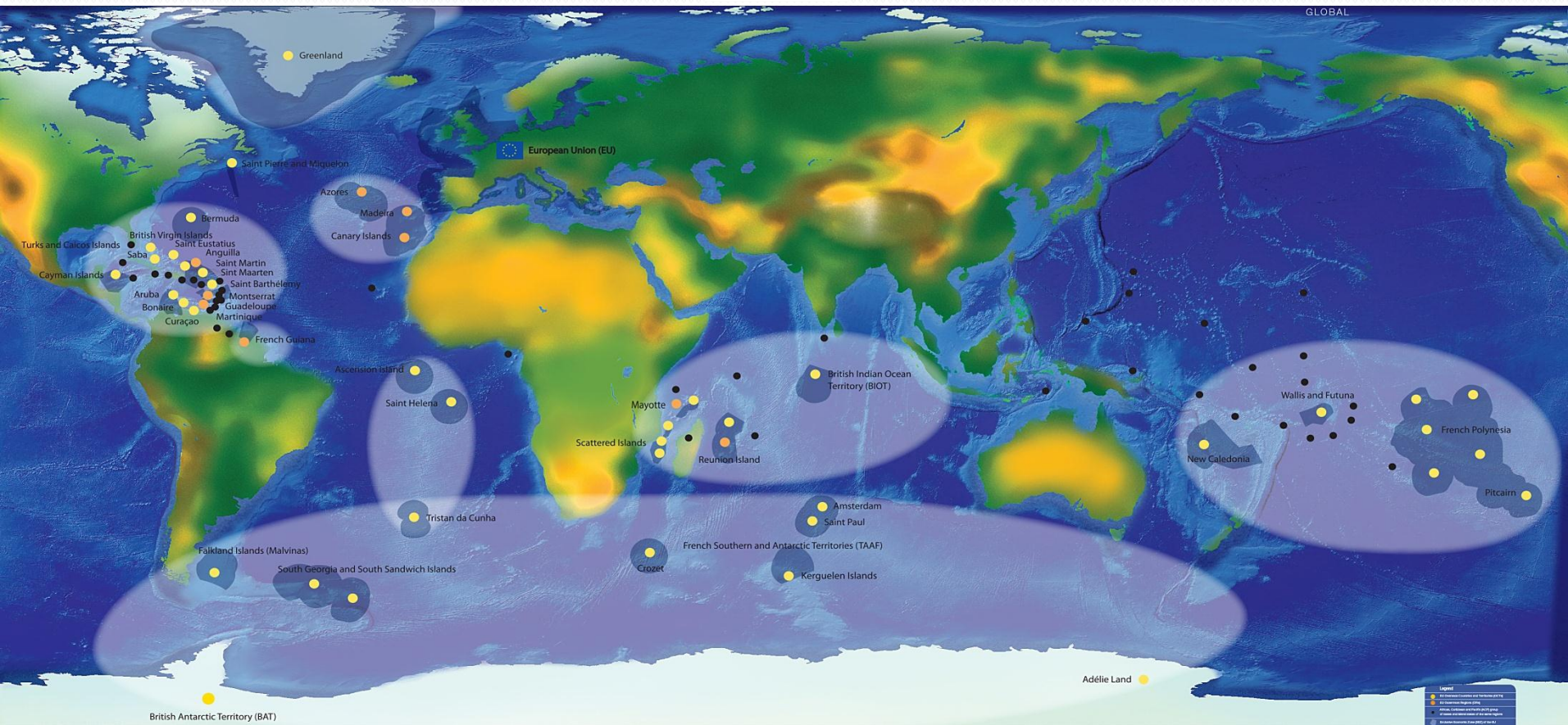


# BEST

VOLUNTARY SCHEME FOR BIODIVERSITY AND ECOSYSTEM SERVICES IN TERRITORIES OF EUROPEAN OVERSEAS



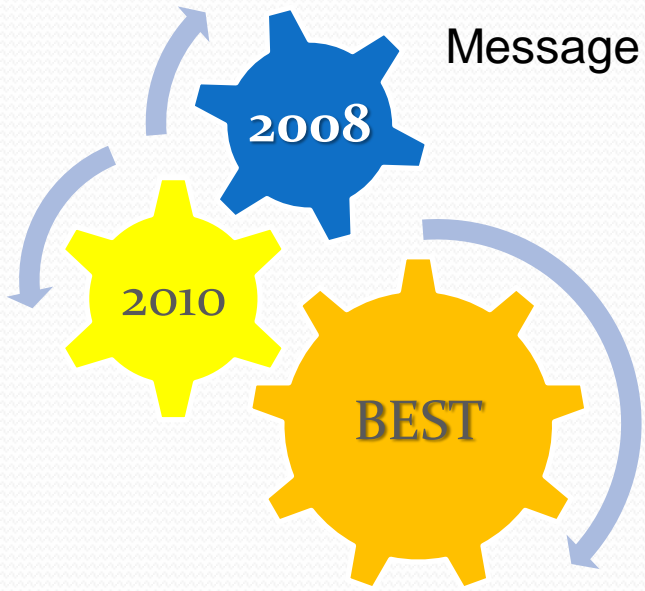


# BEST

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
**E**COSYSTEM **S**ERVICES  
IN **T**ERRITORIES OF  
EUROPEAN OVERSEAS



## Message from Reunion Island



ue  
2008,fr

### Message from Reunion Island

Message from the Conference "The European Union and its Overseas Entities: Strategies to counter Climate Change and Biodiversity Loss", Reunion Island, 7-11 July 2008

# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## Message from Reunion Island



13. There is an urgent need for EU Member States and the European Commission, together with the ORs and OCTs, to establish a voluntary scheme for the protection of species and habitats, inspired by the Natura 2000 approach. This scheme should be easily accessible, flexible, adapted to the local situation, balance conservation and development needs, as well as take into account existing mechanisms and tools. The implementation of the scheme should be based on local commitment and shared financing.

# BEST

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
**E**COSYSTEM **S**ERVICES  
IN **T**ERRITORIES OF  
EUROPEAN OVERSEAS





# BEST

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
**E**COSYSTEM **S**ERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## A European Initiative

For :

*Promoting **conservation and sustainable use** of biodiversity and ecosystem services in European Outermost Regions and European Overseas Countries and Territories.*

# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## A European Initiative of international importance

Decision of the [CBD COP XI/157](#) on the Review of the Programme of Work on Island Biodiversity mentions the BEST initiative among the “*the progress on sustainable financing mechanisms developed in island regions for climate change and Biodiversity*”.



# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## A flexible scheme

A wide scope

Open to ORs, OCTs, third Countries and IO

NO prescription of duration nor budget

European co-financing up to 95%

# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## A real success!

**83** proposals in all the regions where the Europe Overseas are located

Overall requested budget was 6 times higher > than the available budget

9,5 Million mobilized as co-financing



# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## 18 BEST projects +1 Consortium

- *wide geo-political spread*
- *all geographic OR/OCT regions are covered*
- *public and private organisations, researchers, civil society, international and regional organisations*
- *global, regional and local levels represented*
- *wide range of topics – protected areas designation and management, invasive species, climate change, assessment and valuation of ecosystem services, policy tools, networking, communication, education, capacity building ... building BEST*
- *duration: from 9 to 36 months*
- *number of partners: from 1 to 9 (90% 1/2/3)*
- *own contribution: 5% (31 proposals, 45%) to 69%*

# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



	BEST 2011	BEST 2012	2011 + 2012
available budget	2.000.000 €	2.000.000 €	4.000.000 € (+ 800.000 € AfD)
nb of proposals			
total received	41	42	83
requested budget	13.360.486 €	12.778.097 €	26.138.583 €
total costs	19.704.643 €	15.902.307 €	35.606.950 €
own contribution	6.344.157 €	3.124.210 €	9.468.367 €
funded	9	7	16 (+2)
requested budget	1.998.757 €	1.982.090 €	3.980.847 €
total costs	3.635.777 €	2.517.196 €	6.152.973 €
own contribution	1.638.020 €	535.106 €	2.173.126 €
reserve list	15	20	35 (-2)
requested budget	5.095.387 €	5.915.043 €	11.010.430 €
total costs	8.475.556 €	7.990.058 €	16.465.614 €
own contribution	3.380.169 €	2.075.015 €	5.455.184 €



**Giving impetus to a collective movement in favour of the preservation of coastal wetlands in EU Overseas territories**

The rich biodiversity of wetlands and the ecosystem services they provide, including food production, water treatment and climate resilience, are increasingly threatened in EU Overseas territories. These systems are still poorly understood. In Martinique, the French Overseas Development (OFV), through the LEADER programme, has initiated a 'Wetlands Atlas' project. The project involves mapping wetlands and assesses their ecological and socio-economic value. It also aims to promote management practices and to develop local initiatives for wetland restoration. The project will be achieved through four activities: 1. establishing and providing a wetland assessment; 2. specifying a preliminary and technical protocol for coastal wetland management; 3. providing the creation of a network and a group public and private stakeholders involved.

**Quantification of Ecosystem Services in Agroecosystems, case of Plantain banana in Martinique**

The objective of the L'Aspen/Pharos project is to assess ecosystem services of banana field systems in Martinique, especially in terms of conservation of arthropods and plant diversity, of production of peels, and of production to allow to maximize the protection of ecosystem services and to improve their management of agroecosystem. The study which is the focus of this project is to assess the services of the agroecosystems in terms of landscape and food security. The project is funded by the European Union (through the French Overseas Development OFV), through the LEADER programme.

**Conserving Species and Sites of International Importance by the Eradication of Invasive Alien Species in the Caribbean UK Overseas Territories**

This project addresses the threat of Invasive Alien Species (IAS) in the context of the UK Overseas Territories (UKOT) which consists of an estimated 20% of the UK's total biodiversity and over 300 globally threatened species (IUCN, 2015). The project is being implemented in 12 important UK Overseas Territories. The project will have a positive impact on a range of species including: 1. Three species of seabird; 2. Three species of invertebrate fauna including the Blue Yucca and the Rock Insects (Cymon) species; 3. Critically endangered Neotropical Olive and Mountain Chickadee.

**Quantification of ecosystem services provided by marine protected areas in the Caribbean with a view to their payment**

By assessing the value of ecosystem services generated by some specific marine protected areas (MPAs), project CRPES aims to increase fishermen' support to MPAs and to identify another form to the economic effects to the sustainable use of the marine resources of Caribbean MPAs. The assessment will be used to develop a system of payment for ecosystem services and establish a transfer of money from the users towards the fishermen.

**Protecting biodiversity and creating multiple benefits for local communities in Greenland**

The environment of Greenland is rapidly changing. The extent of sea ice and snow cover is increasingly unpredictable. Many species are changing their distribution patterns and also, unfortunately invasive, species are starting to colonise the territories. The indigenous hunter and herder communities to the changing environment with all the same time increasing the pressure and the maintenance of the species and hence the need to improve the management of the environment. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**Changes in submersed vegetation: assessing loss in ecosystem services from fringing to deepwater systems dominated by opportunistic vegetation**

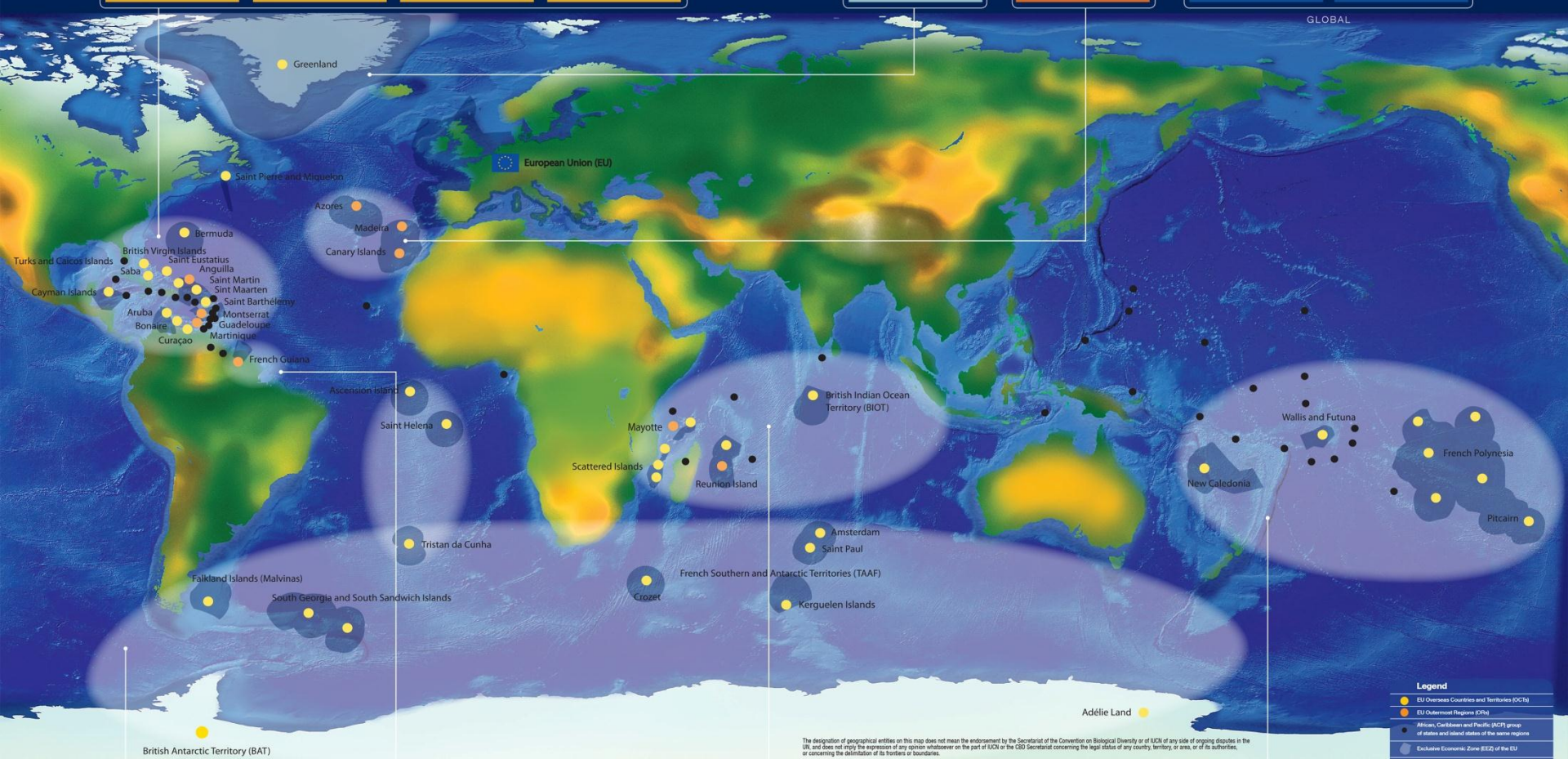
In coastal areas of the world, fringing vegetation (e.g. sea grass and large brown macroalgae) and a pavement like or canopy forming and laminar diatoms forming habitat complexity, protecting coastlines, filtering sediment and providing food and shelter for fish. Conservation and culture of these ecosystems is important if they are currently overexploited. The aim of the project is to establish a system of monitoring and management of the fringing and deepwater systems. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**Piloting the Development and Implementation of National-Level Joint Activities between the Rio Conventions in Support of Ecosystem-based Approaches to Climate Change Mitigation and Adaptation**

The project built the capacity of pilot countries to identify and capitalize on opportunities to reduce both greenhouse gas emissions and environmental impact. It focused on pilot countries with high potential for climate change and high environmental impact. It provided a framework for joint activities between the Rio Conventions. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**Building partnerships and awareness of biodiversity and climate change in Europe overseas for the future of BEST**

This "Building project" contributes to strengthen biodiversity conservation and climate change mitigation in Europe overseas through strengthening strategic partnerships, facilitating capacity building, awareness raising, mobilising support for action using targeted communication and awareness raising events at the EU and international levels. It successfully engages support for the BEST initiative and has increased for visibility and coordination of Europe overseas biodiversity and climate change at the EU, Europe overseas and international level. The project is implemented in collaboration with institutions and actors including the Overseas Councils and Institutes of the European Union, European Commission and European Commission Directorate.



The designation of geographical entities on this map does not mean the endorsement by the Secretariat of the Convention on Biological Diversity or of IUCN of any view of ongoing disputes in the UK, and does not imply an expression of any opinion whatsoever on the part of IUCN or the CBD Secretariat concerning the legal status of any country, territory, or area, or its authorities, or concerning the delimitation of its frontiers or boundaries.

**Terrestrial ecosystems of the Falklands – a climate change risk assessment**

The diversity of the Falkland Islands is changing. 130 years of records show seasonal rainfall has declined and over 50 years of temperature records show significant increases in mean summer number and frequency. Increased drought periods will decrease soil water content. Increased plant growth and more frequent fires on the island's wetlands. The islands already show a range of climate change impacts, but we need a better understanding of how these changes affect the islands' ecosystems. This project is the first step in this process. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**Identifying important marine areas for macaroni penguins (*Eudyptes chrysolophus*) in the UK and French Overseas Territories**

This exciting and ground-breaking project aims to improve the knowledge of the extent of important marine areas for globally endangered species, around the UK Overseas Territories. It will focus on identifying the important marine areas and help on management and conservation of these areas. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**White-tipped peccaries monitoring from the Parc amazonien de Guyane - national park of French Guiana**

The White-tipped Peccary (WT) is one of the species considered by the World Conservation Union (IUCN) as an indicator of ecological networks of the South American forest. This species represents a very important part of the biodiversity of the region. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**Creation of new protected areas in the public forests of La Réunion and Mayotte**

This project involves the creation of three new ecological reserves. One in Grand Sud, Est de Sud and Centre de Sud in Réunion. The other two in Mayotte. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**Migration Routes of Megaptera Novaeangliae (Humpback Whales)**

The project aims, through a better understanding of the migration routes of Megaptera Novaeangliae, to improve the conservation measures in favour of this vulnerable species of a local and regional scale. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**Connectivity of Loggerhead turtle (Caretta caretta) in Western Indian Ocean: Implementation of local and regional management**

The project aims to improve the connectivity of the Loggerhead turtle (Caretta caretta) in the Western Indian Ocean. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**Coral reefs in a changing world – ecosystem services from coral reefs: public tools for decision-making in New Caledonia and French Polynesia**

The project aims to provide a set of methods to estimate ecosystem services (ES) from coral reefs. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**Pacific Ocean Ecosystem Analysis**

PAOECA general objective is to strengthen conservation and sustainable management of marine ecosystems, to foster ecosystem-based approaches and to improve climate change adaptation in the European Territories of the Pacific. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**Comprehensive management strategies for environment and natural services: biodiversity and ecosystem**

The aims, objectives and availability of the biodiversity of New Caledonia, one of the most important biodiversity hotspots in the world, are investigated. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.

**Protection and sustainable management of French Polynesia land-birds threatened by extinction**

The project objective is to strengthen the conservation and sustainable management of French Polynesia land-birds threatened by extinction. The project will include: 1. Assessing the current state of the environment; 2. Identifying the key areas for protection; 3. Developing a management plan; 4. Implementing the plan; 5. Monitoring the results; 6. Evaluating the impact of the project.



# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## Polar, sub-polar, South Atlantic projects





# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## Polar, sub-polar, South Atlantic projects

BEST/2012/7 on-going (coordinated by Atelier Technique des Espaces Naturels, ATEN) funded through AID

**Giving impetus to a collective movement in favour of overseas littoral wetlands preservation in the EU overseas (the MANG project)**

The rich wetland biodiversity and the ecosystem services they provide including flood regulation, water treatment and shoreline protection are increasingly threatened. In the EU overseas these systems are still poorly characterized. The MANG project attempts to tackle this lack of knowledge and the associated shortage in existing management methods and tools to improve coastal wetlands conservation and thus to impact in a positive manner all wetlands of the European OEs and OCTs. This shall be achieved through four activities: establish and promote a method for site evaluation; specify a participatory and transversal method for coastal wetlands' management; promote adoption of the method; involve public and stakeholders.

BEST/2011/16-8 on-going (co-ordinated by CIRAD (Centre de Coopération Internationale en recherche agronomique pour le développement))

**Quantification of ecosystem services in agroecosystems, case of Plantain banana in Martinique (EcoServPlantain)**

The overall goals of the project are to increase the knowledge base on the prevalence of ecosystem services in plantain based agroecosystems and to disentangle the relation between biodiversity and ecological mechanisms involved in these services. The project includes five activities: construction of a field network, measure of ecosystem services, statistical analysis, modeling and results dissemination.

BEST/2012/4 on-going (coordinated by the Royal Society for the Protection of Birds RSPB)

**Conserving species and sites of international importance by the eradication of invasive alien species in the Caribbean UK OCTs (EcoServPlantain)**

This project includes restoration of high biodiversity areas through the active management of invasive species, which have been identified among the greatest threats to biodiversity across all of the UKOTs. It will focus on developing in-territory capacity through implementation of activities and training in the four phases of invasive species management: scoping, technical implementation, post-project monitoring and evaluation and sustaining results. The ecosystem-wide biodiversity benefits include regeneration of vegetation, recovery of native bird and invertebrate populations, and improved ecosystem resilience to the negative impacts of climate change.

BEST/2011/16-9 on-going (IAG – CRPLC (Université des Antilles et de la Guyane – Centre de Recherche sur les Pouvoirs Locaux de la Caraïbe))

**Quantification of ecosystem services provided by the marine protected areas in the Caribbean with a view to their payment (CARIPES)**

L'objectif du projet CARIPES est de faire participer activement les pêcheurs côtiers aux efforts de conservation et d'utilisation durable des ressources halieutiques dans les aires marines protégées de la Caraïbe. La mise en place d'un système de paiement pour les services écosystémiques produits au sein d'une aire protégée marine en élaboration en Martinique et de deux en opération à Saba et les Vierges Britanniques vise à promouvoir de tels efforts en établissant un transfert monétaire des usagers vers les pêcheurs. Au-delà des aspects financiers, l'instauration d'un tel processus entend faire changer le regard porté sur le monde de la pêche: de celui de destructeur du milieu marin à celui de garant de sa bonne santé.

BEST/2012/11 on-going (coordinated by Nordisk Fond for Miljø og Udvikling)

**Protecting Biodiversity and Creating Multiple Benefits for Local Communities in Greenland**

Adapting the livelihoods of the indigenous hunter and fishing communities to the changed environment while at the same time ensuring protection and sustainable use of the goods and benefits provided by the Arctic ecosystems is a daunting challenge. This project aims to enhance the protection and sustainable management of marine and terrestrial resources on the part of local communities in Greenland; to strengthen the human and organisational capacity of Greenland's communities and the government to sustainably protect, manage, monitor and use natural resources; and to pilot innovative bottom-up approaches to natural resource management among local communities and the government. In addition the project encourages transboundary working on invasive species and on the impacts of climate change and it helps to lever resources, including payment for ecosystem services (PES).



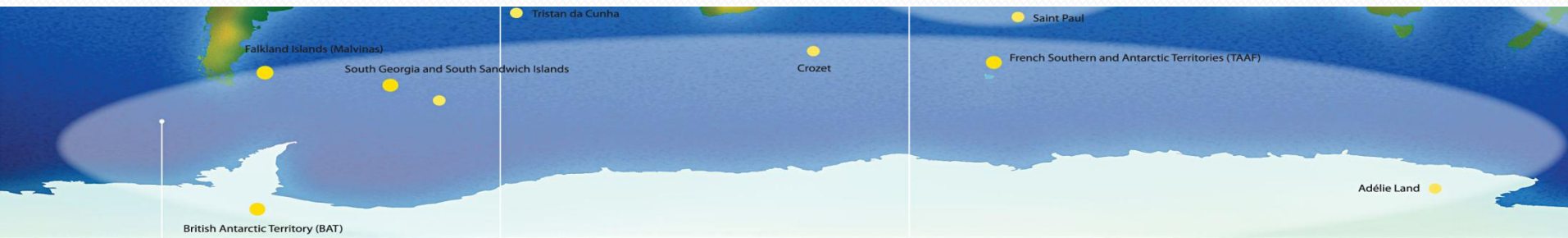


# BEST

VOLUNTARY SCHEME FOR BIODIVERSITY AND ECOSYSTEM SERVICES IN TERRITORIES OF EUROPEAN OVERSEAS



## Polar, sub-polar, South Atlantic projects



**BEST/2011/16** on-going (coordinated by Royal Botanic Gardens, Kew)  
**Terrestrial ecosystems of the Falklands – a climate change risk assessment (TEFRA)**  
This innovative project's key objective is to provide the Falkland Islands Government with the tools and knowledge to effectively conserve native plants, but habitats first form and the services they provide in the face of a changing climate. Soil carbon storage and water availability will be monitored under 2000 climate change scenarios to determine potential impacts on future carbon storage and water availability. The information collected from the results of these analyses will feed into a large landscape assessment carried out in conjunction with local and overseas stakeholders. It assesses the likely impacts of climate change on the terrestrial biodiversity and ecosystem services of the Falkland Islands. The project will work closely with local stakeholders including representatives from government, tourism industry, farming community and business sectors.

**BEST/2011/06** on-going (co-ordinated by British Arctic Survey)  
**Identifying important marine areas for macaroni penguins (*Eudyptes chrysolophus*) in the UK and French OTs**  
This exciting and ground-breaking project aims to recognise the most important sea areas for macaroni penguins, a globally endangered species, across the EU. To have been designated by the appropriate authorities and to agree on management plans for these areas would be a major step for the UK and France. The project will contribute to the design of marine protected areas that are being actively developed or planned by the South Georgia and South Sandwich Islands Government and administration of the Natural Reserve of the French Southern Territories.

**BEST/2011/08** on-going (coordinated by the Parc Amazonien de French Guiana)  
**Suivie Opérationnelle des Pécariés à lèvres blanche du Parc Amazonien de Guyane (SOPPAO)**  
Le Pécari à Lèvres Blanches est l'un des 3 espèces considérées par la World Conservation Society (IUCN) comme indicateur des Terres Vives et des réserves écologiques des Forêts d'Amazonie du Sud. L'espèce représente une part très importante de la population des populations vivant exclusivement de la viande, soit une ressource alimentaire à l'échelle pour les habitants de la Guyane. Avec cette étude professionnelle et sur le terrain afin de mieux comprendre les effets d'invasion des animaux de bétail, cet état a permis de mieux caractériser et d'un projet à plus long terme.

**BEST/2011/10** finished (coordinated by ONP)  
**Création de nouvelles aires protégées dans les forêts publiques à la Réunion et à Mayotte**  
This project resulted the creation of three new biological reserves, that de création des Rés. littoral du Grand Paysage et Terrestre sur des sites importants en tant que forêts publiques d'une réserve. Il a permis de définir les conditions de gestion de ces zones protégées et de leur mise en œuvre. Les réserves ont été créées dans les forêts publiques de la Réunion et de Mayotte. Elles ont pour objectif de protéger les espèces et les habitats qui y vivent et de contribuer à la préservation de la biodiversité dans les forêts publiques de la Réunion et de Mayotte.

**BEST/2012/06** on-going (coordinated by GLOBEC)  
**Migration routes of Megaptera Novaeangliae Humpback Whales (MIHOMEN)**  
The project aims through a better understanding of migration routes, migration knowledge network, related to reinforce information resources at a higher level and implementation of some management plans for the humpback whale species at a local and regional level. MIHOMEN represents the creation of a local and regional level. MIHOMEN represents the creation of a local and regional level. MIHOMEN represents the creation of a local and regional level. MIHOMEN represents the creation of a local and regional level.

**BEST/2012/20** on-going (coordinated by Association CESTIM/Kelonia) funded by AFD  
**Connectivité des populations de tortues caouannes (Caretta caretta) dans l'ouest de l'océan Indien : mise en place de mesures de gestions locales et régionales (COCA-LOCA)**  
The project aims to increase the knowledge on the humpback turtles. Caretta caretta including migration patterns and connectivity between the main known breeding sites of populations, which have, so far, been little studied in the Indian Ocean. This knowledge will contribute to implement effective management measures at the local level through the forthcoming French National Action Plan and at the regional level through a close cooperation with the Indian Ocean and South East Asia (IOSEA) which have already defined their Action Plan. Good practices, experience and knowledge shall be exchanged. Thanks to the supported entities in La Réunion shall be assessed, and an equivalent process initiated in Mayotte.

**BEST/2011/25** on-going (coordinated by Institut des Récifs Coralliens du Pacifique IRCP)  
**Coral reefs in a changing world – ecosystemic services from coral reefs : public tools for decision-making in New Caledonia and French Polynesia (CORAIL)**  
The project aims to provide a set of methods to evaluate ecosystem services from coral reefs for public decision-making for the present and for the future in the context of global change including demographic and climate changes. The goal is to understand today the importance between ecosystem services in order to identify future decisions through scenarios of governance. This brochure and methods presented will be issued in two case studies in EU OTs in the Pacific.

**BEST/2012/19** on-going (coordinated by French Marine Protected Areas Agency)  
**South Pacific Ocean Ecosystemic Analysis (RADIOCEA)**  
As a flagship project, RADIOCEA is a first attempt to create marine management across the tropical South Pacific Ocean over 20 million km<sup>2</sup> of marine waters ranging from the lagoons to the outer margins in order to address the diverse dimensions of marine issues and to implement an integrated approach of marine ecosystem management from both geographic and socio-economic perspectives. The project aims to improve conservation and sustainable management of marine ecosystems, to foster ecosystem based approaches and to improve climate change adaptation in the EU OTs of the tropical South Pacific and the neighbouring countries through the development of a solid marine spatial planning. It will and RADIOCEA will foster collaboration of local, national and regional and beyond levels, by collating data from various institutions and actors and encouraging joint decisions between long-standing countries and other countries over the conservation and management of marine resources.

The designation of geographical entities on this map and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IACM concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

# 3 Projects



# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## Polar, sub-polar, South Atlantic projects

### Co-ordinators:

- Nordisk Fond for Miljø og Udvikling
- Natural Environment Research Council - British Antarctic Survey
- Botanic Royal Gardens, Kew

### Partners:

- Department of Fisheries, Hunting and Agriculture, Government of Greenland; Greenland Fisher and Hunter Organisation; Greenland Association of Municipalities; Cornell University, Laboratory of Ornithology (New York USA); Inuit Circumpolar Council
- Centre d'Etude Biologiques de Chizé, CNRS; Birdlife International
- Falklands Conservation; United Kingdom Falkland Islands Trust



## Protecting biodiversity and creating multiple benefits for local communities in Greenland

Adapting the livelihoods of the indigenous hunter and fishing communities to the changed environment while at the same time ensuring protection and sustainable use of the goods and benefits provided by the Arctic ecosystems is a daunting challenge. This project aims to enhance the protection and sustainable management of marine and terrestrial resources on the part of local communities in Greenland; to strengthen the human and organisational capacity of Greenland's communities and the government to sustainably protect, manage, monitor and use natural resources; and to pilot innovative bottom-up approaches to natural resource management among local communities and the government. In addition the project encourages transboundary working on invasive species and on the impacts of climate change and it helps to lever resources, including payment for ecosystem services (PES).



### Statistics and Figures

changing and the people in the Arctic are facing gas as many rely on natural resources for both and income. Successful adaptation to climate the sustainable use of resources requires observation ment.

nowledge of the environment is incomplete and scientific monitoring is logistically difficult. Local enters observe the environment all year round. Their and knowledge are, however, not consistently yalized or used for resource management.

overnment and European Commission are partners tive to pilot-test and institutionalize a simple, field- ne for monitoring and management of resources ecifically to enable Greenlandic fishers and hunters o follow trends in living resources and to propose e decisions.

ry experiences suggest that there is great interest hunters and fishers in participating in the scheme. eads to natural resource management actions ed on community members' own observations ge. There is correspondence between community eptions and professional scientists' assessments e abundance of several resources, suggesting ty-based monitoring can complement scientist- nitoring. Community-based monitoring can pin- ar species and areas that are in need of more d, at the same time, it can help link observed il changes to management action.

oted from: Danielsen, F., E. Topp-Jørgensen, M. øvermann, P. Lavstrøm, M. Schiøtz, P. Jakobsen. acounts: using local knowledge to improve Arctic agement. *Polar Geography*. In press, Dec. 2013.

#### of the Project

ment of Greenland is rapidly changing. The extent id snow cover is increasingly unpredictable. Many changing their distribution patterns and alien, vasive, species are turning up. Adapting the f the indigenous hunter and fisher communities ed environment while at the same time ensuring biodiversity and the sustainable use of the goods provided by the Arctic ecosystems is a daunting inoes 2009, the Government of Greenland has with communities in Disko Bay and Uummannaq Greenland to pilot the use of community-based roe monitoring as a tool for improving biodiversity and sustainable resource management. The results ising.



The government would like to scale up this initiative technically and organisationally so that community biodiversity monitoring goes beyond a critical point in terms of policy support, implementation standards, government capacity and number of communities involved, at which point this scheme will be able to continue across the country with minimal further external assistance.

The objectives of the project are (i) to enhance the protection and sustainable management of marine and terrestrial resources on the part of local communities in Greenland; (ii) to strengthen the human and organisational capacity of Greenland's communities and the government to sustainably protect, manage, monitor and use natural resources; and (iii) to pilot innovative bottom-up approaches to natural resource management among local communities and the government. The project will be carried out over a three-year period by the government, in collaboration with stakeholders at local, national and international level.

The project is well in line with the core objectives of 'BEST'. It could showcase many benefits that can be achieved through this funding scheme. The project promotes conservation and sustainable use of biodiversity and ecosystem services and focuses on coastal areas at the interface between terrestrial and marine ecosystems. The project balances conservation and development needs, takes existing conservation mechanisms and tools into account, and is based on local commitment among Greenland's communities and government.

#### CONTACTS

Nette Levemann and Nuka Mellor Lund  
nmm@nanaq.gl



<http://youtu.be/jPg4nzQ8jl0>





## Terrestrial ecosystems of the Falklands – a climate change risk assessment (TEFRA)

This innovative project's key objective is to provide the Falkland Islands Government with the tools and knowledge to effectively conserve native plants, the habitats they form and the services they provide in the face of a changing climate. Soil carbon storage and water availability will be modelled under 2020-2080 climate change scenarios to determine potential impacts on future carbon storage potential, plant growth and hence pastoral systems. The results of these analyses will feed into a large scale risk assessment, carried out in consultation with local and international stakeholders, to assess the likely impacts of climate change on the terrestrial biodiversity and ecosystem services of the Falkland Islands. The project will work closely with local stakeholders including representatives from government, tourism industry, farming community and business sector.



### Statistics and Figures

project is currently in phase I: using our botanical develop species distribution models to predict likely climate change on plant diversity in the Falklands. Distribution modelling depends on access to accurate records and we are fortunate to be able to use a pre-existing database.

forward has been the organisation of this database that enables useful screening of botanical records one which can be used in the modelling process. we have classified records according to their giving us with three sets of data, two of which can distribution modelling work:



solution data are allowing us to investigate the role range of finer scale environmental features, such aspect, in determining the distribution of species chipelago. The lower resolution data are at the same bioclimatic data available for the Falkland Islands. At model summary statistics (e.g. max, min, mean) for important topographical features, such as altitude, their relative importance in determining species

lant records at 1-1000 m resolution include habitat and a subset of these will be used to model the s of predicted climate change scenarios on the f restricted range habitats such as cushion heath.

Falkland's most widespread and common plant s over 1000 records – for example the dominant rub, *Empetrum rubrum*, has 2045 records – of the 190 native vascular plants have less than 20 is largely because they are genuinely rare but is to the fact that there are still areas of the Falkland have not been surveyed.

We are initially focusing on restricted range native taxa and habitats, and using a recent set of climate predictions produced in collaboration with the Climatic Research Unit at the University of East Anglia. The climate of the Falklands is milder in the west and there are a suite of species whose distribution reflects this trend. The cushion plants *Azorella monantha* and *Azorella selago* provide an example of two species we would expect to respond very differently to the temperature increases predicted for the Falkland Islands. These two plants from the Celery family (Apiaceae) have contrasting distributions and habitat preferences. *Azorella monantha* is a coastal species only found in the west of the Falkland Islands between 5-370 m above sea level whereas *Azorella selago* is only found inland, predominantly

between 450-685 m above sea level (figure 1). *Azorella selago* is restricted to the Falkland Islands, sub-Antarctic islands and the southern-most part of South America, whereas *Azorella monantha* is restricted to the Falklands and South America and reaches further north within Chile and Argentina. Working collaboratively with the GIS unit at Kew we are already gaining exciting insights into key drivers of distributions of species like these two through the use of, for example, habitat suitability modelling.

#### Description of the Project

The climate of the Falkland Islands is changing. 136 years of records show seasonal rainfall has declined and over 50 years of sunshine records show significant increases in mean summer sunshine and temperature. Increased drought periods will decrease soil water content, threaten plant growth and place increased stress on the shallow peat soils of the Islands already prone to drying out and erosion. This in turn will have a profound impact on plant community diversity, pasture growth, water availability and ultimately the potential of soils to sequester carbon. Urgent action is required to better understand and address these severe threats.

#### CONTACTS

Dr Rebecca Upson  
R.Upson@kew.org



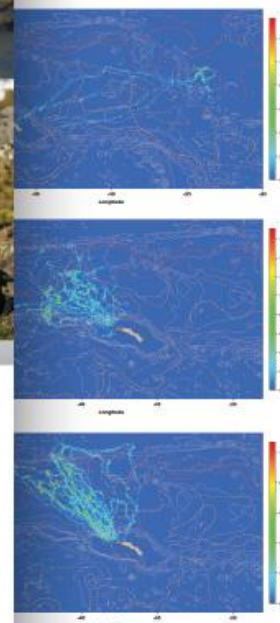


## Identifying important marine areas for macaroni penguins (*Eudyptes chrysolophus*) in the UK and French OTs

This exciting and ground-breaking project aims to recognise the most important at sea areas for macaroni penguins, a globally endangered species, around the EU OTs, to have these designated by the appropriate authorities and to agree on management plans for them with stakeholders. The information collated through the project will contribute to the design of marine protected areas that are being actively developed at present by the South Georgia and South Sandwich Islands Government and administration of the Natural Reserve of the French Southern Territories.



### Location of the Project



(APF) waters (indicated by red dashed and dotted lines on the map, Figures 1 a-c). Incubating penguins extend their foraging trips into northern parts of the APF, reaching waters of the Polar Frontal Zone (PFZ). Penguins during pre-moult mainly explore areas in the southern part of the APF. Interestingly, penguins breeding at Rookery Bay explore very different geographical areas to those of the Fairy Point colony (Figures 1 b, c), implying longer foraging trip distances to the APF for Rookery Bay penguins. However, penguins of both colonies forage in areas of similar frontal signatures associated with the southern APF.

Among seabirds, penguins play a major role in the oceanic food webs (Brooke 2004) although several species are rapidly declining. Large seabird breeding colonies throughout the world are recognised as Important Bird Areas (IBAs) and often receive formal site protection through governmental designation and management plans. However, the limit of these sites is the high water mark, and so the key marine foraging areas and commuting corridors which are vital to seabird survival and reproductive success generally receive no recognition or protection. Identifying important areas for seabirds in the marine environment is urgently required to overcome this problem and produce an ecologically coherent network of protected sites.



Results show the at-sea distribution of Macaroni penguins breeding at South Georgia during different phases: incubation and pre-moult (December/January/February/March, respectively). During these periods penguins need to acquire resources at sea for long periods on land while incubating the egg or during moult (Croxall 1991). Due to the time and energy associated with returns to land for incubation and moult, penguins foraging trips during these periods are long and they aim at highly productive marine areas in order to maximize energy.

Results show the foraging trips of Macaroni penguins during incubation and pre-moult to be oriented to the north of South Georgia. The birds appear to explore Antarctic Polar Front

waters. These issues are of special interest when considering macaroni penguins (*Eudyptes chrysolophus*) which are regarded as Globally Endangered by BirdLife International and the IUCN. Macaroni penguins are the most important avian consumer of marine resources on the planet, and approximately 82% of the entire world population breeds within the UK and French OTs of South Georgia and the South Sandwich Islands, Crozet and Kerguelen. Numbers have declined substantially at South Georgia (Trathan et al. 2012) and in the Indian Ocean (Crawford et al. 2003, CNRS-CEBC unpublished) during the previous four decades. Reasons for the decline are not well understood, but changes in food availability brought about by environmental change are likely to be responsible (Crawford et al. 2003) and may be further compounded by increased competition with fisheries and growing populations of seals and whales around South Georgia (Trathan et al. 2012).

#### CONTACTS

Dr. Norman Ratcliffe  
nor@bas.ac.uk





# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



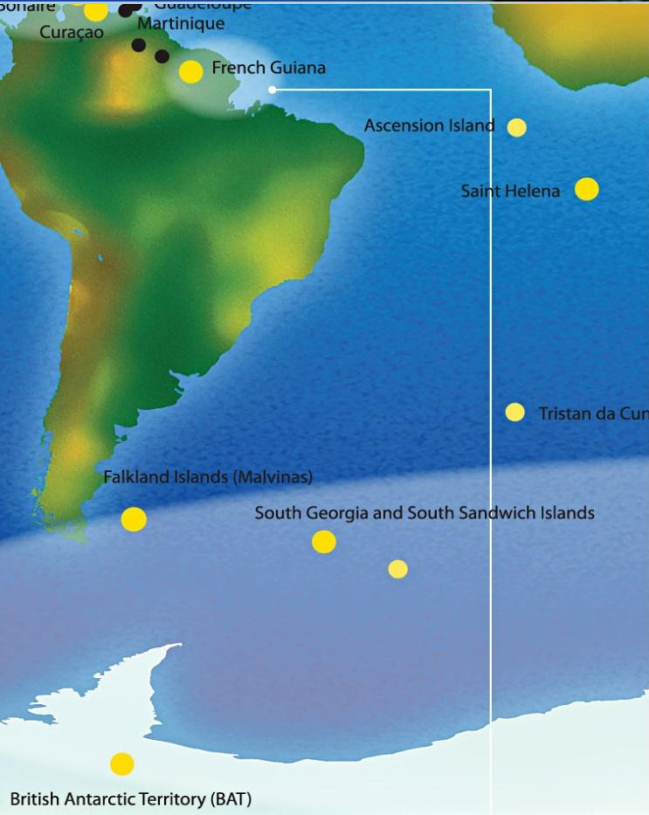
## Amazonian project





# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## 1 Project

Co-ordinator:

Parc National de Guyane

BEST/2011/6 on-going  
(co-ordinated by British Arctic Survey)  
Identifying important marine areas  
for macaroni penguins (*Eudyptes  
chrysolophus*) in the UK and  
French OTs

This exciting and ground-breaking project aims to recognise the most important at-sea areas for movement programs, a globally endangered species, around the EU OTs, to have these designated by the appropriate authorities and to agree on management plans for them with stakeholders. The information collected through the project will contribute to the design of marine protected areas that are being actively developed at present by the South Georgia and South Sandwich Islands Government and administration of the Natural Reserve of the French Southern Territories.

BEST/2011/36 on-going (coordinated by the Parc  
Amazonien de French Guiana)

Suivie Opérationnel des Pécariis à  
lèvres blanche du Parc Amazonien de  
Guyane (SOPPAG)

Le Pécari à Lèvre Blanche a été l'une des 5 espèces considérées par le World Conservation Society (WCS) comme indicateur des Trames Vertes et des Réseaux Ecologiques des Terres d'Amérique du Sud. L'animal représente une part très importante de l'alimentation des populations vivant exclusivement de la chasse, soit une ressource prioritaire et vitale pour les habitants de la Guyane. Ainsi cette étude préliminaire est une phase pilote de tests méthodologiques et d'initiation des acteurs du territoire, qui vise à poser les bases essentielles d'un projet à plus long terme.





## Suivi Opérationnel des Pécari à lèvres blanches du Parc Amazonien de Guyane (SOPPAG)

Le Pécari à Lèvre Blanche a été l'une des 5 espèces considérées par le World Conservation Society (WCS) comme indicateur des Trames Vertes et des réseaux écologiques des forêts d'Amérique du Sud. L'animal représente une part très importante de l'alimentation des populations vivant exclusivement de la chasse, soit une ressource prioritaire et vitale pour les habitants de la Guyane. Ainsi cette étude préliminaire est une phase pilote de tests méthodologiques et d'initiation des acteurs du territoire, qui vise à poser les bases essentielles d'un projet à plus long terme.



### Objectif du projet



d'utiliser la présentation résumée faite dans votre appel BEST. Toutefois des compléments peuvent être demandés par les coordinateurs.

action :

Les Lèvres Blanches (PLB) sont des mammifères du sanglier, vivant exclusivement sur les territoires du Parc amazonien de Guyane. Sur l'ensemble de cette vaste aire écologique, cette espèce représente une part très importante de l'alimentation des habitants de la Guyane. Cette espèce est une ressource prioritaire pour les habitants de Guyane.

Sur l'ensemble de cette vaste aire écologique, cette espèce représente une part très importante de l'alimentation des habitants de la Guyane. Cette espèce est une ressource prioritaire pour les habitants de Guyane. Sur l'ensemble de cette vaste aire écologique, cette espèce représente une part très importante de l'alimentation des habitants de la Guyane.

Conservation Society (WCS) sponsorisait en 2003 un projet de réflexion pour le développement d'une stratégie de gestion des espaces naturels d'Amazonie, axée sur la

définition d'espèces régionalement indicatrices (« Landscape species »). Ces espèces ont un effet parapluie sur l'ensemble de l'écosystème parce qu'elles utilisent de grands espaces, des habitats différents, ont un impact structurant des écosystèmes par leurs diverses fonctions d'ingénierie écologique. Ainsi les efforts de conservation se focalisant sur ces espèces, dites clef de voûte, permettent d'optimiser des objectifs de conservation de la biodiversité et de l'intégrité écologique à l'échelle régionale.

Le Pécari à lèvres blanches a été l'une des 5 espèces considérées par le WCS comme indicateur des Trames Vertes et des réseaux écologiques des forêts d'Amérique du Sud. Son statut UICN vient également tout récemment d'être modifié, passant de « quasi-menacé » à « vulnérable » et témoigne de l'importance majeure d'acquiescer une meilleure connaissance globale de l'espèce en vue de sa conservation.



### LE PROJET

Le Parc amazonien de Guyane, en partenariat avec l'Office National de la Chasse et de la Faune Sauvage, a donc lancé le suivi opérationnel des Pécari à lèvres blanches du Parc amazonien de Guyane (SOPPAG).

Ce programme, soutenu financièrement par le fond européen BEST, vise l'acquisition de connaissances portant sur l'écologie et la biologie des Pécari à lèvres blanches (Tayassu pecari) « ou cochon bwa », spécifiquement en Guyane française.

Egalement soutenu par le « Pecary Specialist Group » de l'UICN (correspondante M<sup>lle</sup> Alexine Kouroukhan), ce projet s'inscrit dans une première phase d'étude des PLB de Guyane visant à long terme à définir un plan de gestion cynégétique durable de cette ressource et de ses habitats.

L'un des principaux enjeux du programme consiste à estimer l'importance du domaine vital de cette espèce extrêmement mobile afin d'avoir une meilleure connaissance des distances journalières parcourues, des corridors empruntés, des déplacements saisonniers, etc. Pour cela, la réalisation de captures permettra d'équiper 5 individus adultes de colliers émetteurs permettant de suivre leurs déplacements par satellite.

CONTACTS  
Luc CLEMENT





# BEST

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
ECOSYSTEM **S**ERVICES  
IN **T**ERRITORIES OF  
EUROPEAN OVERSEAS



## Macaronesian project





# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



BEST/2011/16-9 on-going (co-ordinated by CIRAD (Centre de Coopération Internationale en recherche agronomique pour le développement))

Quantification of ecosystem services in agroecosystems, case of Plantain banana in Martinique (EcoServPlantain)

The overall goals of the project are to increase the knowledge base on the prevalence of ecosystem services in plantain based agroecosystems and to disentangle the relation between biodiversity and ecological mechanisms involved in these services. The project includes five activities: construction of a field network, measure of ecosystem services, statistical analysis, modelling and results dissemination.

BEST/2012/4 on-going (coordinated by the Royal Society for the Protection of Birds RSPB)

Conserving species and sites of international importance by the eradication of invasive alien species in the Caribbean UK OCTs

This project includes restoration of high biodiversity areas through the active management of invasive species, which have been identified among the greatest threats to biodiversity across all of the UKOTs. It will focus on developing in-territory capacity through implementation of activities and training in the four phases of invasive species management: scoping, technical implementation, post-project monitoring and evaluation and sustaining results. The ecosystem-wide biodiversity benefits include regeneration of vegetation, recovery of native bird and invertebrate populations, and improved ecosystem resilience to the negative impacts of climate change.

BEST/2011/16-9 on-going (UAG – ORPLC (Université des Antilles et de la Guyane – Centre de Recherche sur les Pouvoirs Locaux de la Caraïbe))

Quantification of ecosystem services provided by the marine protected areas in the Caribbean with a view to their payment (CARIPES)

L'objectif du projet CARIPES est de faire participer activement les pêcheurs côtiers aux efforts de conservation et d'utilisation durable des ressources halieutiques dans les aires marines protégées de la Caraïbe. La mise en place d'un système de paiement pour les services écosystémiques produits au sein d'une aire protégée marine en élaboration en Martinique et du deux en opération à Saba et les Îles Vierges Britanniques sera à promouvoir de tels efforts en établissant un transfert monétaire des usagers vers les pêcheurs. Au-delà des aspects financiers, l'instauration d'un tel processus entendra faire changer le regard porté sur le monde de la pêche: de celui de destructeur du milieu marin à celui de garant de sa bonne santé.

BEST/2012/11 on-going (coordinated by Nordtak Fond for Miljø og Udvikling)

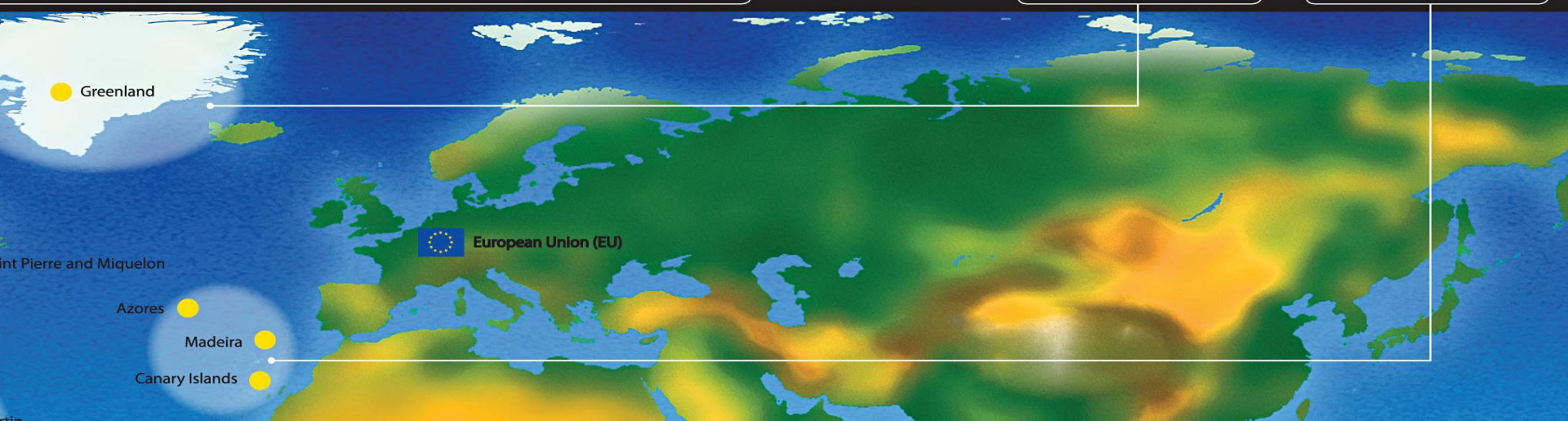
Protecting Biodiversity and Creating Multiple Benefits for Local Communities in Greenland

Adapting the livelihoods of the indigenous hunter and fishing communities to the changed environment while at the same time ensuring protection and sustainable use of the goods and benefits provided by the Arctic ecosystems is a daunting challenge. This project aims to enhance the protection and sustainable management of marine and terrestrial resources on the part of local communities in Greenland, to strengthen the human and organisational capacity of Greenland's communities and the government to sustainably protect, manage, monitor and use natural resources, and to pilot innovative bottom-up approaches to natural resource management among local communities and the government. In addition the project encourages transboundary working on invasive species and on the impacts of climate change and it helps to lever resources, including payment for ecosystem services (PES).

BEST/2012/23 on-going (coordinated by Universidad de las Palmas de Gran Canaria)

Changes in submersed vegetation: assessing loss in ecosystem services from frondose to depauperate systems dominated by opportunistic vegetation

On coastal areas of the world frondose vegetation (e.g. sea grasses and large brown macroalgae) exert a paramount role on community structure and function including increasing habitat complexity, protecting coastlines, filtering terrestrial run-off, sequestering and storing carbon, sequestering nutrients, and providing food and shelter for fish. Conservation and restoration of these ecosystems is important as they are currently declining worldwide. The aim of the project is to empirically quantify changes in the magnitude of ecosystem services, including supply of primary production, provision of habitat for epifauna, quality of food for epifauna, provision of habitat for juvenile fishes, and water clarity, between frondose vegetated systems and those dominated by opportunistic vegetation within three Outermost Regions: Canaries, Azores and Guadeloupe Island (Lesser Antilles).



# 1

# Project

# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## Macaronesian project

### Co-ordinator:

- Universidad de Las Palmas de Gran Canaria

### Partners:

- Universidade dos Açores
- Université des Antilles et de la Guyane (Guadeloupe)





## Changes in submersed vegetation: assessing loss in ecosystem services from frondose to depauperate systems dominated by opportunistic vegetation

On coastal areas of the world frondose vegetation (e.g. sea grasses and large brown macroalgae) exert a paramount role on community structure and function including increasing habitat complexity, protecting coastlines, filtering terrestrial run-off, sequestering and storing carbon, sequestering nutrients, and providing food and shelter for fish. Conservation and restoration of these ecosystems is important as they are currently declining worldwide. The aim of the project is to empirically quantify changes in the magnitude of ecosystem services, including supply of primary production, provision of habitat for epifauna, quality of food for epifauna, provision of habitat for juvenile fishes, and water clarity, between frondose vegetated systems and those dominated by opportunistic vegetation within three Outermost Regions: Canaries, Azores and Guadeloupe Island (Lesser Antilles).



### histories

... of our first sampling field trips in Gran Canaria detected a strange organism that have resulted to be 'genus', i.e. a higher taxonomic unit than species (currently pool several species). The new organism is a green, so-called *Martiacaprella macaronensis*, which recently described in the scientific journal *Zootaxa* (3-172).

... focus on submersed marine vegetation. Despite (marine plants) deliver essential functions and human well-being, estimation of the economic value of seagrass meadows is particularly incipient in the marine realm, where ecological services still need to be evaluated. On an island scale, we have determined the economic value of *C. nodosa* meadows as habitat for coastal fishes targeted fisheries at the oceanic island of Gran Canaria (Canary archipelago, Western Atlantic). Large-sized fishes (mostly adults), despite the fishable fraction, have a mean monetary value of 280.8 € ha<sup>-1</sup> (806.2 € ha<sup>-1</sup> corresponded to pelagic species); at the insular scale adds up to 806,239 €, which is more than a 10% of the island's GDP. Moreover, small-sized fishes (mostly juveniles), which are also accounted, as these fishes are used as sea grass meadows as 'nursery grounds'. The use of this fish production was estimated at 95.75 t ha<sup>-1</sup> at the island-scale, this value adds up to 67,030.30 €. Our strategy provides complementary assessments of the economic contribution of seagrass meadows for coastal fisheries and 'nursery' grounds. Our approach represents the first economic evaluations in the world of economic value of seagrass meadows as habitat for nearshore fishes.



Description of the Project

The management of natural systems cannot incorporate all the ecological information, so simplifications of this information into a format that can advise policy-makers is a required step to better manage ecosystems. A method for simplifying ecological information into management frameworks considers provision of 'goods and services' by ecosystems. On coastal areas of the world, frondose vegetation (e.g. seagrasses and large brown macroalgae) exert a paramount role on community structure and function, e.g. increasing habitat complexity, protecting coastlines, filtering terrestrial run-off, sequestering carbon and nutrients, and providing food and shelter for invertebrates and fishes. Conservation of these valuable habitats is therefore important, particularly since seagrass meadows and frondose brown algal beds are declining worldwide, mainly in areas of intense human activities, where these habitats are replaced by opportunistic vegetation. Because the structural and functional characteristics of ecosystems generate the services they provide, replacement of frondose vegetation by opportunistic vegetation might induce diverse impacts on ecosystem services, with some services being enhanced and others being unchanged or depressed. The aim of this proposal is, therefore, to empirically quantify changes in the magnitude of ecosystem services, including supply of primary production, provision of habitat for epifauna, quality of food for epifauna, provision of habitat for juvenile fishes and water clarity, between frondose vegetated systems and those dominated by opportunistic vegetation within similar areas in 3 UPRs: Canaries, Azores and Guadeloupe Island (Lesser Antilles). Adequate management of coastal areas requires such knowledge, and so we expect a transfer of our results to environmental policy-makers to take decisions under different scenarios.



#### CONTACTS

Fernando Tuja  
ftuja@ufree.es  
+34 928167229  
www.fernandotuja.org





# BEST

VOLUNTARY SCHEME  
FOR **BIODIVERSITY** AND  
**ECOSYSTEM SERVICES**  
IN **TERRITORIES OF**  
EUROPEAN OVERSEAS



## Global projects





# BEST

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
**E**COSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## 2 Projects

# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## Global projects

### Co-ordinators:

- CBD Secretariat
- IUCN RofE

### Partners:

- CBD; OCTA; CI; CEPF (no supporting fund), EBCD





## Piloting the Development and Implementation of National-Level Joint Activities between the Rio Conventions in Support of Ecosystem-based Approaches to Climate Change Mitigation and Adaptation

The project built the capacity of pilot countries to identify and capitalize on opportunities to enhance links between three interconnected environmental issues (biodiversity, climate change and land degradation) and related processes. It contributed to increase the visibility of EU overseas on international level.



### Workshop report:

<http://www.cbd.int/doc/?meeting=CBISRIO-PC-01>

building workshop for pilot countries was held from 29 October to 2 November 2012 and was 18 participants. The workshop built knowledge and in biodiversity – climate change – land degradation potential benefits to be achieved from joint activities. It helped in the development of training material and the completion of case studies on relevant activities or activities under implementation within countries. The workshop also facilitated the exchange of experiences among pilot countries who were able to share information on the implementation of relevant projects. As one of the request of Overseas Countries or Territories (OCT/OR) participants, an expert was presented on the use of geographic information system (GIS) to map vulnerability to climate change in coastal areas that will soon be undertaken in the EU OCT/OR pilot countries.

Additionally, pilot OCTs/ORs also discussed how their cooperation with EU countries could be strengthened in order to align the OCT/OR views in international negotiations on climate change – biodiversity links. They drew on experiences of other regions participating in the pilot project and produced a summary of relevant decisions and planned actions under the Convention on Biological Diversity (CBD), the Paris Agreement on Climate Change and the United Nations Convention to Combat Desertification (UNCCD).

Key messages from the discussions during the workshop was that ecosystem-based approaches offer a way to enhance the resilience of both people and ecosystems to the negative impacts of climate change. In order to be successful, however, ecosystem-based approaches must be integrated within broader adaptation plans and programmes and based on the costs and benefits of ecosystem-based approaches compared to other approaches. Capturing the benefits in a clearer way for decision-makers was also an important step. Regarding mitigation, one of the key messages was that achieving synergies through REDD+ requires careful consideration of relevant safeguards and monitoring to achieve co-benefits as well as an integration of tradeoffs between carbon sequestration and other ecosystem services. In order to ensure that the pilot countries continue to deliver benefits to the pilot countries, a workshop was held on gaps, needs and next steps.

Each pilot country began the process of identifying gaps preventing the enhanced implementation of synergies among the Rio Conventions such as: the lack of baseline biodiversity data (especially from remote islands), the lack of studies on impacts and vulnerability of biodiversity to climate change, poor two-way communication between policy-makers and scientists, and a lack of resources (human and financial) assigned to coordination and collaboration. Various tools were presented to help in addressing the identified gaps and contact information was shared with experts in the region who could provide additional support. For example, following the identification of challenges, an expert in governance from IJCN was contacted and was able to join the meeting via teleconference in order to answer questions from workshop participants. Such flexibility in programming as well as the broad range of experts available "on-call" to contribute made the workshop especially unique.

#### Description of the Project

The links between biodiversity, climate change and land degradation are particularly relevant in islands, where systems are so interconnected, vulnerability to change is high, and resilience is typically low. As such, enhancing synergies between the three Rio Conventions, the Convention on Biological Diversity, the United Nations Convention to Combat Desertification and the United Nations Framework Convention on Climate Change, in European overseas countries and territories is essential if European Parties to the Conventions are to meet their international obligations.

The project built the capacity of pilot countries, specifically New Caledonia and Bermuda, to identify and capitalize on opportunities to enhance links between these three interconnected environmental issues and processes. Through knowledge exchange with other countries and direct consultations with experts, representatives from New Caledonia and Bermuda received guidance on issues such as impacts and vulnerability, ecosystem-based approaches to adaptation and climate change and invasive alien species. The representatives of the overseas countries also shared their own experiences with regards to helping species to adapt to climate change and implementing blue carbon projects and developed a list of planned actions to enhance synergies in upcoming projects including the development of a climate change adaptation plan and the listing of a World Heritage Site.



#### CONTACTS

Ms. Sakiko Kokutao  
sakiko.kokutao@cbd.int  
81 4 257-6907





## Building partnerships and awareness of biodiversity and climate change in Europe overseas for the future of BEST

This "facilitating project" contributes to strengthen biodiversity conservation and climate change adaptation in Europe overseas through strengthening strategic partnerships, elaborating on governance and financial mechanisms, mobilising support for action using targeted communication and awareness raising events at the EU and international levels. It successfully leverages support for the BEST Initiative and has increased the visibility and consideration of Europe overseas biodiversity and climate change at the EU, Europe overseas and international level. The project is implemented in collaboration with stakeholders and actors including OCTA, European Parliament and European Commission services.



has made great strides in raising awareness of EU issues and challenges in terms of biodiversity and climate change in Europe overseas. Through using multiple communication channels, this project has been successful at dispersing information amongst a wide range of relevant stakeholders and this has shown that European Overseas issues have been well understood, at a global, European and local level.



Events associated with this project have been put on in Europe overseas entities. In this, several Roundtable meetings have been extremely successful in bringing together a range of stakeholders representatives from EU institutions, Member States, Overseas Countries and Territories, Outermost regions, NGOs and local associations. Several major events have been held at the European level, in close collaboration with the Parliament Intergroup on Climate Change, Biodiversity and Sustainable Development, and at the international level with the Partnership (GLISPA). These events have successfully facilitated debate, discussion and action in order to tackle the challenges facing Europe Overseas.

Various communication tools such as Twitter, IUCN's Europe Overseas website and the IUCN Europe Overseas website have all been actively used to spread the message amongst different stakeholders regarding the most recent developments affecting Europe Overseas. Numerous web stories have been circulated via social media sites that have highlighted conservation efforts in Europe overseas, legislative developments and other relevant information in overseas entities to tackle biodiversity loss. Similarly, the production of print materials such as "Navigating with the Best" (and available in three languages) and materials such as posters and banners have helped to raise awareness of Europe Overseas amongst stakeholders.

There has also been great efforts towards developing a clearly defined business case on Europe overseas biodiversity and climate change, which can be used by all European actors as a tool to leverage partnerships and future collaborations. This has involved utilising expert consultants and bringing together stakeholders for numerous meetings in order to fully agree on the best way forward regarding a dedicated strategy to support Europe Overseas.

### Description of the Project

The aim of the Action is to strengthen biodiversity conservation and climate change adaptation in Europe overseas through strengthening strategic partnerships; proposing governance and financial mechanisms to enhance biodiversity and climate change policies and programmes targeted at Europe overseas; and mobilising support for Action using targeted communications and awareness raising events at the EU and international levels.

The Action addresses the recommendations of the Message from Reunion Island (2008) and the objectives of the BEST Preparatory Action, more specifically, Priority 4 and 5 of the BEST 2011 - Open Call for Proposals, and aims to communicate the unique contribution of Europe overseas to the EU's international commitments, in particular, the CBD Strategic Plan and the Aichi Biodiversity Targets.

The Action is implemented jointly by International Union for Conservation of Nature (IUCN) and European Bureau for Conservation and Development (EBCD) with support from Conservation International (CI) Europe, the Overseas Countries and Territories of the European Union Association (OCTA), the Secretariat of the Convention on Biological Diversity (SCBD) and the Critical Ecosystem Partnership Fund (CEPF). The project partners and supporters bring a unique mix of institutional capacity, expertise, skills and networks from local and national, to European and international level, which will contribute to successful outcomes of the Action.



The main outcomes of the Action are: increased partnerships through an open and flexible mechanism able to provide an effective channel for dialogue and consensus building among EU institutions, EU Member States, regional and local institutions on key issues and solutions including the BEST; a proposal for a BEST governance, including consideration of strategic policy objectives, principles and options for implementation modalities and a framework for evaluation of its impacts; an expert report on governance options and financial mechanisms with options to be considered in the future of BEST, as well as increased visibility and consideration of Europe overseas biodiversity and climate change at the EU, Europe overseas and international level.

### CONTACTS

Carole Martineau  
carole.martineau@iucn.org





# BEST

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
ECOSYSTEM **S**ERVICES  
IN **T**ERRITORIES OF  
EUROPEAN OVERSEAS



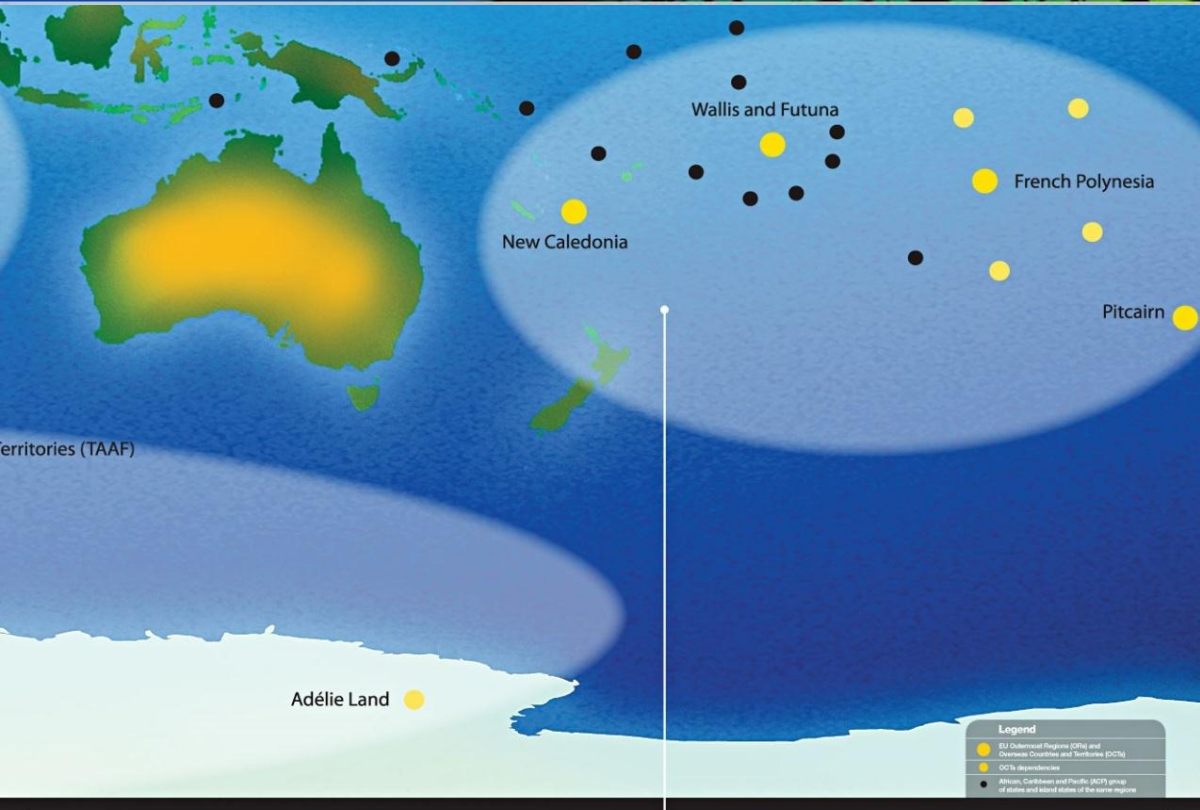
## Pacific projects





# BEST

VOLUNTARY SCHEME FOR BIODIVERSITY AND ECOSYSTEM SERVICES IN TERRITORIES OF EUROPEAN OVERSEAS



## 4 Projects

BEST/2011/35 on-going (coordinated by Institut des Récifs Coralliens du Pacifique IRCP)

**Coral reefs in a changing world – ecosystemic services from coral reefs : public tools for decision-making in New Caledonia and French Polynesia (CORAIL)**

The project aims to provide a set of methods to evaluate ecosystem services from coral reefs for public decision-making for the present and for the future in the context of global change including demographic and climate change. The goal is to understand today the relationships between ecosystem services in order to inform future decisions through scenarios of governance. The theories and methods proposed will be tested in two case studies in EU OCTs in the Pacific.

BEST/2012/19 on-going (coordinated by French Marine Protected Areas Agency)

**South Pacific Ocean Ecosystemic Analysis (PACIOCEA)**

As a flagship project, PACIOCEA is a first attempt to consider marine management across the tropical South Pacific Ocean (over 21 million km<sup>2</sup>) at multiple scales ranging from the lagoons to the whole region in order to address the different dimensions of marine issues and to implement an integrated approach of marine ecosystem management from both geographic and socio-economic perspectives. The project aims to strengthen conservation and sustainable management of marine ecosystems, to foster ecosystem-based approaches and to improve climate change adaptation in the EU OCTs of the tropical South Pacific and the neighbouring countries through the development of a called marine spatial planning. To this end PACIOCEA will foster collaboration at both technical and political, and regional and local levels, by collecting data from various institutions and actors and encouraging joint decisions between neighbouring countries and within countries over the conservation and management of marine resources.

BEST/2011/42 on-going (coordinated by ADIECAL)

**Rational management of the environment and natural areas: biodiversity and ecosystem services of New Caledonia (GREEN NC)**

New Caledonia is one of the 10 most important biodiversity hotspots worldwide. The project provides the opportunity to develop synergistic, convergent and complementary action on priority sites including through improving essential knowledge, support management actions protection, restoration and forest reduction and strengthening collective governance authorities. This will contribute to build strong foundations for the sustainable management of natural resources in New Caledonia and help to adapt to ecological and socio-economic changes.

BEST/2011/26 on-going (coordinated by SOP MANU, Association Manu Société d'Ornithologie de Polynésie)

**Protection et gestion durable des oiseaux terrestres de Polynésie française menaces d'extinction et de leurs habitats**

Concrete actions are being undertaken for the recovery of two species of French Polynesia listed as critically endangered (Tahiti Flycatcher – *Pomarea nigra* and Fulu Hiva monarch – *Pomarea whitneyi*) on three islands Rimataua, Ua Huka and Taharua. The first year of this conservation action delivered tangible results as significant recovery of the target species were reported. The actions of recovery and biosecurity are implemented by involving local people through the creation of so-called species support groups (SSGs). The aim of the protected areas will be to generate durable income through the implementation of development programmes.



# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## Pacific projects

### Co-ordinators:

- Institute for the Pacific Coral Reef
- Manu – Association Société d'Ornithologie de Polynésie
- ADECAL (New Caledonia Economic Development Agency)
- French Marine Protected Area Agency

### Partners:

- Johann Heinrich von Thünen Institute
- Province Nord; Province Sud; Province des Îles Loyautés
- SPREP Secretariat of the Pacific Regional Environment Programme; UNESCO Intergovernmental Oceanographic Commission; Institut de Recherche pour le Développement IRD



## Protection et gestion durable des oiseaux terrestres de Polynésie française menacés d'extinction et de leurs habitats

Concrete actions are being undertaken for the recovery of two species of French Polynesia listed as critically endangered (Tahiti flycatcher – Pomarea nigra and Fatu Hiva monarch - Pomarea whitneyi) on three islands Rimatara, Ua Huka and Tahuata. The first year of this conservation action delivered tangible results as significant recovery of the target species were reported. The actions of recovery and biosecurity are implemented by involving local people through the creation of so-called species support groups (SSGs). The aim of the protected areas will be to generate durable income through the implementation of development programmes.



### de la Société), Fatu Hiva, Tahuata, Ua Huka (Marquises), Rimatara (Australes)

Exotiques Envahissantes (EEE) ont conduit à la dégradation de nombreux écosystèmes terrestres de Polynésie française sur 33 espèces d'oiseaux terrestres nicheurs, 15 espèces de la Polynésie française ou orientale et 18 espèces étrangères, 20 sont menacées de disparition, soit 71 espèces. Il y a donc urgence à agir durablement pour préserver cette richesse aux générations futures. L'objectif principal de l'action proposée était de développer un réseau de gestion durable de l'avifaune en mettant en place des actions de sauvegarde des espèces d'oiseaux endémiques.

Ces actions de sauvegarde devaient impliquer les populations locales notamment via la création de Groupes Participatifs (GGP) et des actions secondaires de gestion durable. Sur les deux sites possédant les deux espèces les plus menacées de Polynésie française : Tahiti avec le Tahiti Pomarea nigra et Fatu Hiva avec celui de Pomarea whitneyi, les GGP doivent de plus aboutir à la mise en place d'aires protégées sur le modèle du Takitumu (TA) des Îles Cook. Ces actions étaient en fait la forme de deux objectifs spécifiques.

l'objectif spécifique n°1 'Mise en place d'une prévention de l'introduction d'une EEE dans une île indemne', trois sites prioritaires en Polynésie française : Rimatara (ZOE n°211, ZICO PF 19), Ua Huka (Marquises, ZOE n°212, ZICO PF 11) et Tahuata (Marquises, ZOE n°212, ZICO



Sur Rimatara, l'action de sauvegarde a débuté en juin 2012 avec la sélection d'un habitant, Tinaha Mooroa (TM). Trois des quatre réunions de GGP (composé de 8 habitants de Rimatara) se sont déjà tenues en juin et décembre 2012 et mai 2013. Lors du deuxième séjour, 121 foyers représentant 361 adultes ont été consultés et 379 d'entre eux se sont déclarés favorables à la mise en place d'une quarantaine pour certaines marchandises afin de protéger l'île du rat noir, tout comme le conseil municipal à l'unanimité. Un hangar a été dévolu à cette fonction et la quarantaine partielle a déjà commencé. 108 élèves ont été sensibilisés. Des outils de communication ont été élaborés. 37 touristes ont visités les oiseaux avec le guide depuis septembre et octobre 2013.

#### CONTACTS

Caroline Blamvillish  
 cblamvillish@manu.pf  
 (00 39) 52 11 0075 88 67





## Rational management of the environment and natural areas: biodiversity and ecosystem services of New Caledonia (GREEN NC)

New Caledonia is one of the 10 most important biodiversity hotspots worldwide. The project provides the opportunity to develop synergistic, convergent and complementary action on priority sites including through improving essential knowledge, support management actions (protection, restoration and threat reduction) and strengthening collective governance authorities. This will contribute to build strong foundations for the sustainable management of natural resources in New Caledonia and help to adapt to ecological and socio-economic changes.



### er les activités de gestion existantes

#### ressources et des sites terrestres

arquable des îles Loyautés (Province îles) et la is de santal font l'objet d'un effort de gestion tout s populations, l'habitat et l'exposition aux menaces emarquable des îles Loyautés sont évalués pour cartographie des zones d'enjeux de conservation proposer des recommandations de gestion. Une ticière est portée sur la menace qui constituent envahissantes qui sont identifiées, localisées et pour s recommandations de contrôle sont émis. Après des inventaires précis du Santal sur l'archipel des une proposition de réglementation a été soumise locales afin de gérer durablement cette ressource émique (*Santalum austrocaledonicum*). Les quotas district ont pu être révisés et un cahier de clauses été élaboré pour spécifier les recommandations préalable à l'abattage a aussi été développé. La e plantation de santal est recommandée pour capital naturel, développer la filière et aménager gradées ou envahies.



REEN contribue par un effet « levier » certain à et à la faisabilité des politiques publiques en ction de l'environnement, lié à un apport de fond donc une reconnaissance de l'intérêt et des enjeux du I-NC par la Commission Européenne, tel un « label » xcollectivités locales de mobiliser plus facilement (que ds propres ou via des apports financiers extérieurs), s et financements complémentaires nécessaires à la s actions concrètes du projet (ex : WWF, industriels

Dans le Grand Sud de la Nouvelle-Calédonie, la délimitation périmètre à proposer à l'inscription RAMSAR a été finalisée. Le périmètre actualisé inclut non seulement la plaine des lacs mais aussi le Parc de la rivière Bleue et le Lac artificiel, une partie de la plaine des Lacs de Yaté, le tout en une entité cohérente de près de 44 000 ha. Qui permettra d'affirmer et de protéger l'exceptionnelle biodiversité terrestre de cette zone. Le dossier d'inscription a été transmis en Juillet 2012 au ministre de l'écologie avec un avis très favorable du Haut Commissariat, représentant de l'Etat en NC. Ce travail est conduit en complémentarité avec les projets INTEGRE et RESCQUE.



miniers, associations, bailleurs internationaux (projets RESCQUE, INTEGRE).

En effet, au-delà de l'ensemble d'actions concrètes mises en œuvre par les différents acteurs institutionnels, se consolident donc des objectifs de gestion spécifiques mais aussi de véritables axes stratégiques communs et partagés pour la réalisation pérenne d'un réseau d'aires protégées à une échelle « pays », appuyés par la création et l'opérationnalité effective du CEN.

#### CONTACTS

Adrien Rivaton et Pablo Chavence  
ADECAL  
Phone : (687) 24.90.77 - Mail : [adecal@adecal.nc](mailto:adecal@adecal.nc)  
Web : [www.adecal.nc](http://www.adecal.nc)







## Coral reefs in a changing world – ecosystemic services from coral reefs: public tools for decision- making in New Caledonia and French Polynesia (CORAIL)

The project aims to provide a set of methods to evaluate ecosystem services from coral reefs for public decision-making for the present and for the future in the context of global change including demographic and climate change. The goal is to understand today the relationships between ecosystem services in order to inform future decisions through scenarios of governance. The theories and methods proposed will be tested in two case studies in EU OCTs in the Pacific.



### Statistics and Figures

In 2013, the starting committee gathered together, in French Polynesia, many stakeholders from French Polynesia and New-Caledonia (picture 1 below). It was a great moment for presenting the BEST project on the spot. There were large actors participation and discussion about the output on ES and Coral reef. During the meeting and the months that followed, more local stakeholders shared their anticipations about output of the project. The main areas of concerns emerged:

- Environmental and health (especially the impact of Ciguatera in French Polynesia)
- Tourism and incoastal (Crown-Of-thorns-Starfish) : impact on coral reef in term of ES
- Governance and Governance of network of MPA.

During the year 2014 especially in New-Caledonia.



During the year 2013, teams involved in the project made 3 presentations in Paris EHESS during a workshop on three issues we have to cope with, i.e. cultural

analysis of ES notion and its valuation methods for coral reef in the Pacific. The Moorea example. The Moorea example. The Moorea example.

As an important step to the finalisation of WP1 analysis of ES notion and its valuation methods for coral reef (due mid February 2014).

In early 2013, teams project and stakeholders also selected the main ecosystem services about coral reef. The list is almost validated by the members of the project. Following a revision of the literature and multidisciplinary approaches, the ES list includes: production of biomass for commercial fisheries (ES1) that includes pelagic and recreative fishery, production of commercial fisheries (ES2), scenery beauty for tourism and associated expenses of blue tourism



(ES3), protection against coastal floodings (ES4) and carbon sequestration (in New Caledonia mangroves and seagrass) (ES5). Many other ES related to cultural and traditional aspects are being studied by the members of WP1 and need more efforts before they get selected. For ES1 to ES5, data have been collected for the study sites both for the bio-quantification of the ES and for their economic valuation. Data was formatted and validated for the needs of the WP2 outputs and coordinated with the WP3 models for the cost-benefit analysis. Missing data (mainly about ES3 and the costs of conservation) as well as defining clear scenario of coastal management are planned for the first 2 quarters of 2014.

Members from WP2 and WP3 also met in Hamburg (Allemagne-France) to discuss and formalize 1) interface WP 2 monetary valuation of ES and WP3 Cost-benefit analysis and governance scenarios. 2) Influence diagram and Bayesian network for Moorea (according to governance objectives of the Moorea's management comity). Figure 2 shows the formalization so far.

At last, the communication and governance team (WP4), participated to meetings both in French Polynesia and New Caledonia with other Best members, gathered many data to produce a very interesting report on "analysis of the role of scientists and knowledge in marine areas construction and governance in Moorea." This report, based on an exam of scientist's influence on the Moorea case study, during the last 20 years, shows a very limited influence of biologists, no influence at all of human science input, on the governance of the Moorea's network of MPA.



#### CONTACTS

Tamara Bambridge  
tamara.bambridge@erlobe.pf





## South Pacific Ocean Ecosystemic Analysis (PACIOCEA)

The rich wetland biodiversity and the ecosystem services they provide including flood regulation, water treatment and shoreline protection are increasingly threatened. In the EU overseas these systems are still poorly characterized. The MANG project attempts to tackle this lack of knowledge and the associated shortage in existing management methods and tools to improve coastal wetlands conservation and thus to impact in a positive manner all wetlands of the European OFs and OCTs. This shall be achieved through four activities: establish and promote a method for site evaluation; specify a participatory and transversal method for coastal wetlands' management; promote adoption of the method; involve public and stakeholders.



### CONTACTS

Anne Létay  
Anne.Letay@afno-marhous.fr

### EA en quelques chiffres



Surface couverte par le projet: Km<sup>2</sup> (source Agence des zones protégées, 2013)

Nombre de pays et territoires concernés par le projet: 22 pays et 7 agences régionales.

Le projet bénéficie d'un soutien financier européen ayant un partage de compétence pour l'Europe face à 16 États insulaires indépendants. La situation est particulière dans le cadre de la coopération régionale avec l'objectif de renforcer les coopérations.

Un atelier s'est déroulé à Suva, Fidji du 26 au 29 mars 2013 (plus deux journées entre experts les 25 et 30 mars). La volonté de développer la coopération entre les États a été soulignée en co-organisant ce premier atelier avec les porteurs d'un autre projet MACBIO (GIZ et hôte de la gestion intégrée des espaces maritimes insulaires et les porteurs d'un projet en attente de financement (direction de l'environnement du gouvernement SIRO et AUSAID). Durant ce workshop, une journée d'échanges a également été partagée avec la CDB. Cette organisation a permis d'élargir la visibilité du PACIOCEA et de son financement sur l'action régionale dans le paysage régional.

### Objectifs

1) Utiliser la présentation résumée faite dans votre appel BEST. Toutefois des compléments peuvent être fournis par les coordinateurs.

### Objectif principal

1) L'objectif principal est de renforcer la conservation et le management des écosystèmes marins, de favoriser l'approche intégrée et d'améliorer la planification spatiale des pays voisins du sud de l'océan Pacifique à travers le développement d'un cadre de planification spatiale. PACIOCEA sera mis en œuvre par l'Agence française pour le développement et le Secrétariat de l'océan Pacifique.

PACIOCEA est en étroite collaboration avec les gouvernements locaux, le Programme régional de l'environnement (SPREP), la Commission intergouvernementale océanographique de l'UNESCO (IOC) et l'Institut français de recherche pour le développement (IFREMER).

En tant que projet pilote, PACIOCEA est la première tentative de considérer la gestion marine à l'échelle de l'océan Pacifique du Sud à plusieurs échelles allant des lagunes à l'ensemble de la région afin d'adresser les différentes dimensions des problèmes marins et d'implémenter une approche intégrée de la gestion des écosystèmes marins, à la fois géographique et socio-économique. Le cadre de travail de PACIOCEA offre la première opportunité de rassembler des acteurs, experts et parties prenantes de différents secteurs et de construire un réseau technique utile pour aborder les problèmes marins à différentes échelles, à l'intérieur, à l'extérieur et au-delà des zones économiques exclusives des pays et territoires du sud de l'océan Pacifique. Cette approche multidimensionnelle, car elle donne une vue d'ensemble des aspects écologiques et socio-économiques et fournit un cadre cohérent et pertinent pour l'analyse et l'action, est un véritable atout pour renforcer les programmes existants de conservation marine et développer des écosystèmes marins sains et résilients et des stratégies d'adaptation au changement climatique.



Le projet est rythmé par l'organisation de ateliers de travail afin de rassembler les représentants des 22 PACTs, les organisations régionales et différents experts. Ces ateliers seront particulièrement importants pour participer à la création d'un réseau de compétences sur la planification spatiale marine dans le Pacifique.

4) Afin d'illustrer au mieux le projet, nous vous serions particulièrement redevables si vous pouviez également transmettre des photos (si possible) avec les droits associés. Merci de faire parvenir ces photos en haute résolution à Carole Martinez: carole.martinez@iucn.org ou Chris Carroll: chris.carroll@iucn.org. Pour toutes questions veuillez vous adresser à ces mêmes contacts.





# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## Caribbean projects





# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



BEST/2012/7 on-going (coordinated by Atelier Technique des Espaces Naturels, ATEN) funded through AID

**Giving impetus to a collective movement in favour of overseas littoral wetlands preservation in the EU overseas (the MANG project)**

The rich wetland biodiversity and the ecosystem services they provide including flood regulation, water treatment and shoreline protection are increasingly threatened. In the EU overseas these systems are still poorly characterized. The MANG project attempts to tackle this lack of knowledge and the associated shortage in existing management methods and tools to improve coastal wetlands conservation and thus to impact in a positive manner all wetlands of the European OEs and OCTs. This shall be achieved through four activities: establish and promote a method for site evaluation; specify a participatory and transversal method for coastal wetlands' management; promote adoption of the method; involve public and stakeholders.

BEST/2011/16-8 on-going (co-ordinated by CIRAD (Centre de Coopération internationale en recherche agronomique pour le développement))

**Quantification of ecosystem services in agroecosystems, case of Plantain banana in Martinique (EcoServPlantain)**

The overall goals of the project are to increase the knowledge base on the prevalence of ecosystem services in plantain based agroecosystems and to disentangle the relation between biodiversity and ecological mechanisms involved in these services. The project includes five activities: construction of a field network; measure of ecosystem services; statistical analysis; modelling and results dissemination.

BEST/2012/4 on-going (coordinated by the Royal Society for the Protection of Birds RSPB)

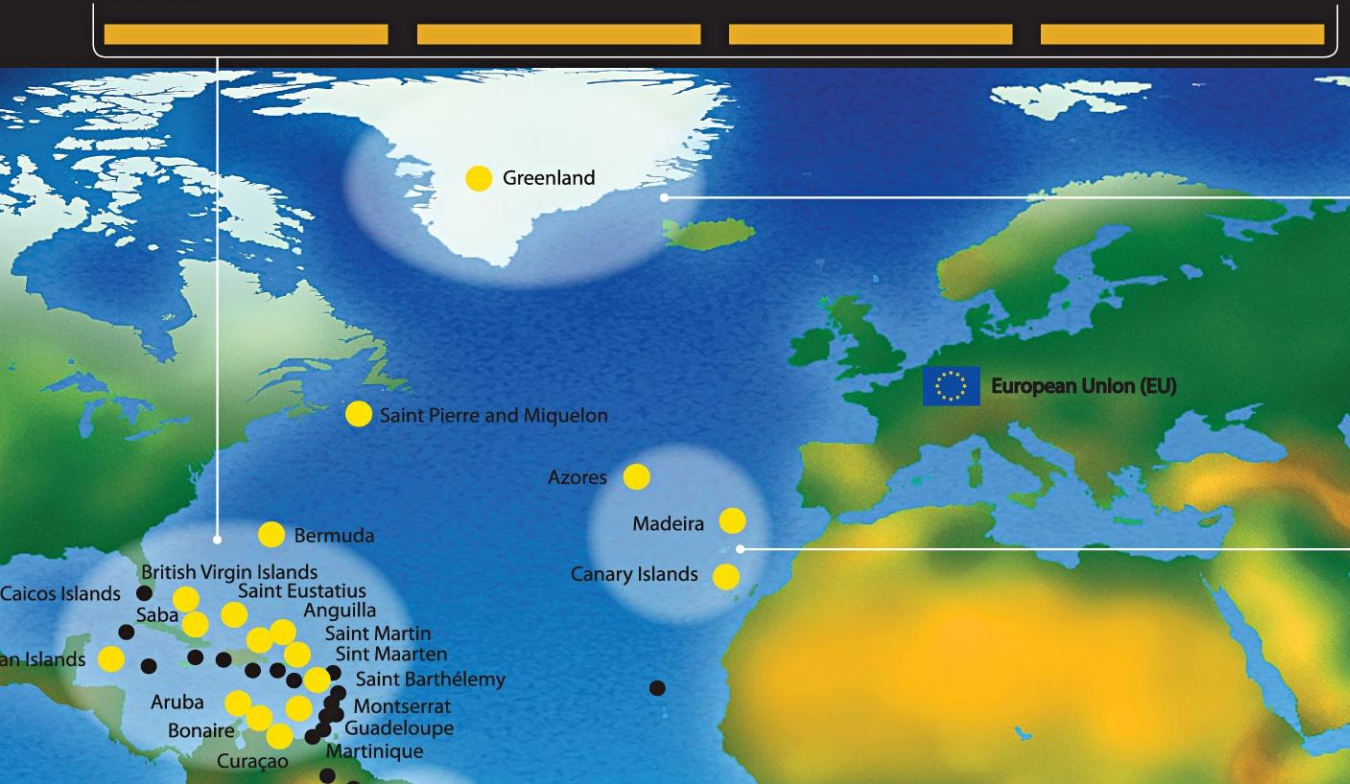
**Conserving species and sites of international importance by the eradication of invasive alien species in the Caribbean UK OCTs**

This project includes restoration of high biodiversity areas through the active management of invasive species, which have been identified among the greatest threats to biodiversity across all of the UKOCTs. It will focus on developing in-territory capacity through implementation of activities and training in the four phases of invasive species management: scoping, technical implementation, post-project monitoring and evaluation and sustaining results. The ecosystem-wide biodiversity benefits include regeneration of vegetation, recovery of native bird and invertebrate populations, and improved ecosystem resilience to the negative impacts of climate change.

BEST/2011/16-9 on-going (IAG – CRPLC (Université des Antilles et de la Guyane – Centre de Recherche sur les Pouvoirs Locaux de la Caraïbe))

**Quantification of ecosystem services provided by the marine protected areas in the Caribbean with a view to their payment (CARIPES)**

L'objectif du projet CARIPES est de faire participer activement les pêcheurs côtiers aux efforts de conservation et d'utilisation durable des ressources halieutiques dans les zones marines protégées de la Caraïbe. La mise en place d'un système de paiement pour les services écosystémiques produits au sein d'une aire protégée marine en élaboration en Martinique et de deux en opération à Saba et les Vierges britanniques vise à promouvoir de tels efforts en établissant un transfert monétaire des usages vers les pêcheurs. Au-delà des aspects financiers, l'instauration d'un tel processus entend faire changer le regard porté sur le monde de la pêche: de celui de destructeur du milieu marin à celui de garant de sa bonne santé.



# 4 Projects

# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## Caribbean projects

### Co-ordinators:

- Université des Antilles et de la Guyane (Centre de Recherche sur les Pouvoirs Locaux de la Caraïbe)

- Centre de Coopération internationale en recherche agronomique pour le développement CIRAD

- The Royal Society for the Protection of Birds

- ATEN Atelier technique des espaces naturels

### Partners:

- Conseil Régional de Martinique  
(observer, no funding)

- Conseil Régional de Martinique  
(observer, no funding)

- Anguilla National Trust; National Trust for the Cayman Islands

- Conservatoire du Littoral





## Conserving Species and Sites of International Importance by the Eradication of Invasive Alien Species in the Caribbean UK Overseas Territories

This project addresses the threat of Invasive Alien Species in the context of the UK Overseas Territories which accounts for an estimated 90% of the UK's total biodiversity and over 300 globally threatened species (IUCN 2013).

The project is being implemented in 10 Important Bird Areas / Key Biodiversity Areas in the 5 Territories demonstrating best practice for the prevention, control or eradication of Invasive Alien Species.



### Objectives of the Project

Threatened by Invasive Alien Species (IAS) to the extent that the biodiversity of ecosystems is well known, and islands, with their vulnerable biodiversity suffer disproportionately from invasive species.

Islands in the Caribbean United Kingdom Overseas Territories (UKOTs) have invasive vertebrates. Invasive mammals identified among the greatest threats to biodiversity in the UKOTs. Seabirds are particularly vulnerable to predators and many seabird colonies have been lost due to the predation of cats, rats and even mice. The predators are often compounded by introduced plants in particular, degraded the forest and encourage the growth of thorny or toxic plants often invasive species. The result of the combined impact of predation and habitat destruction is that many islands are denuded and island endemic species are at risk of extinction.

Pressure from IAS is set to increase as a result of climate change. Capacity within territory is limited to tackle these challenges. Actions to address the impacts of IAS in the UKOTs are not well developed compared to other island territories. For example only a small number of island-eradication programmes in the Pacific and Indian Ocean regions. The project includes active management of invasive species to protect biodiversity areas. The ecosystem-wide biodiversity management programme includes regeneration of native bird and invertebrate populations, and ecosystem resilience to the negative impacts of IAS.



The overall goal of this project is to protect sites and species of conservation importance by the eradication of IAS in the UKOTs in the Caribbean, sharing best practice and building local capacity, with a primary focus on invasive vertebrates. The action will focus on developing in-territory capacity through implementation of activities and training in the four phases of invasive species management:

1. Scoping sites, assessing feasibility and operational planning.
2. Technical implementation of invasive eradication and control.
3. Post project monitoring and evaluation.
4. Sustaining results post project (biosecurity).

The project will have a positive impact on seven sites of international biodiversity importance and six protected areas across five territories.



The project will be coordinated by the Royal Society for the Protection of Birds, and includes the participation of six organisations in five Caribbean UKOTs: The Anguilla National Trust; The National Trust for Cayman Islands; The National Parks Trust for the Virgin Islands; The Jost Van Dyke Preservation Society; The Turks and Caicos National Trust and the Department of Environment, Montserrat.



### CONTACTS

Jamoa Millott  
01 767 690342





# Quantification of ecosystem services in agroecosystems, case of Plantain banana in Martinique (EcoServPlantain)

The overall goals of the project are to increase the knowledge base on the prevalence of ecosystem services in plantain based agroecosystems and to disentangle the relation between biodiversity and ecological mechanisms involved in these services. The project includes five activities: construction of a field network, measure of ecosystem services, statistical analysis, modelling and results dissemination.



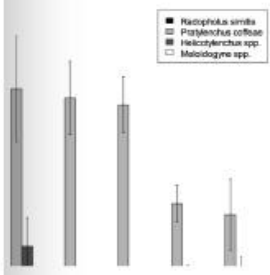
## Statistics and Figures

### Construction of a field network



This activity aims at selecting the optimal network of fields to assess ecosystem services in plantain based agroecosystems and associated ecological processes. We analysed a large data base composed of 53 fields located all over Martinique (Figure 1). These data that focus on plantain allowed us to characterize the effect of the previous crop on the abundance of plantatodes (Figure 2). These results allowed us to select 20 fields that are representative of the diversity of cropping practices in Martinique. We selected fields for the study in order to maximize the capacity to capture a general trend between biodiversity and ecosystems by selecting situations that reduce soil and climate conditions. Having achieved this activity, we now work on 20 fields in which to investigate further and in greater depth ecosystem services available.

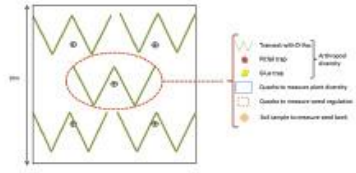
### Measurement of ecosystem services



This activity consisted in elaborating and validating a protocol to measure ecosystem services. In particular, we designed and tested a protocol that measures the effect of plant diversity on the growth of weeds. This protocol allows testing four species of plants representative of the diversity of plant communities to develop mitigation strategies of weeds to develop. In the complete protocol, we will also measure arthropod diversity (three types

of capture to cover of the diversity), plant diversity, and field productivity. To ensure a good representativeness of each measured field, we will proceed to five replicates per field (Figure 3). The measure design with paired measures in each repetition will ensure an optimal statistical analysis of data. In each field that will be surveyed, we will get the description of actual cultural practices and the cropping system history.

### Statistical analysis



We begin this activity on the base of existing data, focusing on the service of pest regulation of plant-parasitic nematodes in plantain agroecosystems in Martinique. Our results have permitted to highlight the importance of cultural practices (previous crop before plantain during the crop rotation cycle) on the regulation of plant-parasitic nematodes. We also showed that the type of soil has a strong effect on the abundance of these pests (Figure 4). These results will be presented in a first article resulting from the EcoServPlantain project. The analysis of data issued from Activity 2 will be carried out in the second part of the project.

### Description of the Project

The overall goals of the project are to increase the knowledge base on the prevalence of ecosystem services in plantain based agroecosystems and to disentangle the relation between biodiversity and ecological mechanisms involved in these services. The project includes five activities: construction of a field network, measure of ecosystem services, statistical analysis, modelling and results dissemination. Data issued from this project will provide the foundation of the quantification of a broad range of ecosystem services, including regulation, conservation and production services. The applied objective of the project is to produce recommendation to policy makers and stakeholders involved in the management of biodiversity in agroecosystems to enhance ecosystem services and biodiversity conservation. The project includes five activities: 1- construction of a field network, 2- measure of ecosystem services, 3- statistical analysis, 4- modelling, and 5- results dissemination.

**CONTACTS**  
 Olivia Lorne  
 olivia.lorne@ciad.fr







## Quantification of ecosystem services provided by the marine protected areas in the Caribbean with a view to their payment (CARIPES)

L'objectif du projet CARIPES est de faire participer activement les pêcheurs côtiers aux efforts de conservation et d'utilisation durable des ressources halieutiques dans les aires marines protégées de la Caraïbe. La mise en place d'un système de paiement pour les services écosystémiques produits au sein d'une aire protégée marine en élaboration en Martinique et de deux en opération à Saba et les Îles Vierges Britanniques vise à promouvoir de tels efforts en établissant un transfert monétaire des usagers vers les pêcheurs. Au-delà des aspects financiers, l'instauration d'un tel processus entend faire changer le regard porté sur le monde de la pêche: de celui de destructeur du milieu marin à celui de garant de sa bonne santé.



## Statistics and Figures

The project covers three case studies: French, Dutch systems of MPA implementation and management against coastal fishery systems. It involves different cultures and development for one similar objective: marine conservation and resources management in tropical seas.



The assessment of MPAs or MPA project can give an idea of the value attributed in part to ecosystem services. The case of a marine reserve in the north-western part of the island of Martinique, located in the area of Prêcheur, has led to an assessment of marine and coastal ecosystems. The economic value (TEV) has been estimated to about 58 million Euros annually, almost 12 million Euros by km<sup>2</sup>. This value is the sum of values associated to: i) direct uses (fishing, tourism, etc.) for almost 9 million Euros; ii) indirect uses deriving from ecological services (water treatment and purification, biomass productivity, carbon sequestration) for 35 million Euros; and iii) non-uses associated to the existence of the natural capital without direct use for about 55 million Euros. The creation of a marine reserve should lead to an increase of this value through the enhancement of ecological services of ecosystems and the development of extractive uses such as tourism and marine leisure.

The implementation will be done in Saba and the BVI, and results will be used to generate new mechanisms of payment for ecosystem services and a better acceptance of MPA projects.

### Objectives of the Project

The main objective of the CARIPES project is to actively involve coastal fishermen to the efforts for conservation and sustainable use of fishery resources in the marine protected areas in the Caribbean region. The establishment of a scheme of payment for ecosystem services within a marine protected area project in the framework of two MPAs in Saba and the British Virgin Islands will be done by establishing a fund transfer from the state towards the fishermen. Beyond the financial aspects,



The implementation of such a process intends to change the image related to the world of fisheries: that of destructive of the marine environment to the guarantor of its good health. The project will develop avenues in this direction so that the traditional knowledge of the fishermen is valued. It will also, in the absence of similar experiences applied to marine protected areas and coastal areas in the Caribbean and by the world, mark out the stages of the implementation of the payments for ecosystem services in marine protected areas.

### Specific objectives

- To found a good governance of areas/resources where the objectives of conservation and sustainable use of fishery resources converge
- To use the knowledge of the fishermen to improve the answers brought to the consequences of the global changes and possible resilience of ecosystems in MPAs
- To improve knowledge relating to ecosystem services produced within MPAs of the Caribbean area
- To strengthen regional co-operation in terms of research and management of MPAs
- To develop payment mechanisms for ecosystem services
- To increase the number of MPAs and to improve the effectiveness of those already in place by the development of an effective mechanism for financing conservation actions.



### CONTACTS

Jean-Philippe Marchal  
marchal.jean@gmail.com

Plaine Feller  
plaine.feller@port.ac.uk





## Giving impetus to a collective movement in favour of overseas littoral wetlands preservation in the EU overseas (the MANG project)

The rich wetland biodiversity and the ecosystem services they provide including flood regulation, water treatment and shoreline protection are increasingly threatened. In the EU overseas these systems are still poorly characterized. The MANG project attempts to tackle this lack of knowledge and the associated shortage in existing management methods and tools to improve coastal wetlands conservation and thus to impact in a positive manner all wetlands of the European OFIs and OCTs. This shall be achieved through four activities: establish and promote a method for site evaluation; specify a participatory and transversal method for coastal wetlands' management; promote adoption of the method; involve public and stakeholders.



### Histories

Il s'agit d'utiliser la présentation résumée faite dans votre appel BEST. Toutefois des compléments peuvent être ajoutés par les coordinateurs.

Le projet :

concerne les zones ultra périphériques (RUP) et les 21 pays et territoires d'outre-mer (PTOM) de l'Union européenne. Ces zones possèdent une biodiversité d'une richesse exceptionnelle et sont reconnues. Les zones humides\* de ces régions sont essentiellement littorales. Elles représentent une biodiversité inégale notamment grâce à leur proximité avec la mer (reproduction, alimentation, halte migratoire). Ces écosystèmes diversifiés (mangroves, étangs, lagunes) fournissent de nombreux services écosystémiques locaux, notamment la régulation des crues, des eaux souterraines, l'épuration de l'eau et la protection des côtes lors de cyclones.

En outre-mer européen, les zones humides littorales sont particulièrement fragiles et menacées. Par ailleurs, comme dans les zones littorales connues et que les méthodes et outils de gestion pour leur conservation est à améliorer. Pour ces raisons, les acteurs impliqués dans la préservation des zones humides littorales ont des difficultés à intégrer les objectifs de conservation à l'échelle locale, nationale ou européenne. Il est urgent de développer une dynamique collective pour la préservation des zones littorales de l'outre-mer européen.

En raison du déficit de reconnaissance, de connaissance et d'outils pour la gestion des zones humides, le projet MANG a pour ambition de :

1. Mettre à disposition des bases techniques et méthodologiques pour la gestion des zones humides des RUP et PTOM, rattrapant leur déficit en matière de connaissances, de réseaux et de compétences.

2. Pour chaque site, des stratégies de conservation et d'implication de l'ensemble des acteurs



- Porter à connaissance des publics et acteurs concernés, des informations utiles et pertinentes pour une meilleure prise de conscience et une appropriation des valeurs et des services écosystémiques de ces milieux.

Ainsi, deux organismes expérimentés dans le domaine de la préservation des espaces naturels d'outre-mer (le GIP Aten



– Coordonnateur, et le Conservatoire du littoral - Partenaire) s'associent pour porter le projet MANG. L'Aten a pour mission la mise en réseau et la professionnalisation des gestionnaires et coordonne le programme TEMELIM de renforcement des capacités des gardes. Le Conservatoire du littoral, en charge du Pôles-relais mangroves et zones humides d'outre-mer, préserve déjà un grand nombre de zones humides diversifiées en outre-mer dont 6 d'entre elles sont labellisées Ramsar. Il dispose à ce titre d'un réseau opérationnel de gestionnaires locaux (réserves, parcs, collectivités) et sa mission de préserver 35 000 ha de mangroves d'outre-mer est inscrite dans la feuille de route gouvernementale faisant suite à la conférence environnementale 2013.

Le projet MANG se décline en 4 activités :

- Activité 1 : Réaliser une méthode de diagnostic de site et le porter à connaissance des parties prenantes dans les actions de gestion et de conservation
- Activité 2 : Préciser une méthodologie participative de gestion des zones humides
- Activité 3 : Faire connaître et permettre l'adoption de ces méthodologies de travail à l'ensemble des gestionnaires des zones humides
- Activité 4 : Implication des différents publics concernés pour une meilleure conservation des zones humides.

Ce projet, sur 26 mois, concerne en priorité les acteurs impliqués dans les zones humides européennes d'Amérique et de l'Océan Indien. Il a vocation à bénéficier à l'ensemble des RUP et des PTOM.

#### CONTACTS

Fernando Tuya  
ftuya@yahoo.es  
+34 928457270  
www.fernandotuya.org



# BEST

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
**E**COSYSTEM **S**ERVICES  
IN **T**ERRITORIES OF  
EUROPEAN OVERSEAS



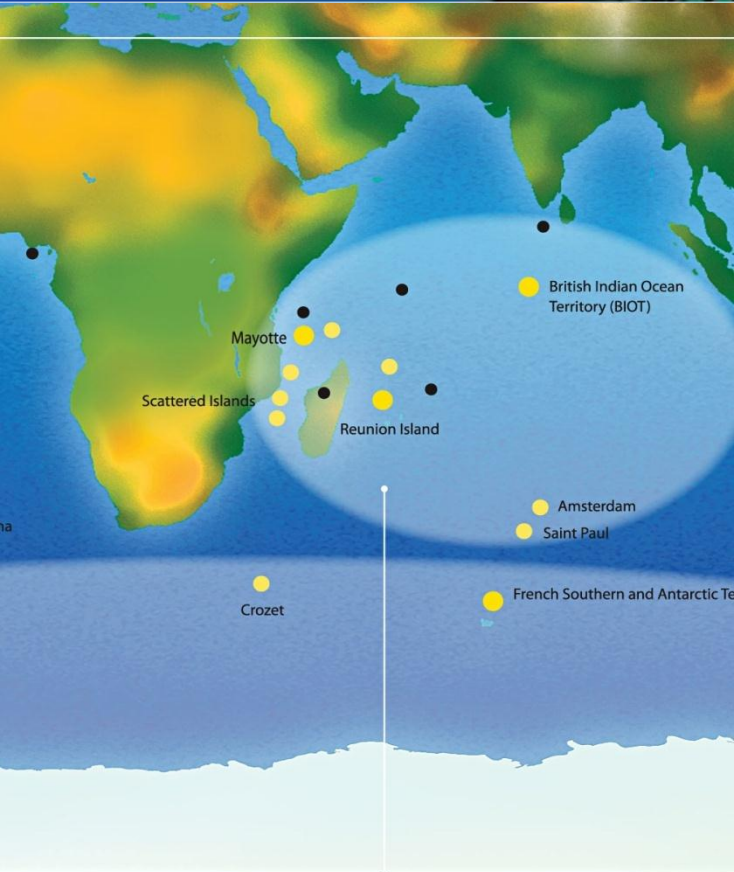
## Indian Ocean projects





# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## 3 Projects

**BEST/2011/10 finished (coordinated by DNF)**  
**Création de nouvelles aires protégées dans les forêts publiques à la Réunion et à Mayotte**

This project enabled the creation of three new biological reserves, Bois de couleur des bas, Littoral de Saint Philippe and Terrasses des Hautes, and to work in the public forests of La Réunion. It developed a strategy for the creation of protected areas in La Réunion and initiated a regional coordination with Mayotte focusing on the creation of protected areas in the public forests of Mayotte.

**BEST/2012/28 on-going (coordinated by Globolife)**  
**Migration routes of Megaptera Novaeangliae Humpback Whales (MIROMEN)**

The project aims through a better understanding of migration routes Megaptera Novaeangliae Humpback Whales to reinforce conservation measures and to support the implementation of new management plans for this emblematic species at a local and regional level. MIROMEN deployed 15 satellite tags on humpback whales in La Réunion to assess movements between breeding areas and around Réunion and to identify the migration routes from Réunion to their feeding grounds. On the basis of this knowledge, new marine protected areas may be created. The first results have already been starting, as the whales moved to unexpected locations.

**BEST/2012/200 on-going (coordinated by Association CEDIM/Kelonia) funded by AFD**  
**Connectivité des populations de tortues caouannes (Caretta caretta) dans l'ouest de l'océan Indien : mise en place de mesures de gestion locales et régionales (COCA-LOCA)**

The project aims to increase the knowledge on the humpback turtles Caretta caretta including migration pathways and connectivity between the main known breeding sites of populations, which have, so far, been little studied in the Indian Ocean. This knowledge will contribute to implement effective management measures at the local level through the forthcoming French National Action Plan and at the regional level through a close cooperation with the Indian Ocean and South-East Asia (IOSEA) which have already defined their Action Plan. Good practices, experience and knowledge shall be exchanged. Threats to the humpback turtles in La Réunion shall be assessed.



# BEST

VOLUNTARY SCHEME  
FOR BIODIVERSITY AND  
ECOSYSTEM SERVICES  
IN TERRITORIES OF  
EUROPEAN OVERSEAS



## Indian Ocean projects

### Co-ordinators:

- ONF Office National des Forêts
- Association Globice Réunion
- Association Kélonia

### Partners:

- Wildlife Conservation Society,  
Madagascar
- IFREMER; CLS



## Migration routes of Megaptera Novaeangliae Humpback Whales (MIROMEN)

The project aims through a better understanding of migration routes Megaptera Novaeangliae Humpback Whales to reinforce conservation measures or to trigger the implementation of new management plans for this emblematic species at a local and regional level. MIROMEN deployed 15 satellite tags on humpback whales in the Reunion to assess movements between breeding areas and around Reunion and to identify the migration routes from Reunion to their feeding grounds. On the basis of this knowledge new marine protected areas may be created. The first results have already been startling, as the whales moved to unexpected locations.



[http://www.antennereunion.fr/Video-Reunion-information?titre=528855-Les-baleines-equipees-de-balises-Argos&pgp=5&id\\_document=777675](http://www.antennereunion.fr/Video-Reunion-information?titre=528855-Les-baleines-equipees-de-balises-Argos&pgp=5&id_document=777675))

[http://www.globice.org/03\\_ProgrammeMiromenPresentation.htm](http://www.globice.org/03_ProgrammeMiromenPresentation.htm)

### Statistics and Figures

Le MIROMEN (Migration routes of Megaptera) mis en œuvre par Globice en partenariat avec la Conservation Society) et le soutien de la Brigade N Indien (BNO) consiste en l'étude des parcours des baleines à bosse fréquentant la Réunion, par satellite, afin d'améliorer les connaissances sur les déplacements de l'espèce autour de la Réunion et au sein de l'océan Indien et ainsi mettre en lumière les routes et sites utilisés.

15 balises Argos ont été déployées à ces fins, entre le 31 août et le 6 août 2013. Elles ont rapidement apporté des résultats aussi surprenants qu'essentiels à une meilleure connaissance de l'espèce.

Le déploiement d'une balise Argos sur une baleine à bosse d'une baleine Argos est une opération délicate. Une fois les animaux détectés, il s'agit d'identifier au mieux le sexe et le sexe de chaque individu. En effet, les comportements migratoires peuvent varier, suivant le sexe et le statut de l'individu, selon qu'il s'agit d'une femelle en reproduction, d'un mâle solitaire dans des groupes compétitifs, ou des mâles en couples mères-baleineau. Afin de posséder les données les plus complètes possible, il a donc été tenté de marquer les baleines entre mâles et femelles, avec et sans satellite. C'est à Salvatore Cerchio, chercheur de la WCS, spécialiste qu'est revenue la charge d'interpréter le comportement des individus pour désigner lequel est à équiper pour atteindre les objectifs du jour.



reste à faire. Approcher l'individu ciblé suffisamment pour être en mesure de placer idéalement la balise, sans perturber l'animal et en limitant son stress au maximum a requis une coopération entre le « tagueur », Ygor Geyer, chargé



de déployer les balises, et le pilote, Jacques Fayon, agent de la BNOI. Positionné sur une plateforme spécialement conçue à cette fin sur le bateau de la Brigade, Ygor Geyer était pour chaque opération « les yeux » de l'équipage. Son expérience de la lecture du déplacement des individus lui permettait d'anticiper leurs mouvements, afin d'être au bon endroit au bon moment.

C'est par signes, ou par brèves instructions qu'il transmettait ses consignes au pilote, qui devait les appliquer dans l'instant, nécessitant réactivité et précision. Dans le même temps, Philippe Mongin, chef de la BNOI avait la charge de collecter un échantillon cutané grâce à une arbalète équipée d'un embout spécifique, pendant que Violaine Dulau, responsable scientifique de Globice, collectait les données nécessaires, telles que les coordonnées GPS, le comportement des animaux, les photographies etc. La tension était grande lors de chaque déploiement. Une erreur, un mouvement inopiné du bateau et la balise se serait retrouvée à l'eau, avec toutes les précieuses données qu'elle aurait dû rapporter.

La phase de terrain s'est finalement déroulée avec succès, et ce sont bien 15 baleines qui ont été équipées, 6 femelles, 5 mâles et 4 individus dont le sexe n'a pas pu être identifié in situ (les biopsies permettront de lever le mystère).

Globalement, 17 jours de mer et plus de 1000 km ont été nécessaires pour déposer l'ensemble des balises. Une concertation préalable avec les opérateurs touristiques avait permis de définir le mode opératoire suivant : ne pas tenter de marquer sur des baleines faisant l'objet d'observation par d'autres bateaux. Quant aux bateaux de plaisance, une information était systématiquement donnée lorsque l'un d'eux approchait en pleine opération. Les utilisateurs du plan d'eau ont ainsi été montrés très coopératifs et ont ainsi contribué au bon déroulement de la mission.

#### CONTACTS

Gulliana Collares  
 gulliana.collares@globice.org  
 06 82 71 12 72







## COCA LOCA project

### Connectivity of Loggerhead turtle (*Caretta caretta*) in Western Indian Ocean: Implementation of IOCAI and regional management

The project just started in September 2013. For the kick-off meeting, we started with an ambitious meeting to share experiences between partners of the project (see report\_Cocaloca\_Azores\_10\_2013.pdf). The objective of this workshop was to gather scientists from the Indian and Atlantic Oceans, in order to share experiences and identify future actions for research and conservation of marine turtles in Overseas European Territories. This workshop was conducted in the framework of the EU-BEST project COCA-LOCA and held in Falal, Azores in the Atlantic Ocean. It brought 17 key loggerhead researchers from Madeira, Canaries, USA, Portugal, France, Azores, La Réunion in order to discuss the objectives of COCA-LOCA project and identify future research priorities for future project.

Another key advance was a meeting held in Mozambique, beside the WIGMSA symposium ([www.wigmsa.org](http://www.wigmsa.org)). Kelonia and Ifremer had a meeting with the team in Mozambique, in Maputo (with Centro Vida e Terra, Marine Parc de Ponta de Ouro and AICM) in order to formalize the cooperation within COCA-LOCA. A MoU is in preparation. A field trip organized by CTV in Ponta de Ouro allowed finding 2 loggerheads and 1 leatherback turtle. The sampling of loggerhead turtle is now starting in Ponta de Ouro with the first loggerhead individual arriving for the beginning of the nesting season that finish in February.



Loggerhead turtle (*Caretta caretta*) is one of the 7 species of marine turtles.

It occurs in the territorial waters of Reunion and is listed in Appendix I of the Washington Convention the IUCN Red List. More than other species, it is especially susceptible to bycatch in fisheries, plastic debris and boat strikes. A regional convention for management and conservation of sea turtles and their habitat in the Indian Ocean and South-East Asia (IOSEA) was signed in 2003 under the aegis of the Convention for Biological Diversity (CBD).

Measures to reduce the impact of these anthropogenic threats to marine turtles have recently been implemented in the Indian Ocean. These measures must be based on a clear understanding of the biology of this migratory species, whose individuals are largely scattered in this Indian Ocean region.

The objective of this BEST 2012 action is thus to increase knowledge on this sea turtle species which has, so far, been little known in the Indian Ocean. In particular, studies of the oceanic dispersal pathways and of the connectivity between populations and known breeding sites of the western Indian Ocean to implement effective management measures at the regional level, through the forthcoming French National Action Plan and at the regional level, through a close cooperation with the IOSEA which has already defined its Action Plan.

More specifically, our project plan proposes:

- To assess the relative importance of major anthropogenic threats to the loggerhead turtle in the territorial waters of Reunion, strengthening actions to directly reduce the local impact of these threats, and initiate an equivalent process in Mayotte,
- To study the oceanic movements of loggerhead turtles present in the territorial waters of Reunion and Mayotte. This will be achieved by increasing the data already collected through individual Argos tracking, new genetic and isotopic analyses and hatchlings dispersal modeling from the main nesting sites of the Indian Ocean,
- To establish a cooperation between Reunion, Mayotte and the countries hosting the nesting sites of this species (South Africa, Madagascar, Mozambique and Oman) to implement regional management measures,
- To exchange good practices, experiences and scientific knowledge with the OFRs Atlantic already working on the juvenile stages of this species: Azores, Madeira, Canary Islands.

The first objective is clearly an «immediate» conservation goal. The following objectives shall, in the medium term, allow optimization of the means dedicated to conservation of this species thanks to a largely improved knowledge of the habitats occupied during the different life stages of this highly migratory species.



<http://kelonia.org/fr/00-GB/index-gb.html>

#### CONTACTS

Stephane COCCONE  
stephane.coccone@kelonia.org





## Création de nouvelles aires protégées dans les forêts publiques à la Réunion et à Mayotte

This project enabled the creation of three new biological reserves, Bois de couleur des bas, Littoral de Saint Philippe and Tamariniaie des Hauts sous le vent in the public forests of La Réunion. It developed a strategy for the creation of protected areas in La Réunion and installed a regional coordination with Mayotte focusing on the creation of protected areas in the public forests of Mayotte.



de coopération aura permis de faire émerger un projet ambitieux : la création d'une grande réserve naturelle sur les monts et crêtes de Mayotte. Lors de l'achèvement de la mission, la DEAL souhaitait confier à l'ONF un dossier de présentation pour permettre de lancer la procédure administrative de cette réserve naturelle avant la fin de l'année 2013.

Ce projet de réserve naturelle partagée par tous les acteurs de l'environnement, les situations apparaissent plus complexes mais les enjeux restent très importants. Une étude de type REDOM, du même type que celle initiée dans les 4 autres DOM, permettrait d'aider à hiérarchiser les projets d'aires protégées dans la région et à assurer la conservation d'un échantillon représentatif de la biodiversité et des espèces de Mayotte.

Le projet

BEST « création d'aires protégées dans les forêts publiques à la Réunion et à La Réunion », piloté par l'ONF, vise à appuyer une action de coopération entre la Réunion et Mayotte afin de permettre des échanges entre techniciens



ces deux îles : 42 % de la surface terrestre de La Réunion est couverte par des aires protégées officielles contre moins de 0,01 % à Mayotte (rem : si l'on compte les terrains du Conservatoire du littoral dans les aires protégées, elles représentent 5 % de la surface de l'île).

L'action de coopération a pour but de faire bénéficier Mayotte d'un retour d'expérience sur la mise en place progressive à La Réunion d'un réseau d'aires protégées initié dans les années 1950, et de pouvoir ainsi apporter une aide extérieure aux techniciens mahorais en charge de la création d'aires protégées dans leur domaine de prérogative respective.

Cette action de coopération s'est déroulée en deux temps :

- la venue d'une délégation de techniciens de l'environnement de Mayotte à La Réunion, afin qu'ils puissent visiter différentes aires protégées présentes à La Réunion. Ils ont pu ainsi voir les actions mises en place pour la conservation de la nature et l'écotourisme et rencontrer les différents acteurs réunionnais en charge de la création et la gestion de ces aires protégées ;

- une mission à Mayotte de l'ingénieur écologue de l'ONF Réunion afin de recueillir auprès des acteurs mahorais quelles étaient leurs priorités en matière d'aires protégées dans le but d'analyser les projets convergents et d'identifier les différentes opportunités et points de blocages existants pour développer un réseau d'aires protégées cohérent.

Cette coopération régionale aura permis en particulier de faire émerger un projet fédérateur, prioritaire et ambitieux : la création en forêt publique d'une grande réserve naturelle abritant les dernières forêts primaires de Mayotte situées sur les monts et les crêtes. Ce projet sera instruit administrativement avant la fin de l'année 2013 par la DEAL et l'ONF en lien avec leurs différents partenaires.



Le projet vise à appuyer sur les stratégies possibles pour la mise en place d'un réseau d'aires protégées, en particulier dans les forêts publiques, qui abritent dans ces deux îles une part importante de la biodiversité terrestre.

Les départements d'outre-mer se caractérisent par une biodiversité à la fois exceptionnelle et très menacée. A La Réunion, les forêts publiques font parties du même « hot spot » de la biodiversité, et sont donc considérées par les scientifiques comme une priorité mondiale en matière de conservation de la nature.

En raison d'enjeux et menaces en commun, on observe pour ces deux îles une grande disparité entre

### CONTACTS

Julien Tribolo  
julien.tribolo@onf.fr





+

# BEST Consortium

*A Partnership for sustaining the BEST  
Preparatory Action*



# BEST

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
ECOSYSTEM **S**ERVICES  
IN **T**ERRITORIES OF  
EUROPEAN OVERSEAS



# *A Partnership for putting in place key components of the Voluntary Scheme*

**BEST**

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
ECOSYSTEM **S**ERVICES  
IN **T**ERRITORIES OF  
EUROPEAN OVERSEAS





# BEST Consortium Partners:



- IUCN

CONSERVATION INTERNATIONAL



- Conservation International (CI) and the Critical Ecosystem Partnership Fund (CEPF)



- the French IUCN Committee



- the WWF France

- the UNEP SPAW Regional Activity Center (SPAW RAC),



- the Fundo Regional para a Ciência (FRC)

- the South Atlantic Environment Research Institute (SAERI)



- the French Antarctic and Sub Antarctic Territories

- One Agency-Ausy Belgium - De Visu



# BEST

VOLUNTARY SCHEME FOR BIODIVERSITY AND ECOSYSTEM SERVICES IN TERRITORIES OF EUROPEAN OVERSEAS



# Organizational Structure:

- 1 Central coordination team based in Brussels
- **7 Regional hubs:** Indian Ocean, Caribbean, Pacific, Amazon, South Atlantic, Polar and Sub-Polar, Macaronesia

# Partners roles:

- **IUCN and its EU Overseas programme:** lead the consortium
- **IUCN French Committee, SPAW RAC, WWF France, FRC, TAAF and SAERI:** in charge of the Regional hubs and of implementing regional Ecosystem Profiles work
- **CEPF-CI:** Support Development of Ecosystem Profiles and Fund-raising activities
- **DeVisu and One Agency:** IT and communication technologies for the BEST platform



# Activities and tasks

1. Set up a Steering Committee – biannual meetings
2. Set up Regional hubs
3. Develop and manage an interactive website
3. Facilitate information sharing on funding and Fund-raising through: Website-Face-to-face meetings with donors-Financing Roundtables-BEST Strategy Group
4. Development of Ecosystem profiles
5. Development of BEST strategies

**BEST**

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
ECOSYSTEM **S**ERVICES  
IN **T**ERRITORIES OF  
EUROPEAN OVERSEAS



# 1. Set up a Steering Committee – biannual meetings

“Representatives of OCTs, ORs, Commission services, Member States including through relevant financial institutions, the BEST working team, the co-ordinators of the BEST facilitating project and NETBIOME CSA,  
.....”

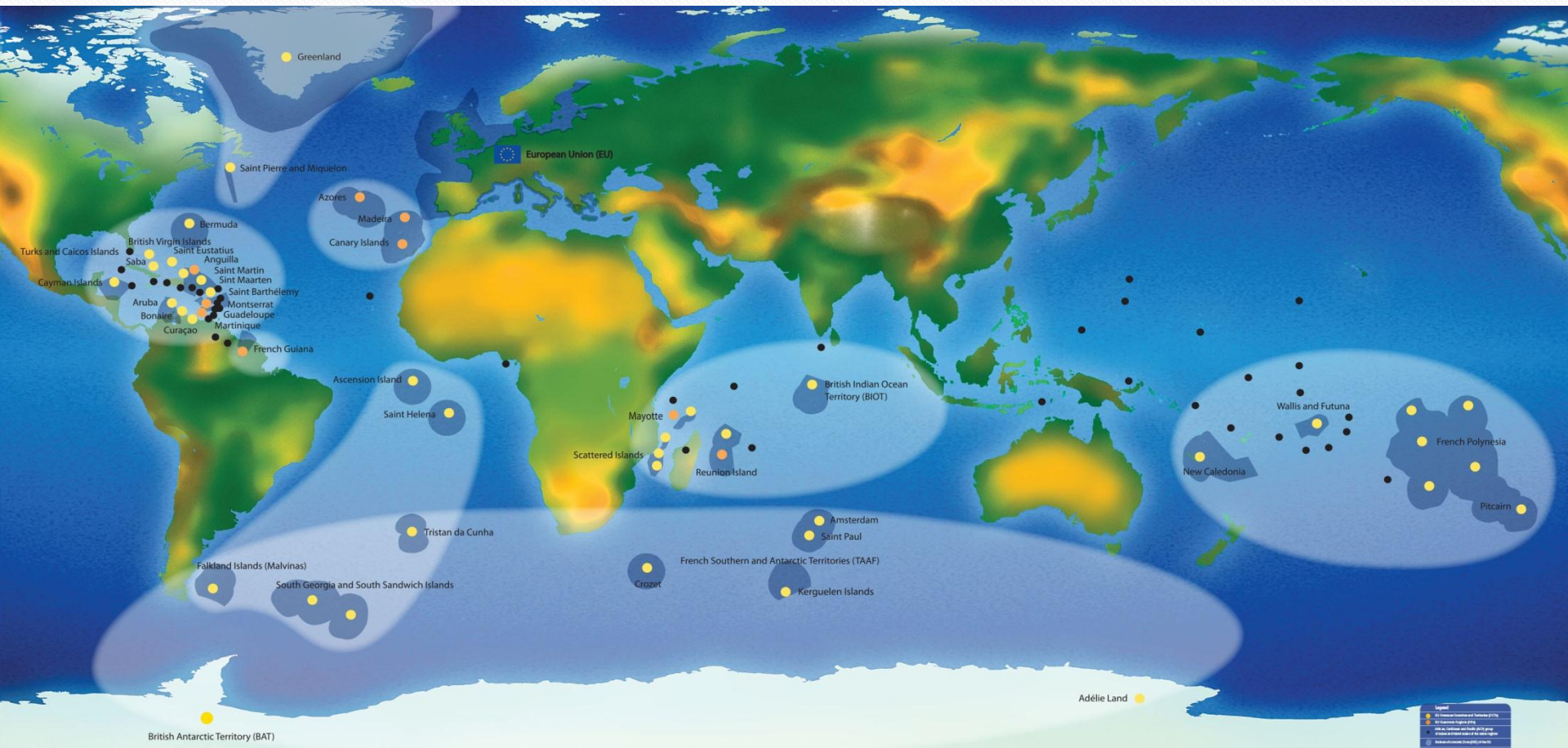
**BEST**

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
ECOSYSTEM **S**ERVICES  
IN **T**ERRITORIES OF  
EUROPEAN OVERSEAS





# 7 Regions -/ 7 Hubs



## 2. Set up Regional Hubs

- “Representing the 7 regions in which the EU Outermost Regions and the Overseas Countries and Territories are located;
- Promote and deliver enhanced cross- regional cooperation, exchanges and implementation in support of BEST objectives;
- Disseminate best practices;
- Increase buy-in from all the relevant actors and publicise BEST work and achievements at regional level
- Capitalise on existing networks for regional cooperation;
- Directly input into the development of regional ecosystem profiles and therefore contribute to the link between LOT1 and LOT2;
- Require the establishment of functioning secretariat support at the regional level and the organisation of regional coordination and implementation workshops;
- A representative of each regional hub shall undertake a 6 months paid internship;
- Build partnerships and promote BEST information exchange in the region;
- Communicate regularly with the BEST central working team through phone calls, skype and reports to forum and structures;
- Provide regular communications and reports to the BEST working team on the progress of the profile;
- Provide lessons learnt and other information to the BEST working team to be communicated via the interactive website;
- Visit stakeholders, and attend meetings and events to ensure collaboration, coordination and outreach.”

# BEST

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
ECOSYSTEM **S**ERVICES  
IN **T**ERRITORIES OF  
EUROPEAN OVERSEAS





# 3.BEST Website:

- Fostering interactions
- Clearing-house
- Funding opportunities
- Liaison between donors and actors
- info on Overseas biodiversity
- BEST projects
- Best practices

**BEST**  
VOLUNTARY SCHEME FOR BIODIVERSITY AND ECOSYSTEM SERVICES IN TERRITORIES OF EUROPEAN OVERSEAS

HOME ABOUT PROJECTS FUNDING OPPORTUNITIES ECOSYSTEM PROFILES NEWS & EVENTS CONTACT EN | FR

Share Print Full screen

**COCALOCA – Indian Ocean**  
This regional project led by Kélonia has for objectives:  
- Study the oceanic movements of Loggerhead turtles in the territorial waters of Reunion and Mayotte using satellites, genetic, isotopes and modeling technologies;  
- Establish cooperation between Reunion, Mayotte and the countries hosting nesting sites of this species;  
- Exchange good practices, experiences and scientific knowledge. [See more](#)

500 km  
500 mi

**Best practices**

**MAYOTTE**  
The French overseas department of Mayotte is located in the biogeographical area of the Comoros Archipelago, at the heart of the Mozambique Channel and close to Madagascar. Mayotte hosts a variety of land and marine tropical ecosystems which are of major ecological value, despite significant landscape changes due to the exploitation of first sugar cane and later rice. For its limited territory, Mayotte's natural landscape hosts a vast array of rare biodiversity. Landscapes range from tropical forests located on summits and ridges, wetlands amid alluvial plains, bays covered in mangroves, coasts outlined by coral reefs and surrounded by marine flora.

[SEE MORE](#)

**Regional ecosystem profiles**

South Atlantic Macaronesia Indian Ocean Polar and Sub Polar

**JOIN US**

**SUBSCRIBE TO OUR MAILING LIST**

**Latest projects**

- **MAP FOR** Monitoring of Alien Plant in Outermost regions [SEE MORE](#)
- **WIOCEAN** Western Indian Ocean Connectivity [SEE MORE](#)

**Latest funding opportunities**

- Call for applications open on ecosystem restoration – deadline 15 Oct. 2013
- Darwin + call – deadline 20 Sept.2013

**Latest news and events**

- **IUCN – CAR SPAW** Workshop on climate change and marine protected areas in the Caribbean region – 25 Nov. 2013

**Latest video interviews**

- Interview with MEP Ponga – What progress in BEST?

**Related links**

- BISE
- CLIMATE ADAPT

The objective of BEST is to promote conservation and sustainable use of biodiversity and ecosystem services in European regions and European Overseas Countries and Territories.

© 2013

- The website will increase the appreciation of the biodiversity of EU Overseas by featuring the variety and value of its species and ecosystems, Promoting new opportunities of actions and projects







- by featuring projects - the issue they address, the achievements - the website will seek to inspire new donors. For example, help illustrate the vital ecosystem services coral reefs provide

## 4. Facilitate information sharing on funding and fund-raising :

- Website/ Clearing House
- Face-to-face meetings with donors
- Financing Roundtables

**BEST**

VOLUNTARY SCHEME  
FOR **B**IODIVERSITY AND  
ECOSYSTEM **S**ERVICES  
IN **T**ERRITORIES OF  
EUROPEAN OVERSEAS





# 5 Development of Ecosystem profiles

Participation and close consultation to ensure **ownership and relevance** of work





# Ecosystem Profiling is a **PROCESS**, involving broad stakeholder consultations



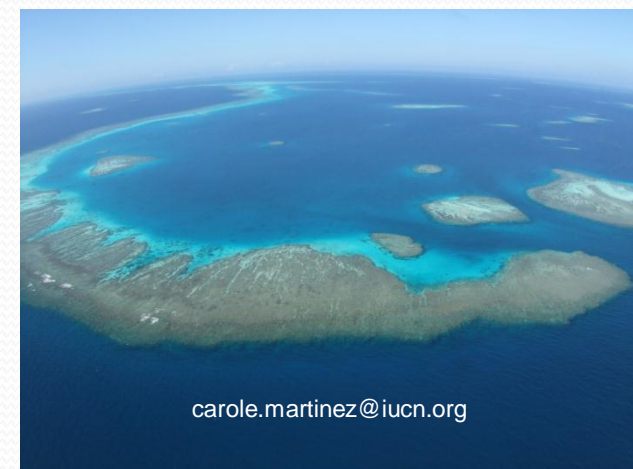
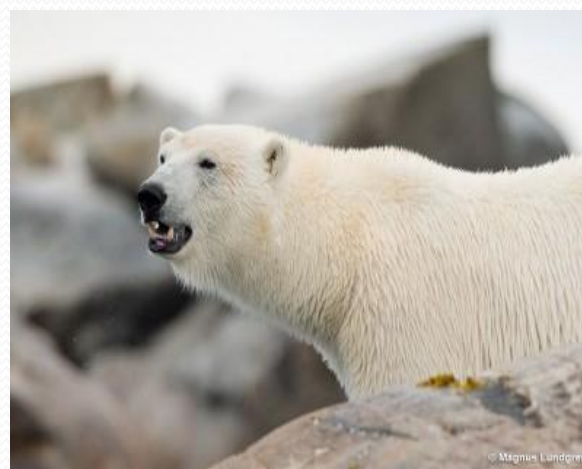


# 6 Development of BEST Strategies

## Participative approach:

- Develop investment strategies with local actors to insure that the investment strategies and fund-raising actions will **adress the needs on the ground**





[carole.martinez@iucn.org](mailto:carole.martinez@iucn.org)