

Involvement

Juan de Nova lies nearly 150 kilometers west of Madagascar in the Mozambique Channel. The anvil-shaped island covers a surface area of five square kilometers, measuring 6 kilometers in length and 1.6 kilometers in width.



Land above water level: 44 square kilometers
Lagoons: 118.4 square kilometers
Exclusive Economic Zone (EEZ): 640,400 square kilometers

“Our business expertise was a perfect match for this biodiversity protection initiative”

FRANCK HAASER, PROJECT MANAGER.



In 2010, the Veolia Environnement Foundation and the authorities for the French Western and Antarctic lands (TAAF) signed a partnership to protect biodiversity in the Iles Eparses—or Scattered Islands as they are sometimes known—the French islands in the Indian Ocean. The first step involved cleaning up beaches on Juan de Nova.

Biodiversity in the Face of ADVERSITY

On March 7, 2011, seven Veoliaforce volunteers landed on the island of Juan de Nova to remove old oil drums buried alongside the beach. “The drums were left behind after construction work to build an airstrip connecting the island to the rest of the world and had been identified as hazardous waste during an earlier inspection by the Foundation (see “Milestones”, page 55).” Erosion had gradually worn away the containers, which had begun to spill their contents onto the beach—a nesting ground for sea turtles and sooty and crested terns on the island,” explains Franck Haaser, Project Manager and Head of Emergencies at the Veolia Environnement Foundation. “Given the island’s isolated location, this was a campaign that required complex logistics to transport some 70 cubic meters of watertight



Top: Cleaning beaches on Juan de Nova: a Veoliaforce volunteer digs in.
Bottom: Juan de Nova is home to the largest colony of sooty terns in the Indian Ocean (over one million pairs).

Iles Eparses

These islands include a total of five islands: four in the Mozambique Channel (Bassas da India, Europa, Juan de Nova, and Glorieuses) and one to the north of Reunion Island (Tromelin). The islands are listed as “ocean sanctuaries of a primitive nature.” Their isolated location, insular environment and sparse human settlement have made them an outstanding habitat for species living on land and in the sea. Europa, for instance, is home to eight species of nesting seabird and two endemic subspecies, while Juan de Nova has the largest colony of sooty terns in the Indian Ocean (over one million pairs). The islands are also a unique source of diversity in marine biology. The coral reefs now being studied are almost entirely preserved, making them shining examples for the world’s scientific community. Europa has over 60 species of coral and Juan de Nova has nearly one hundred. The islands’ beaches are major nesting grounds for sea turtles—an endangered species protected by international conventions.

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containers, tools and a compact excavator with the help of the TAAF and French Army Forces in the Southern Indian Ocean.”

Once on site, the Veoliaforce team quickly got to work, setting up in the island’s cyclone shelter and preparing the site. The weather was unpredictable, with rain for the first two days compounded by the humid heat of the tropics. “We got up at dawn and were on the beach by 7 a.m. The combination of weather and heat had mixed the tar into the sand, which made our job that much harder. We used the compact excavator to remove most of it, but then we had to separate the contaminated sand from the clean sand by hand. We never let up,” says Olivier Navette, Technical Coordinator and Director of Sonolub, a Sarp Industries hydrocarbon treatment plant in Normandy, France.

Resealing 30 metric tons of waste

The team removed and resealed at least 30 metric tons of waste in nearly 145 containers in barely five days. The waste was taken to Reunion Island in late April, where it will be shipped back to France for disposal at the Sarp Industries hazardous waste incinerator in Limay, near Paris. “Our business expertise was a perfect match for this biodiversity protection campaign through a drive to put our skills in hazardous waste management to good use,” explains Mr Haaser.

With this initial step now complete, the Veolia Environnement Foundation and the TAAF can focus fully on the second stage of their partnership: a scientific research program for coral reefs in the Iles Eparses. Led by French development research body Institut de Recherche pour le Développement (IRD), this latest initiative will provide a detailed inventory of the different lagoons and help develop a more tailored approach to protection. Juan de Nova will eventually be home to a biodiversity observatory. Watch this space. ■



Stage 1:
A compact excavator is used to dig up the oil drums, avoiding mixing clean and contaminated sand wherever possible.



Stage 2:
Once removed, the drums are sealed in watertight containers. The biggest challenge lies in not squashing the drums and spilling their contents.

Stage 3: After separating the polluted sand from the clean sand by hand, the team seals the contaminated sand in watertight containers and logs each barrel based on its contents.



What are the TAAF?

- The French Western and Antarctic lands (TAAF) were designated a French overseas territory by law on August 6, 1955. They currently comprise five divisions: three in the Subantarctic, lying in the southern part of the Indian Ocean (Kerguelen, Crozet and the islands of Saint-Paul and Amsterdam); one on the Antarctic continent (Adélie Land); and a fifth, which joined the TAAF in 2007, consisting of five islands, the majority of which lie in the Mozambique Channel (the Iles Eparses).
- The TAAF form a huge maritime and land-based wilderness spanning 2.4 million square kilometers, over four times the size of mainland France. The territories’ Exclusive Economic Zones make France the world’s third-largest maritime power.
- Although France has a permanent human presence in these territories through logistics, scientific and military personnel, the TAAF are almost entirely untouched by human activities. They are home to many animal and plant species, in many cases endemic. For example, there are nearly 50 million birds in the TAAF—some facing extinction—which seek sanctuary there for nesting.

Milestones...

- 1950** • The World Meteorological Organization asks France to set up weather stations on the Iles Eparses. These are located in strategic positions in the path of tropical cyclones coming from the Southwest Indian Ocean, which can hit Reunion Island, Mauritius, the Seychelles, the Comoros, Madagascar and Mozambique.
- 1975** • Listed as nature reserves, the islands of Europa, Bassas da India, Tromelin and Glorieuses provide a baseline for a number of scientific studies.
- February 2007** • The Iles Eparses join the French Western and Antarctic lands (TAAF).
- January 2009** • A framework agreement is signed with the French Marine Protected Areas Agency (Agence des aires marines protégées). This leads to a biodiversity action plan designed to take tangible steps to protect the TAAF. Split between the Iles Eparses Islands/Subantarctic Islands and Adélie Land, the plan sets eight key targets developed through the Grenelle Environment Forum.
- April 2009** • The extensive TAAF clean-up campaign in the Iles Eparses removes 650 metric tons of metal waste resulting from several decades of human settlement. Some waste is left over after the campaign, requiring special treatment, largely on Juan de Nova.
- 2010** • The leading government official for the TAAF, Rollon Mouchel-Blaisot, signs a partnership with the Veolia Environnement Foundation to protect biodiversity in the Iles Eparses with two key goals: preserving the coral reefs and removing and treating waste resulting from human activities on the island of Juan de Nova.
- March 2010** • The Veolia Environnement Foundation sends two waste-management experts to Juan de Nova to study pollution on the island. Their analysis reveals hazardous waste and an action plan is drawn up in partnership with the TAAF to remove and treat the waste.
- March 2011** • Seven Veoliaforce volunteers clean up the waste on Juan de Nova.