

Biodiversity 2014

**E Tango Maori
te Ao Ora Natura**
Our Islands, Our Biodiversity, Our Future

community rely on biodiversity for housing, traditional medicines, handicraft production, costumes and food. Therefore, NES and its stakeholders are celebrating island biodiversity and raising awareness of just how valuable biodiversity is to our livelihoods and the way we live here in the Cooks.

2014 - NES campaign theme

The purpose of this campaign is to promote different aspects of Cook Islands biodiversity to our people, including by highlighting threats such as invasive species and human activity as well as promoting unique features of our species and ecosystems.

The theme itself is linked to the International Year of Small Island Developing States as well as the Year of Island Biodiversity, and was developed to recognize the link biodiversity on each of the islands has to our past and present and its importance to our future.

Tune into CITV tonight at 6.30pm for a 30min documentary to celebrate International Biodiversity Day.

Biodiversity and our traditions

Our Biodiversity plays a huge role when it comes to Cook Islands custom and tradition. For many generations, our fore-fathers incorporated our natural biodiversity and have transformed these into our tradition custom, songs, dance, agricultural practices and traditional medicines.

For many generations, particular trees have been carved and used as small fishing boats, ukelele's and drums – and all play significant roles in our traditional custom, while plants have been used for the use of traditional medicine and house making.

One of the biggest threats when it comes to traditional medicine is development by us. In recent years, taunga's have been forced to search for particular plants further inland as the numbers of certain plants found in now developed areas has dwindled. What we practiced in the past could one day be the answer to our needs in the future. So conserve our island biodiversity and our future.

Cross-Island Biodiversity adventures

The National Environment Service has so far conducted three cross island trek walks with the senior students of Avarua and Takitumu schools.

The 3-4 hour trek falls in line with NES Education Unit's education workplan and this year's 2014 theme being, 'Our Islands, Our Biodiversity, Our Future – Te Tango Maori te Ao Ora Natura.'

Throughout the trek, students are able to learn more about our Island Biodiversity and the threats our biodiversity faces from invasive species and human contact and allows students to engage more with our natural environment and familiarize themselves with the different plants, identify its uses for medicinal purposes and how these plants are used in the outer islands.

Before the trek begins, students are put into groups lead by a NES officers and accompanied

by teachers, parents and a member of the Rescue Fire Service.

Along the walk students are shown different species of plants and were asked to draw the different leaf shapes as well as take note of the plants surrounding habitat.

It is NES's intention to conduct more cross island treks with other schools and the Takitumu Conservation Area in Papaarua.



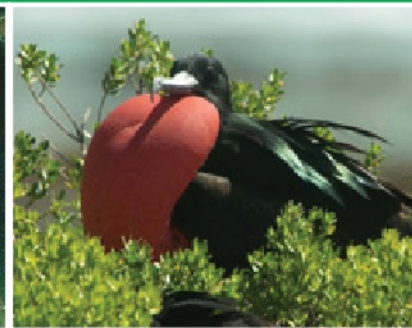
Suwarrow's rat eradication programme

Suwarrow is one of two most important breeding sites for seabirds in the Cook Islands and one of only a few sites in the world where seabirds occur largely undisturbed. The atoll is known for having around 9% of the world's population of Kota'a and 3% of the world's population of Tavake.

Amid the islands beauty lay one of the birds biggest threat, the Pacific rat (*Rattus exulans*) that was threatening the islands breeding seabirds and was growing in numbers at an alarming rate and was confirmed to have been present on 4 of the 30 motu's.

In 2012, a baseline survey was carried on Suwarrow where data was collected and sent to Rarotonga to determine how much rat bait was required, and then in May 2013, a team was sent to carry out the eradication program and lead by TIS and supported by the Birdlife International, the Pacific Invasives Initiative (technical advice), the National Environment Service and a secondary school student.

The team prepared the baiting grid for



each of the 4 motu's which comprised of a network of tracks 20m apart with baiting points marked at 20-25m intervals. Around 25kg of bait was laid per hectare and a further 15kg of bait laid 7-10 days later, however, the team discovered that more bait was required because the bait was being consumed by coconut crabs, which has no permanent affect on them, the team then noted that a further 20kg of bait be laid to accommodate the coconut crabs.

With the return of the 2 Suwarrow officers later this month, the pair will monitor the 4 motu's for any rat presence and if need be, another eradication operation may be carried out this year.

Senior Biodiversity Officer, Elizabeth Munro says, the operation was captured by Wildlife film-maker Nick Hayward' who produced a short documentary on the eradication program and will be screened on CITV tonight.

Great Biodiversity Inter-Ministry Challenge

The National Environment Service is celebrating International Day of Biodiversity with an Inter-Ministry challenge with around 10 teams agreeing to be part of the commemoration.

Each team of six members will compete in activities around town in which all have been created and linked to our islands biodiversity. The activities created falls in well with the 2014 theme being "Our Islands, Our Biodiversity, Our Future – E Tango Maori te Ao Ora Natura." The aim of this challenge is to see how well we know our island biodiversity and to strengthen ministry partnerships in working together to conserve our biodiversity.

Teams will be given activities to complete and will be monitored by NES staff.

The National Environment Service thanks all those who have agreed to the Great Biodiversity Challenge and wish all teams participating the best of luck!

"IUCN Red List June 2014 update" for the Cook Islands

Fieldwork was carried out in 2010 to survey some plants in the Rarotonga mountains of Te Manga and Te Kou. These plants were found to have very little surviving numbers.

The list was generated by Wildlands NZ in partnership with Gerald Mc Cormack of the Natural Heritage project. This list is hoped to be submitted to the IUCN redlist for critically endangered species in June of this year. In total 17 species were identified with only 1 of those species now extinct, which is the Rarotonga Acalypha.

Name of Plant	Situation	Common Name/Maori Name	Type of Plants
Acalypha wilderi	Extinct	Rarotonga Acalypha	
Asplenium schizotrichum	Critically Endangered		Fern
Balanophora wilderi	Data Deficient	Rarotonga Balanophora	Herb
Coprosma laevigata	Critically Endangered	Rarotonga Coprosma	Tree
Cyathea parksiae	Least Concern	Rough Tree-Fern or Panga Tua-taratara	Fern
Cyrtandra liliiana	Critically Endangered	Te Manga Cyrtandra	Shrub
Cyrtandra rarotongensis	Critically Endangered	Rarotonga Cyrtandra	Shrub
Fitchia speciosa	Least Concern	Rarotonga Fitchia	Tree
Garnotia cheesemanii	Critically Endangered	Rarotonga Garnotia	Grass
Geniostoma rarotongensis	Data Deficient	Rarotonga Geniostoma	Shrub
Haloragis stokesii	Critically Endangered	Rarotonga Haloragis	Shrub
Homalium acuminatum	Least Concern	Cook Islands Homalium	Tree
Meryta pauciflora	Vulnerable	Rarotonga Meryta	Tree
Pittosporum rarotongense	Least Concern	Cook Islands Pittosporum	Tree
Psychotria whistleri	Critically Endangered	Rarotonga Psychotria	Shrub
Radiogrammitis cheesemanii	Endangered	Cloud Grass-fern	Fern
Sclerotheca viridiflora	Critically Endangered	Rarotonga Sclerotheca	Shrub

REMINDER:

The NES Photo Competition closes on Thursday 29th May – so register now and get clicking and be in to win!

