

**PRISMSS** Restoring Island Resilience

Invasive species are the leading driver of biodiversity loss in the Pacific. They have a significant impact on ecosystem resilience leading to a loss of ecosystem services and a reduced ability to adapt to climate change.

The Pacific Regional Invasive Species Management Support Service (PRISMSS) aims to assist the Pacific in stepping up on-the-ground management of invasive species.

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In July SPREP signed a new Grant Funding Arrangement with the New Zealand Ministry of Foreign Affairs and Trade to provide further support to PRISMSS and PRISMSS activities in the region. The project <u>PRISMSS-Restoring Island Resilience</u> will take place up until mid-2026 and spend over NZD 20 million providing much needed human resources to both manage the PRISMSS and coordinate the PRISMSS programmes, develop further multi-country projects, continue with the mainstreaming activities and research initiatives, and invest in scaling up all five PRISMSS programmes across the region. The SPREP Invasive Species Adviser will continue to provide oversight and advice. We look forward to introducing you to the new team in 2024.

# PRISMSS

# **RESTORING ISLAND RESILIENCE**

At the special <u>PRISMSS Restoring Island Resilience Event</u> in September: <u>"Celebrating Pacific success toward scaling up the management of invasive species- a journey to restoring island resilience through PRISMSS</u>" we celebrated the support from the New Zealand government and received strong pledges from Pacific Ministers, the Global Environment Fund, Green Climate Fund and the Adaptation Fund towards restoring island resilience through PRISMSS.





In November PRISMSS hosted the <u>fifth Pacific Invasive Learning Network Meeting</u> (PILN) at SPREP in Vailima, Apia. With PRISMSS hosting the event it provided an opportunity to focus on the regional aspects of each of the five PRISMSS programmes such as the capability frameworks and other programme components stored within the <u>PRISMSS</u> <u>Navigator</u> to assist with coordination, resourcing and tracking.

From the PRISMSS Team and our partners we would like to wish you a very happy festive season and look forward to working with you again in 2024.





# **PROTECT OUR ISLANDS**

Prevent the arrival, establishment and spread of invasive species

At the recent PILN meeting, country representatives who completed <u>clean boats, clean</u> <u>ports</u> assessments. Highlights from the assessments show that the greatest need at a regional level is support for advocacy/awareness, with 93% of responses citing this as something where assistance is needed. Domestic biosecurity and greater capacity (staff and resources) are also high on priority list.

Importantly, this gives us a baseline for the regions and targets for assistance to countries. As a follow up to the assessments, Protect our Islands will be working with countries to assist with the priorities identified. If you would like your country to be included, please lodge a request with PRISMSS.

One of the initiatives to implement the <u>clean boats, clean ports</u> framework are "buddies" who will work with the countries to assist with their needs. Protect our Islands recently completed a 6-month pilot project for to trial the buddies concept. The pilot enabled assistance with animal control capability development in Tuvalu, and recommendations

for Vanuatu's early detection and rapid response programme in light of lessons learned from their coconut rhinoceros beetle emergency response.



Participants during the clean boats, clean ports session delivered by POI Technical lead Monica Gruber



#### **PREDATOR FREE PACIFIC**

Removal of invasive mammalian predators from islands

The groundbreaking conservation work to eradicate rats on Late Island, Tonga, makes it the largest island in the Pacific to have been cleared of invasive rats. Removing invasive species from islands is one of the most cost-effective tools for building resilience against climate change impacts for communities, biodiversity, and marine habitats.

Local governments, NGOs and communities worked together to restore the 1740 hectare island in August. With completion of the Late Island eradication, together with Muomua and Fuaamotu island, Tonga is now leading the region on efforts to scale up the management of invasive species to increase the resilience of its ecosystems and communities to the increasing impacts of climate change.

<u>Late Island</u> is a sanctuary of biodiversity for Tonga. It supports one of Tonga's largest intact tropical broadleaf forest ecosystems, one of the most threatened ecosystem types in the world. This tropical forest provides a stronghold for several globally threatened species including the Friendly Ground-dove and Tongan Whistler.

Future plans to remove invasive species from the islands of Tofua, Kao and Ata could provide refugia for an incredible 95% of Tonga's biodiversity and support future recovery efforts for endangered species.

Operations have been completed on inhabited Palmerston Atoll (Cook Islands), islets off Ua Pou (French Polynesia) and within Kiritimati Atoll (Kiribati). A novel boat based drone operation was used for the Ua Pou islets, and a traditional hand broadcast approach was used on Palmerston and the Kiritimati sites both providing valuable lessons for future applications.

The eradication of rats from these islets will benefit communities as well as biodiversity. More than 20 species of seabird including the globally Endangered Phoenix Petrel and Polynesian Storm Petrel stand to benefit.



Boat based drone operation used for the rat eradication and baiting work in Ua Pou islets, Marquesas



## WAR ON WEEDS

#### Management of high priority weeds

The <u>War on Weeds (WOW) Programme</u> team led country coordinators through a selfassessment to determine their current capability levels and readiness to plan, manage and implement a WOW Programme. Eighteen capability scorecards were completed with the results enabling the WOW team to identify areas needing improvement. It will also inform targeted capability building efforts to enhance the impact of the WOW Programme across the region.

During a visit to Eua Island, the WOW team identified re-sprouts and new seedlings surrounding the last remaining African tulip tree at a residence in Petani village. The landowner shared that the tree had been planted over 60 years ago for shade and ornamental purposes. Following previous unsuccessful attempts at eradication, new methods were implemented by the WOW team to eliminate the remaining stump and seedlings. Ongoing monitoring of the site in Eua will be required to ensure there is no further stump growth or seedlings in the surrounding area.

On the island of Tongatapu the fight against the Panama rubber tree (*Castilla elastica*) intensified with a new herbicide and application method. Initially introduced to make cricket balls, the tree now threatens Tonga's natural environment by rapidly covering forest edges and open areas. The team focused on training local battler Ms. Loisi Tongia in safe herbicide use, demonstrating its application at Tonga College in Atele which is a hotspot for this invasive plant. Employing the hack and squirt method, the team successfully treated over 100 trees and seedlings.



Invasive Species Battlers WOW Technical lead Mr Josef Pisi and National coordinator Mr Viliami Hakaumotu applying herbicide to the Panama Rubber Tree (Castilla elastica)



#### NATURAL ENEMIES -NATURAL SOLUTIONS

Biological control of widespread weeds

Focusing in on Natural Enemies - Natural Solutions (NENS) priorities for the Pacific.

Also at the recent PILN Meeting the PRISMSS NENS team led a discussion about which invasive weeds were the top priorities for the region for which natural enemies should be developed in the near future. Using a prioritisation tool, and the participants' knowledge and experiences, the NENS team facilitated a robust discussion about the impacts of key weeds. This allowed weed impact and effectiveness of current control tools scores to be agreed and entered into a prioritisation tool developed by the PRISMSS NENS team, along with existing biocontrol effectiveness and cost scores, to generate overall scores.

Koster's curse (*Miconia crenata*), African tulip tree (*Spathodea campanulata*), taro vine (*Epipremnum pinnatum cv aureum*), tamalingi (*Falcataria moluccana*), giant reed (*Arundo donax*), and leucaena (*Leucaena leucocephela*) emerged as the top 6 priority weeds for the Pacific region for which natural enemies should be developed. The PRISMSS NENS team is already actively working on four of these targets for the Pacific. Koster's curse is currently being worked on by researchers in Hawai'i and Australia, and giant reed is an active programme in New Zealand, so it should be straightforward to extend the work on these targets when funds permit.



Top 6 priority weeds identified for the Pacific region



#### RESILIENT ECOSYSTEMS -RESILIENT COMMUNITIES

Priority area ecological restoration

The <u>Resilient Ecosystems Resilient Communities (RERC) Programme</u> team led country coordinators through a self-assessment to determine their current capability levels and readiness to plan, manage and implement a RERC Programme. Nineteen capability scorecards were completed with the results enabling the RERC team to identify areas needing improvement. It will also inform targeted capability building efforts to enhance the impact of the RERC Programme across the region.

The Government of Tonga continues to strengthen its commitment to ecological restoration by announcing the inclusion of part of the Eua National Park as the latest restoration site, of three, within the national RERC programme. The addition of Eua National Park complements the ongoing efforts at Mt. Talau in Vavaú and Toloa Rainforest on the main island of Tongatapu. These initiatives are in alignment with Tonga's recently endorsed National Invasive Species Strategy and Action Plan (NISSAP) reinforcing the Kingdom of Tonga's dedication to proactively addressing invasive species challenges.



Invasive Species Battlers GEF6 RIP Manager Ms Isabel Rasch and GEF6 RIP Officer Ms Loisi Togia feeding the rat stations with block baits

#### **PRISMSS** Partners



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