

PRISMSS Triannual Newsletter - July 2023



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[Pacific Invasives Battlers](#)



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.

PRISMSS aims to assist the Pacific in stepping up on-the-ground management of invasive species.

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PRISMSS Update

The PRISMSS team has been busy with preparations for the highly anticipated PRISMSS Event – Restoring Island Resilience planned in September 2023. This will be held the evening prior to the Environment Ministers High Level Talanoa of the 31st SPREP Meeting of Officials on 8 September. The event aims to showcase national and regional efforts to scale-up Invasive Species management as a key approach for increasing climate resilience of ecosystems and communities and steer additional donor and country support to develop new initiatives to manage invasive species as part of national climate change adaptation plans utilizing PRISMSS.

PRISMSS partner collaboration helped Niue's decision-making to respond to an invasive tree fungus outbreak. This was a great example of the PRISMSS partners working together to quickly act on a problem that in the past might have taken years to resolve.



Protect Our Islands

“Prevent the arrival, establishment and spread of invasive species”

A new [Clean Boats, Clean Ports Framework Battler Series](#) has been published in the [Battler Resource Base](#) to protect Pacific Island Countries and Territories from Invasive Species. We plan to mainly support the framework through Protect our Islands “buddies” – matching country needs with appropriate technical advice to build capability and capacity. A pilot for the Protect our Islands buddies programme is underway, led by Pacific Biosecurity and supported by the New Zealand Ministry of Foreign Affairs MISCCAP programme through the New Zealand Department of Conservation. Country needs are identified through a clean boats, clean ports assessment or through requests lodged with PRISMSS. The Protect our Islands technical lead and partners are currently discussing assignments to limit the impacts of cane toads and feral dogs in Tuvalu; assist with emergency response planning in Vanuatu; respond to a potential new ant incursion in Tokelau; and help American Samoa with biosecurity planning. Contact PRISMSS to arrange a clean boats, clean ports assessment or to [lodge a request](#).



Recently, the Protect our Islands technical lead visited the Marshall Islands, Niue, and Palau as part of several GEF 6 projects. Among other activities, we conducted fire ant surveillance in each country as part of EDRR preparedness. In May colleagues in Niue conducted fire ant surveillance at the port



Predator Free Pacific

"Removal of invasive mammalian predators from Islands"

We are just half way through the year and rats and other invasive species have already been removed from islands in seven countries and territories. Tonga has just finished leading a huge operation to remove rats from Late Island near Vava'u. If successful, Late will be the largest island in the Pacific to have had rats removed and the consequences for biodiversity

and resilience are going to be massive. The island's sea bird populations, already large, are literally going to take off with the resulting increase in nutrient flows providing long term beneficial impacts to the health and productivity of the surrounding reef. Late's reefs sustain a key fishery that sustains the local economy of Vava'u so the project is a win for people and nature alike. To complete the project, a helicopter and equipment was shipped from New Zealand and with bait and other equipment coming from the US, the project has been a huge logistical undertaking.



Consultation with District and Town Officers to reach an agreement for the Eradication of rats on Late, Mu'omu'a and Fua'amotu island in Vava'u



War On Weeds

"Management of high priority weeds"

The War On Weeds programme has made progress in Tuvalu where a site visit in late March identified four low incidence invasive weeds for removal in the main island of Funafuti. These priority species were Ivy gourd, Taro vine, Singapore daisy, and Mile-a-minute.

The weeds occurred close to households and could be manageable at the household level if relevant sectors maintain their properties through manual removal. While training needs were raised by the Tuvalu government on the effective use of agrichemicals to manage weeds, the site visit raised awareness at the household level on the impact of the four species if left unmanaged, and how they can help reduce their impacts manually. Other species that were observed include the Arrowhead vine (*Syngonium spp*), Tamalini (*Leucaena leucocephala*), *mimosa pudica*, to name a few, which will be managed during the operational phase.



Ivy gourd smothering native trees on the north eastern coast of Funafuti Island.



Natural Enemies - Natural Solutions

"Biological control of widespread weeds"

Safety

First!

During a recent visit to Niue, the NENS team finally located two patches of the previously illusive *Sida samoensis*, thanks to GPS coordinates from an herbarium specimen. This plant, which is reported to be native to Niue, Fiji, Samoa, and Tonga, seems to be extremely rare. Recent testing by Biosecurity Queensland has shown that the broomweed beetle (*Calligrapha pantherina*) can damage *S. samoensis*, but not sustain a population on it, so attack would not persist in the absence of broomweed (*Sida actua*, *S. rhombifolia*). This kind of “spillover” attack is sometimes acceptable, where a plant that might suffer transient or minor damage from a natural enemy is not important. But given the on-going survival of *S. samoensis* already appears uncertain, the beetle will not now be released in Niue or Tonga as planned. Although the beetle has provided excellent control of broomweed in three Pacific countries, safety must always come first.



Left Photo – *Sida samoensis* plant found on Niue thanks to GPS coordinates from an herbarium specimen.

Right Photo – Broomweed beetle (*Calligrapha pantherina*) will not be released in Niue or Tonga



Resilient Ecosystems - Resilient Communities

"Priority area ecological restoration"

The Resilient Ecosystems-Resilient Communities (RERC) Programme has notched up efforts in Tonga with Eua National Park (ENP) now added to its portfolio as a priority ecological area for restoration. This follows the site prioritization workshop in February 2023, where ENP was identified as a priority site. RERC technical leads from SPREP arrived in Tonga in early May to carry out a field visit in ENP. Three priority management zones within the ENP were identified, the (i) Lokupo lookout, (ii) Veifefe primary forest, and (ii) several roadsides where invasive weeds such as night cestrum, taro vine, and the giant reed (*Arundo donax*) were predominant. The ENP workbook has been developed, with equipment and tools now being procured to start off the operational phase later in the year. ENP is the third RERC site in Tonga, following the successful recovery of the Tongan whistler bird on Mount Talau in Vava'u, and revamping restoration efforts at Toloa Rainforest on Tongatapu.



Local Environment and Agriculture staff in E'ua Island joined by RERC technical lead from SPREP to determine feasible sites within ENP for restoration.