The News. September, 2010.

This is a summary of recent invasive species management activities by people and agencies that the Pacific Invasives Initiative (PII) works with. It is collated and circulated by the PII Team and contributions are welcome.
Feedback is also welcomed – contact either the PII Team PII@auckland.ac.nz or the people directly involved in projects.
Visit our website http://www.issg.org/cii/PII or find us on Facebook for further information.

PII activities

New PII Strategic Plan
PII has prepared a new Strategic Plan for 2010-2015. It provides our 25-year vision (*The natural heritage and peoples of Pacific Island Countries and Territories are protected from the threats of Invasive Species by Pacific people.*) and our mission (*To strengthen the capacity of Pacific Island Countries and Territories to effectively manage invasive species threats.)* and describes our core values.
The six strategies that will guide PII's work towards achieving its mission are:

1. Development of Pacific capacity for managing invasive species
2. Provision of practical training in invasive species management
3. Provision of invasive species management best practice tools
4. Provision of technical support and advice on invasive species management
5. Development and strengthening of linkages and networks
6. Strengthening of PII as a centre of excellence for invasive species capacity development

The Strategic Plan can be downloaded from our website - http://www.issg.org/cii/PII or contact us and we can email it to you (PII@auckland.ac.nz).

PII and CSP sign MOU
PII has signed a Memorandum of Understanding with the Conservation Society of Pohnpei (CSP). This formalises the relationship which began in 2005.
Through this MOU, PII will be assisting CSP with the implementation of the CEPF-funded project *"Conserving the biodiversity of the Pohnpei Watershed Forest Reserve (WFR) by managing invasive weeds"* which will target five priority species; false sakau, mile-a-minute, chain of love, ivy gourd and Honolulu rose.
The partnership will also extend to other invasive species management projects and PII looks forward to continued successful collaboration with CSP to manage existing threats from the increased spread of invasive plants and other emerging invasive priorities including mammal eradication on small island ecosystems.

Bejay Obispo, Conservation Society of Pohnpei Terrestrial Assistant, treating false sakau (*Piper auritum*) - one of the five priority weeds being targeted in the CSP project. (Photo: Bill Nagle)

Update on the PII Resource Kit for Rodent and Cat Eradication
Over the past few months, PII has been continuing to develop the Resource Kit for Rodent and Cat Eradication projects. The Resource Kit is a practical guide which will assist project managers in developing and implementing rodent and cat eradication projects on islands in the Pacific and elsewhere. It provides best practice processes and methods and lessons learned as well as supporting tools.

PII has always encouraged a stepwise approach to deal with the complexity of invasive species management and to maximise the chances of projects succeeding and the Resource Kit works through those steps in detail. Although some tools (i.e. guidelines and worked examples) are specific to rodent and cat eradication, the processes, lessons learned and most tools are generic and applicable to other invasive species management projects.

The Resource Kit content has undergone three major reviews by world-leading invasive species eradication experts and potential users in the Pacific and is now nearing completion. The feedback received so far has further confirmed the need for such a resource and the Resource Kit has been described as providing an intelligent, practical process by which conservation practitioners can assess, plan, and implement value-added rodent/cat eradication programs.

Other comments described the Resource Kit as basic and topic-driven and following the natural evolution of an ideal eradication project while the presentation of an eradication project exposes the high level of complexity that most practitioners underestimate when initiating an eradication project.

PII is currently working with a leading service provider in information management and process improvement on the design and build of the Resource Kit website and CD-ROM. PII is also developing a Resource Kit training course to provide project managers with the knowledge and skills to carry out eradication projects and maximize the benefits of using the Resource Kit. The training course will be designed and developed between early October and the end of December 2010.

The training pilot is scheduled for early February 2011 with the location yet to be determined, but Fiji is the preferred setting. Attendees will be invited from amongst those practitioners involved in Pacific rodent and cat eradication projects. The pilot is being designed to enable comprehensive feedback from participants on the Resource Kit and training course. This feedback will be used to put the final touches to both the Resource Kit and training course.

PII is grateful to The David & Lucile Packard Foundation for financial support and to the many individuals and organisations such as BirdLife Fiji Programme, BirdLife International, Island Conservation, Nature Fiji, New Zealand Department of Conservation, Ornithological Society of New Caledonia and the Wildlife Conservation Unit of Kiritimati, Kiribati, for in-kind support received to date.

PII assists NTF with feasibility study

Goats have caused major destruction on the island of Monuriki in Fiji, one of the sites of the herbivorous Critically Endangered Fijian crested iguana. The loss of food plants is another threat to the diminished population of iguana on the island. As part of the CEPF-funded iguana recovery project, the National Trust of the Fiji Islands (NTF) worked with the community to get approval for eradicating the goats. NTF is also capturing iguana for a captive breeding programme.

PII provided technical advice and coordinated specialist input to a goat eradication feasibility study on the island which proved positive and NTF and the Yanuya community have started mustering the goats for sale. If the goats become too wary and the community cannot remove them all, professional hunters may be necessary. Rats and ants were observed on the island during the feasibility study and further work will be required to address those threats.

Monuriki Island in western Fiji is host to an endangered forest type, an endangered shearwater and the critically endangered Fijian crested iguana. (Photo: Stuart Chape)

Feral goats have grazed parts of Monuriki Island down to bare rock. No regeneration is occurring and erosion is severe. (Photo: Bill Nagle)

Milika Ratu, National Trust of Fiji project leader for Monuriki with a crested iguana. (Photo: Bill Nagle)

Information on our website

Check out the “Tools” section of our website - the ‘Equipment and suppliers catalogue’ and the ‘Donor matrix’ have been recently updated. The “Awareness” page also has material that can be used to develop an appreciation for invasive species issues.

The website also has links to other sources of information. Look for the link to the new video “Island Invaders - how invasive predators are changing the face of seabird islands” from SEAPRE (Seabirds and introduced predators). See the story of seabird islands, their importance, and the invaders that

threaten them. Shot over a period of three years (with much of the footage captured by SEAPRE scientists in the field), ISLAND INVADERS describes: The importance of seabird islands; The impacts of predators on seabirds and their islands; predator eradication; island recolonisation and restoration; the importance of community involvement to seabird island conservation.

Updates on CEPF-funded invasive species projects that were, or are, being assisted with technical advice and information from PII

Country	Invasive Species Project Title	Target Invasive	Progress
Cook Islands	Enhance the breeding capacity of the reintroduced Rimatara Lorikeet (*Vini kuhlii*) on Atiu by reducing harassment by Common Myna (*Acridotheres tristis*)	Common Myna	Using a combination of traps, poison and shooting, the myna population at Atiu has been reduced from an estimated 7,000 (June 2009) to 1,000 individuals (August 2010). *[Cook Islands Natural Heritage Trust and Te Ipukarea Society]*
Federated States of Micronesia	Improving Invasive Species Eradication and Control in Pohnpei, FSM to protect the Pohnpei Watershed Forest Reserve and Biodiversity	Invasive plants: false sakau, mile-a-minute, chain of love, ivy gourd and Honolulu rose	A 3-year strategic plan for invasive species management is being developed, which will include invasive weed management. *[Conservation Society of Pohnpei]*
Fiji	Species Recovery Plan for the Fijian Crested Iguana	Mongoose and rats	See above. *[National Trust of Fiji Islands]*
Kiribati	Biosecurity Plan for the Phoenix Islands Protected Area, Kiribati	Cats and rats	The biosecurity guidelines for Phoenix Islands Protected Area are being revised after assessment by independent reviewers. Meanwhile ongoing consultation with Government of Kiribati staff is resulting in the implementation of improved biosecurity beginning with rodent and other pest management on domestic vessels. *[Eco Oceania Ltd]*
Marshall Islands	Traditional landowner protection for endangered Ratak Imperial Pigeon (*Ducula oceania ratakensis*) and overwintering Bristle-thighed Curlew (*Numiensis tahitiensis*) in key atolls of the Marshall Islands.	Rats	Project completed. See below. *[Marshall Island Conservation Society]*
Palau	Preventing the spread of Crab-eating Macaques in the Republic of Palau	Macaques	Project completed. The census on captive macaques resulted in 34 individuals being located in Palau. Publicity of the census and general awareness/ education on the crab-eating macaques was conducted via public television, radio, and flyers. *[summary from report: Palau Conservation Trust]*
Pitcairn Island	Finalizing preparations for the eradication of rats from the Henderson Island World Heritage Site	Rats	Following completion of a 2008 feasibility study, a technical expedition visited Henderson in September 2009 to resolve outstanding technical issues. The team concluded that eradication is feasible, giving the green light to proceed if the funding can be raised. *[Royal Society for the Protection of Birds]*
Samoa	Restoration of Nuutele & Nuulua Islands (Aleipata Group), Samoa through the management of introduced rats and ants	Rats and pigs	An extensive network of rat traps and detection gear was deployed on Nu'utele and Nu'ulua islands following the rat eradication operation one year ago. In August the latest of a series of surveillance activities took place and once again no sign of rats was detected. Repeat bird counts and reptile surveys were also carried out as part of the outcome monitoring to assess the recovery of the island ecosystem. Preliminary results are encouraging, with plenty of birds and lizards recorded. *[DEC MNRE, SPREP]*
Tonga	Protection and recovery of endangered species (and ecosystem) in Tonga.	To be determined by research expedition.	See below. *[Tonga Community Development Trust]*
Regional Support Projects	Developing Long-term Capacity for Invasive Species Management in the Polynesia-Micronesia Hotspot.	All species	Completed PII Island Biosecurity Training course in Samoa for the Aleipata project and in Fiji for the National Trust of Fiji Islands; drafted Biosecurity Plan for the Aleipata project; participated in Monuriki

Country	Invasive Species Project Title	Target Invasive	Progress
			Island goat eradication feasibility study for National Trust of Fiji Islands (see above); provided technical advice, reviewed documents and sourced equipment for other projects. Provided support and advice to CEPF Regional Implementing Team. *[PII]*
	Workshop to develop biocontrol strategy for the Pacific.	Invasive plants	Project completed. See below. *[Landcare NZ]*

Tongan megapode threatened by invasive species

(From Sione Faka'osi, Tonga Community Development Trust, s.fakaosi@tcdt.to)

The Tonga Community Development Trust (TCDT), World Pheasant Association (WPA) and Tonga Ministry of Environment and Climate Change (TMECC) have just completed a two-week rapid survey of the Polynesian Megapode *Megapodius pritchardii* (known locally as *Malau*) on the island of Niuafo'ou, Kingdom of Tonga. The survey was the first for the species on Niuafo'ou since 1993 and revealed that the *Malau* population has almost certainly undergone a serious decline.

PII provided technical information and material from the Resource Kit for Rodent and Cat Eradication to the expedition to assist with invasive species work. Local communities and egg collectors gave feral cat predation of young birds or egg-laying females as the primary threat, but little evidence was observed for this. However, the team acknowledges that chick mortality (following emergence from the nests), rather than egg mortality (egg collecting) is probably the primary source of the population decline. Also, feral pigs are almost certainly destroying suitable foraging habitat for young birds.

Feral cat.
(Photo: Rex Williams)

A series of urgent community-based conservation initiatives and an IUCN Species Recovery Action Plan are now being developed and implemented by TCDT, WPA and TMECC. The survey was co-funded by CEPF and Program of Work for Protected Areas (POWPA).

Rats implicated in decline of Micronesian Imperial Pigeon

(From Jeff Zebedy, MICS, jeffzbd@gmail.com)

PII provided technical information and sourced equipment to assist the Marshall Islands Conservation Society (MICS) in their work to protect the *Mule* (*Ducula oceanica ratakensis*), a sub-species of the Micronesian Imperial Pigeon. There were sixteen known birds at the start of the project with the number likely to decline due to people hunting it for food, loss of habitat and loss of one of its main food sources, the seeded breadfruit. Initial activities included an aggressive campaign against firearm usage and distribution of two hundred papaya and twenty breadfruit plants each month for the past three years throughout the islets that make up north Majuro.

Although an increasing number of birds was observed, the population increase was slow. Other factors were involved, one being rats climbing up trees and into nests and eating the eggs or hatchlings. This compelled MICS to install aluminum flashings around coconut palms and fence off breadfruit trees and papaya plants from roaming mammals such as pigs and chickens. As of now, approximately five hundred plants have been banded and fenced off and the number of birds has reached around eighty-five. A *Mule* recovery plan is being developed.

Prioritisation of weed targets for biocontrol

(From Landcare Research – Manaaki Whenua, New Zealand)

Landcare Research has completed a report on the prioritisation of targets for biological control of weeds on Pacific Islands. This is one of the outputs of the CEPF-funded Pacific Biological Control Strategy Workshop held last year (see PII, The News, November 2009). A prioritisation framework was used to investigate the list of 96 weeds from 15 countries or territories that was prepared at the Strategy Workshop. A number of weeds were predicted as being good targets for biocontrol agents and it was recommended that there is scope for redistribution of existing, proven biocontrol agents for some of the worst weeds in the Pacific.

The report is available from the PII website http://www.issg.org/cii/information.html and anyone interested in more information can contact Lynley Hayes HayesL@landcareresearch.co.nz.