Pacific Invasives Initiative

The News, November 2009

This summary of recent activities by people and agencies involved in the Pacific Invasives Initiative (PII) is collated and circulated by the PII Coordinating Team (PII CT). Feedback is welcomed – contact either the people directly involved in projects, or the PII Team PII@auckland.ac.nz. For further information visit our website http://www.issg.org/cii/PII.

Our condolences are extended to friends and colleagues in Samoa who lost loved ones as a result of the disastrous 29 September tsunami.

Changes at SPREP

Welcome to David Sheppard, the new Director of SPREP. PII looks forward to continue to work on invasive species management with SPREP under his leadership and wishes him well in his new role.

Project progress

Samoa: Baiting in August this year targeted Pacific rats on Nu'utele and Nu'ulua Islands (Aleipata Group, Samoa). The project, funded by CEPF and managed by MNRE and SPREP, included a biosecurity training event, developed by PII for MNRE staff and community members who are key stakeholders in the restoration project. The training started in Auckland in September, but the unfortunate news of the tsunami meant the training had to be cut short as the community leaders returned to Samoa. The workshop provided an opportunity to develop participant's knowledge and skills and identify and collect useful local information to develop essential tools to be included in the final biosecurity plan for the islands. The training will be completed at a later date.

Palau: The Palau Bureau of Agriculture (BOA) and the Palau Animal Welfare Society (PAWS) completed a Pet Monkey Sterilization Clinic from 9-17 November. The sterilization, partially funded by CEPF, was to ensure that monkeys will not be able to reproduce if they escape from their owners. This will reduce the spread of monkeys throughout Palau (it is illegal to transport monkeys from Angaur to the rest of Palau) and is part of a long term project to eventually remove the threat of monkeys to the Republic where they can cause significant economic and environmental harm.

Three veterinarians with extensive experience sterilizing macaque monkeys in Hong Kong and throughout Southeast Asia travelled to Palau at their own expense to conduct the clinic. They brought special equipment with them and shared their expertise with the staff of the Animal Shelter.

Of the 27 pet monkeys seen at the Clinic, several had serious health problems and 10 were euthanized at the request of their owners. The other 17 were sterilized and returned to their owners in Koror and Babeldaob. The monkeys were also de-wormed and blood-tested for diseases which could be transmitted to humans. More information will be available as the project proceeds.

Palau: Biological control of the Asian Cycad Scale, *Aulacaspis yasumatsui* with the *Rhyzobius lophanthae* beetle is proving successful for ornamental cycads in Koror. The beetle is established and spreading on its own to infested plants. Wild native cycads in limestone forests are rather isolated, and still not infested. The criterion for deciding success is that the biocontrol agent is keeping scale populations below levels that would require any other treatment. Ornamental and wild cycads are being monitored and the biocontrol agent is being reared for further release if needed.

Thanks to Joel Miles, National Invasive Species Coordinator for the Palau information.

French Polynesia: Invasive mammal control operations to conserve the critically endangered Tahiti Monarch have been carried out since 2004 by Société d'Ornithologie de Polynésie Manu (SOP Manu). Control operations require a different approach than eradications and to support this work, PII coordinated rat and cat control field training for SOP Manu at Boundary Stream Mainland Island in New Zealand in October. This included participation in rat and cat control operations as well as in kokako and kiwi surveys. PII acknowledges the assistance provided by the New Zealand Department of Conservation (NZDOC) for this training.

Thanks to Thomas Ghestemme, SOP Manu land bird conservation manager and Denise Fastier, NZDOC Boundary Stream Team Leader for the above information.

Pitcairn Islands: Henderson, a remote, uninhabited and pristine raised coral island, is one of the Pitcairn group of islands and is a World Heritage Site. It is seriously affected by introduced Pacific rats that, despite being on the island for more than 800 years, are causing ongoing declines in the endemic Henderson petrel population and unsustainably low levels of breeding success in three other petrel species populations which will lead to eventual extinction. Rats on Henderson are also thought to be greatly

impacting invertebrate (including many endemic species) and plant communities.
A feasibility study and draft operational plan highlighted three areas of uncertainty that needed to be addressed before an eradication operation could go ahead: 1) potential competition for bait between rats and very high densities of hermit crabs; 2) risk to the non-target Henderson rail during an aerial bait drop; 3) possible impact of bait on endemic land snails.
A team of specialists worked on Henderson over six weeks testing different rates of non-toxic dyed bait and established that, despite crab densities of >1000 crabs per hectare, all rats were able to feed on bait pellets. The team captured 20 Henderson rails after testing different techniques and successfully held these birds for four weeks in captivity, paving the way for a similar approach to be adopted during an actual eradication. Trials with toxic bait pellets and endemic snails revealed no significant snail mortalities, indicating that this group of animals would not be at risk during a rat eradication operation. These positive results have removed the last remaining obstacles for an eradication, and the challenge now is to raise the funds necessary to carry out this priority eradication.
The Royal Society for the Protection of Birds is grateful to Pitcairn Island for supporting this work and to the UK Overseas Territories Environment Programme (OTEP) for funding.
Thanks to Richard Cuthbert, RSPB, for the above information. Contact him at – Richard.Cuthbert@rspb.org.uk

Invasives information sources

A review of common myna biology and ecology and management can be found at issg.org/cii/PII.

The Journal of Applied Ecology has published a Virtual Issue with the 20 most cited papers on biological invasions that the journal has published in the last 5 years. Read this virtual issue online at http://www.journalofappliedecology.org/view/0/virtualissueoct09.html.

Pacific Biological Control Strategy Workshop, 16-18 November

Pacific Islanders and plant health specialists from the international community recently tackled the issue of adopting biological control as a tool for fighting invasive pests and weeds in agriculture, forestry and natural ecosystems. Plant health and quarantine specialists from American Samoa, Commonwealth of the Northern Marianas, Cook Islands, Federated States of Micronesia, Fiji, Guam, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands and Tonga and scientists from New Zealand, Australia, Hawai`i and the United Kingdom heard of the many biocontrol successes in the Pacific to date.
The workshop, held in Auckland, New Zealand resolved that Pacific Island countries and territories (PICTs) could share more information and perhaps even successful biocontrol agents between agriculture, forestry and biodiversity conservation groups to better address biocontrol work, as well as look at strategies implemented in other regions in the use of biocontrol agents to fight invasive plants and pests.
Presentations given by participants are available on the PII website (issg.org/cii/PII). Keep up with current events at the SPC Land Resources Division website - www.spc.int/lrd.
Thanks to Emil Adams (SPC) for the above information.

PII staff changes

Batiri (Thaman) Hughes is on parental leave and has delivered another young conservationist. Mother and baby are doing fine and we look forward to meeting the new addition to the family.
While Batiri is away, Natasha Doherty is our replacement Programme Support Officer. Natasha worked for the Division of Environment and Conservation (DEC), Ministry of Natural Resources and Environment (MNRE), Government of Samoa. Her work with MNRE included conservation projects such as: The Manumea (*Didunculus strigirostris*) Maomao (*Gymnomyza samoensis*) Project; Lake Lanoto'o Ramsar Project; Programme of Work on Protected Areas; Aleipata Islands Restoration Project; and National Parks and Reserves project.
Natasha has a Bachelor in Physical Geography and Environmental Issues degree from Massey University in New Zealand and a Postgraduate Certificate from the University of Kent in Endangered Species Management.
Marleen Baling has joined PII as a Project Coordinator (funded by CEPF). She has 9 years of experience in various wildlife scientific research and conservation-based projects, project design, fieldwork, and data analysis in Australia, New Caledonia, Malaysia and Mexico as well as New Zealand. Marleen worked with SCO in New Caledonia on conservation of the threatened New Caledonian Fairy Tern (*Sternula neries exsul*). She has also been involved with reptile translocations. Marleen has an MSc (Hons) from the University of Auckland. Her thesis was on the ecology and population genetics of the endangered chevron skink (*Oligosoma homalonotum*).
Alejandra Torres will leave PII in mid-December. We will miss Ale's enthusiasm, dogged determination and commitment to the Pacific and we wish her well for the future.