



# PACIFIC INVASIVES LEARNING NETWORK

## SOUNDBITES – AUGUST 2012

Pacific Invasives Learning Network  
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The monthly electronic newsletter of the Pacific Invasives Learning Network (PILN)  
– reporting on invasive news from PILN teams and the Pacific Invasives Partnership.  
Past issues are available online: <http://www.sprep.org/piln>



Black-eyed susan vine (*Thunbergia alata*) is native to eastern Africa but has been naturalised in many parts of the world, including the Pacific Islands. Introduced as an ornamental plant it has escaped and grow in many habitats.

See more details on the Pacific Island Ecosystems at Risk website:  
[http://www.hear.org/pier/species/thunbergia\\_alata.htm](http://www.hear.org/pier/species/thunbergia_alata.htm)

Photo: Posa Skelton



Every Action Counts  
Reduce, Reuse, Recycle

### PILN teams and country updates

#### Guam cycads threatened by invasive insects

The Micronesia cycad, *Cycas micronesica*, once a dominant forest tree on Guam is likely to become extirpated before 2019. This is the dire prediction by scientists at the Western Pacific Tropical Research Center (WPTRC), University of Guam. The cycad is the only native host for the invasive scale insect *Aulacaspis yasumatsui*. The armored scale insect was unintentionally introduced 20 years ago to an area in southern Florida known for the production and exportation of *Cycas revoluta*. The scale was documented in Hawaii in 1998, Guam in 2003, Rota (CNMI) in 2007 and Palau in 2008. After the scale invasion, mature *C. micronesica* trees began to succumb to other pressures. These other pressures include two other invasive insects: the cycad blue butterfly (*Chilades pandava*) and a tiny moth (*Erechthias* sp.).

Source: University of Guam via ScienceDaily.



Cycad mortality in Guam caused by the invasive Asian cycad scale. Photo Barry Rice - (c)Barry Rice/sarracenia.com

#### Kosrae

The month of August has all been about the Giant African Snail (GAS). The Kosrae Invasive Species Program worked closely with interested local groups to remove the snail. The work included distributing awareness materials such as posters and erecting billboards of the snail. Information on preventing the spread of the snail and how to treat them without using expensive chemicals was also provided. The Invasive Species team hopes to continue this effort until October. For more information about snail work on Kosrae, contact Jason Jack ([jhjack71@gmail.com](mailto:jhjack71@gmail.com)).



The Giant African Snail is causing problems in Kosrae. Photo: Arthur Chapman

## Kiribati

Kiribati held its inception workshop for the GEF-PAS Invasive Species Project from 16-22<sup>nd</sup> August. Dr Gianluca Serra, GEF-PAS Facilitator attended the workshop and provided the project overview, management roles, and the various reporting guidelines. Kiribati's activities under this project include:

- revising of the National Invasive Species Strategic Plan;
- improving invasive species management facilities;
- drafting and implementing an inter-island pest control plan;
- developing an early detection and rapid response plan;
- implementing best practice in invasive species management.

For more details of the project contact Nenenteiti Teariki-Ruatu ([nenenteitiir@environment.gov.ki](mailto:nenenteitiir@environment.gov.ki))



Seabirds of Kiribati (Kiritimati Island) are vulnerable from invasive rats, cats and poachers. Photo – Posa Skelton

## American Samoa

- The American Samoa Invasive Species Taskforce, Tavita Togia accompanied the Deputy Assistant Secretary of the US Department of Interior, Eileen Sobeck, to go on a tour of the *Tamaligi* (*Albizia chinensis*) habitat restoration project at the National Park. The tour included planting of trees to celebrate the success of the restoration work
- The US Department of Interior awarded the National Park of American Samoa and the American Conservation Experience Partnership USD\$227,600 Technical Assistance Program – American Samoa Youth Program: *Tamaligi* and Red Seed Tree Eradication – This program is two-fold, in that it aims to hire:
  - American Samoa youth to assist in the removal of these invasive trees;
  - Teach the youth about job skills and expose them to resource management career paths, as well as eradicating invasive species and reclaiming 2,000 acres of ecologically vulnerable rainforest.
- The National Park's terrestrial program received USD\$48,500 to eradicate *tamaligi* in the villages of Aua, Leloaloe and Atuu starting in October, 2012
- Another acre of disturbed land in the National Park was restored by the crew of the National Park of American Samoa. A total of 983 native trees consisting of six species were replanted as part of the restoration work.
- Control work on the invasive *pulu mamoe* tree (*Castilla elastica*) on Ta'u Island has started with the National Park's crew removing 742 mature trees by drilling the bark of the tree and applying the 'Imitator Plus' herbicide. The crew recorded the DBH (diameter breast height) in cm and the GPS location for future surveys and removal of seeds.
- 8,800 native trees were given away to the public since October 2011 as part of restoration work for the National Park.

For more information on invasive species activities in American Samoa please contact Tavita Togia ([Tavita\\_Togia@nps.gov](mailto:Tavita_Togia@nps.gov))



The *Tamaligi* tree (*Albizia chinensis*) is a serious invader of forest areas in both American Samoa and Samoa.



The brown coloured seed pods of the *Tamaligi*. Photos – Posa Skelton



## Fiji

### *Impact analysis of invasives in Fiji – by Tuverea Tuamoto (NatureFiji)*

In early August 2012, NatureFiji-MareqetiViti (NFMV) conducted a survey in the northern parts of Fiji, covering Taveuni and its surrounding islands, to assess the impacts of invasive species. The survey team included a staff from NFMV and three trained enumerators from the University of the South Pacific and the Fiji National University. An invasive that's becoming a major threat in this particular area is the American iguana (*Iguana iguana*), which was released on Qamea in early 2000, and has since spread to two other islands. To date, the estimated population is at least 2500 individuals. With no natural predators in Fiji, its numbers are expected to increase exponentially. Potential affected areas include Taveuni, an island that is heavily dependent on the export of taro (*Colocasia* spp.) and kava (*Piper methysticum*), and the two main islands of Vanua Levu and Viti Levu. Destructive impacts of this species in Puerto Rico and Florida, has mobilised NFMV and the Biosecurity Authority of Fiji to find the best and effective ways to control them.

The survey covered a total of 117 households in nine villages and one settlement. The questions asked ranged from the presence or absence of this species; any changes seen overtime; are there any good or bad impacts; cost of getting rid of it (money, labour); has it affected agriculture; and others.

Other invasives included in the survey were the Indian mongoose (*Herpestes javanicus*), *Merremia peltata*, African Tulip (*Spathodea campanulata*) and the Taro beetle (*Papuana woodlarkiana*). A similar survey was carried out in Eastern Viti Levu in July in collaboration with the University of the South Pacific and Landcare Research NZ, covering a total of 360 households. Results gathered during these surveys will be presented during the 2<sup>nd</sup> Course for the Economic Analyses of Invasive Species in September in Suva.

For more information contact [tuamoto@naturefiji.org](mailto:tuamoto@naturefiji.org) or visit <http://www.naturefiji.org/>



juvenile American iguana (*Iguana iguana*) on Qamea Island.  
Photo – Rob Fisher



Enumerators with the women of Naqelevu. Photo – Tuverea Tuamoto

### **Research into African Tulip – Needs your Help!**

A joint-research effort by SPC and Rhodes University of South Africa to determine the origin of the African tulip abundant throughout the Pacific Island countries needs your help. You can assist by collecting a few leaves of this plant and sending them to Dr Iain Paterson. The leaves will need to be dried with silica-gel and a permit to accompany the leaves to Dr Paterson. Knowing the origin of the invasive tree will also help in identifying natural enemies (biocontrol). Samples have so far been collected from Fiji and Hawaii, but other islands are welcome to contribute. Contact Warea Orapa ([warea.orapa@gmail.com](mailto:warea.orapa@gmail.com)) or Dr Iain Paterson ([I.Paterson@ru.ac.za](mailto:I.Paterson@ru.ac.za)) as there are protocols that need to be followed.



African tulip with its distinctive orange flowers.  
Photo – Posa Skelton

## Hawaii Invasive Species Council

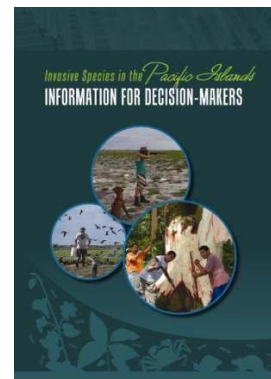
The Resources Working Group of HISC met on the 27 August. Some of the issues discussed included alternative funding mechanisms for HISC, restoration of historic general fund appropriations, special fund options, voluntary funding mechanisms and more. Contact Joshua Atwood for further information. (Joshua.p.atwood@hawaii.gov).

## Pacific Invasives Partnership (PIP) – news

### Invasive information brief for Pacific Island Forum Leaders



Two visually appealing publications prepared by BirdLife International, Pacific Invasive Initiatives and Annette Lees on behalf of the Pacific Invasives Partnership have been released specifically for the Pacific Island Forum Leaders meeting held 27-31 August in Rarotonga, Cook Islands. The publications continue the efforts of the Partnership to raise the profile of invasive species as a serious threat to sustainable development, biodiversity and people. Engaging the Pacific Leaders at the highest level will show their commitment to protecting islands national developments, the fragile island ecological systems and the safety of Pacific peoples. One of the publications provides the information for decision-makers. The



document requests leaders to consider the economic, environmental and social impacts caused by invasive species.

Download the documents on: <http://www.pacificinvasivesinitiative.org/pip/DiscussionFlyer22Aug12.pdf>

<http://www.pacificinvasivesinitiative.org/pip/InformationForDecisionMakers15Aug12.pdf>

### GEF-PAS - Update

The GEF-PAS Invasive Species project has completed all its inception workshops, following the last one held on Tarawa, Kiribati.

Three countries have received their first funding instalments and have also appointed invasive species national coordinators. Another three countries are in the process of recruiting national coordinators and requesting their initial funding instalment.

For more information on the GEF-PAS Invasive Species and GEF-PAS Integrated Island Biodiversity projects, please contact Dr Gianluca Serra (gianlucas@sprep.org).



Participants of the GEF-PAS inception workshop. Photo - SPREP

### PIP presents invasive species to Melanesia Spearhead Group

A presentation delivered by Taholo Kami (Director, IUCN Oceania) to the Melanesia Spearhead Group's Environment and Climate Change Technical Advisory Committee meeting held in Port Vila, Vanuatu late last month was considered by the group and the following recommendations were made:

- Promote a cross-sectoral approach to invasive alien species management
- Recognize the cross-cutting nature of the invasive alien species issue
- Increase political and financial support for invasive species management
- Integrate the invasive alien species management in National Biodiversity Strategy and Action Plans (NBSAPs) and National Invasive Species Strategy, Action Plan and Policy Guideline to facilitate progress towards achieving Aichi Target 9
- Respond to invasive alien species on prevention as the first line of defence, early detection and rapid action when prevention fails, eradication and finally management of established invasions



Taholo Kami presenting invasive species to the MSG's Environment & Climate Change Technical Advisory Committee

The presentation was coordinated by Dr Souad Boudjelas, Chair of PIP and Shyama Pagad – IUCN-ISSG, on behalf of the Pacific Invasives Partnership.

### **CABI launches knowledge bank on plant health information**

The Centre for Agricultural Bioscience International (CABI) has launched the Plantwise Knowledge Bank, a web-based portal that combines plant health information with diagnostic tools, fact sheets and other information resources to assist farmers in identifying and controlling crop pests. The knowledge bank aims to provide extension workers, government organizations, researchers and farmers in developing countries with information to diagnose, treat and prevent plant pests and diseases, in order to reduce threats to food security. The website includes: a diagnostic tool that allows users to identify plant problems based on pictures of symptoms; country-specific pages that provide localized information; and factsheets that describe easily applicable treatments. The knowledge bank complements CABI's Plantwise network of plant clinics in developing countries, which provide support to local farmers to overcome plant health problems.

<http://www.plantwise.org/> <http://www.plantwise.org/KnowledgeBank/home.aspx>

### **IUCN-ISSG**

#### ***Global invasive alien species information partnership to be formalised in COP 11***

An organizational workshop for the Global Invasive Alien Species Information Partnership (GIASIPartnership) was hosted by the Natural History Museum, London, United Kingdom of Great Britain and Ireland, 9-10 July 2012. Twenty-nine individuals participated in this meeting, representing fourteen Parties, four inter-governmental organizations, three non-governmental organizations, three academic/scientific institutions, and the Secretariat of the Convention on Biological Diversity (SCBD). Report on the meeting is in preparation including the operation plan for the GIASIPartnership. The Pacific was represented by the Pacific Invasives Learning Network (PILN) French Polynesia representative Jean-Yves Meyer. Also attending as a key information provider was Shyama Pagad from the Invasive Species Specialist Group (ISSG) of the International Union for Conservation of Nature (IUCN). Pacific Regional ISSG is a Pacific Invasives Partnership (PIP) member and also serves as the Invasive Species focal point for the Oceania Regional Office of the IUCN in Suva, Fiji. An event is being planned for COP11 to formalize the GIASIPartnership including a signing-in ceremony between the partners and the CBD. Demonstrations will be held to present the achievements of the partnership and raise awareness about its work.

### **SAPIENS out now**

A special issue of S.A.P.I.E.N.S has been dedicated to the work of IUCN and its Commissions. VOL.5 / N°2 - IUCN COMMISSIONS. Today, the six IUCN Commissions – Commission on Education and Communication (CEC); Commission on Environmental, Economic and Social Policy (CEESP); Commission on Environmental Law (CEL); Commission on Ecosystem Management (CEM); Species Survival Commission (SSC); and World Commission on Protected Areas (WCPA) – bring together approximately 11,000 scientists and experts from all over the world who give their expertise and knowledge to IUCN free of charge. The IUCN mission “to influence, encourage, and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable” could not be achieved without the Commissions. IUCN’s influence and knowledge base truly reaches out from local community-led initiatives through to international policy.

You can download articles from the link below <http://sapiens.revues.org/1248>

## **Invasive species Opportunities**

### **Coral Reef Alliance – Pacific Coral Reef Resilience Program Director**

This is a new initiative aimed at advancing the science, management and conservation of Pacific coral reefs. Initiative will pursue targeted research at Palmyra Atoll as well as other Pacific Islands. Position will be housed at the Coral Reef Alliance in San Francisco, CA. Position is approximately for two years with strong possibility of a longer-term opportunity. See [http://www.coral.org/Pacific\\_Coral\\_Reef\\_Resilience\\_Program\\_Director](http://www.coral.org/Pacific_Coral_Reef_Resilience_Program_Director).



### Asian ladybugs introduced to Europe – serious mistake experts say

The Asian ladybug native to China and Japan was introduced into Europe 20 years ago to combat aphids. Research showed that this was a serious mistake as the disadvantages far outweigh the advantage including displacing native biodiversity, contaminate homes and spoil the taste of wine. The insect has few natural enemies in Europe. When its food (aphids) run out the insect has an appetite for grapes. [See Invasive species publications for details of this research.](#)



An Asian lady bug spoiling good European wine.

### Education inadvertently helps to spread invasive species

A survey of teachers in North America found that one out of four teachers who used live animals as part of their science curriculum released the animal into the wild after the class. The study was presented in Portland at the national meeting of the Ecological Society of America.



An Albino-laboratory rat – favourite for scientific research. Photo - Wikipedia

### Zoos to save top 10 species from extinction

A list of animals and plants has been drawn up by the British and Irish Association of Zoos and Aquariums for saving from extinction. The top 10 were chosen from hundreds of zoo-backed conservation programmes, focusing on species at high risk of extinction or extinct in the wild, schemes that involved initiatives in the field, zoos that had a management role and projects which included habitat protection and working with local communities. Some of the endangered species included a French Polynesia snail, which is believed to be extinct in the wild due to the introduction of a biological pest control. See the [Guardian website](#) for more details.



Polynesian tree snail is extinct in the wild due to an introduced species. Photo – Dave Clark/ZSL/BIAZA

### Aquatic invader survives without water

The New Zealand native mudsnail, *Potamopyrgus antipodarum*, has invaded water-systems in Europe, Australia, America and Asia. The invasion success of this mudsnail may be partly due to the ability of females to reproduce upto 230 juveniles per year without participation of males. They could also have dispersed attached to birds, fishing tools or animals. A study by Spanish ecologists Álvaro Alonso and Pilar Castro-Díez from the University of Alcalá, confirmed the ability of the snail to survive up to 2 days out of water. From this finding, two (low-cost) and relatively easy control mechanisms for avoiding the spread of mudsnails emerge: 1) exposing to air of any fishing tools and/or boats for more than 53 hours and 2) avoiding the access of wild and domestic animals to infected rivers or lakes via physical barriers or scarecrows. Such simple measures can actually help to preserve water bodies free of invaders.



New Zealand mudsnail. Photo by Daniel L. Gustafson

## Invasive species publications

### Scientific articles

C. Lidwien Raak-van den Berg, Hendrika J. De Lange, Joop C. Van Lenteren. Intraguild Predation Behaviour of Ladybirds in Semi-Field Experiments Explains Invasion Success of *Harmonia axyridis*. *PLoS ONE*, 2012; 7 (7): e40681 DOI: 10.1371/journal.pone.0040681

Y. Aoyama, K. Kawakami & S. Chiba. Seabirds as adhesive seed dispersers of alien and native plants in the oceanic Ogasawara Islands, Japan. *Biodiversity and Conservation Online First™*, 25 July 2012

Kelly, N.E., Wantola, K., Weisz, E., & Yan, N.D. Recreational boats as a vector of secondary spread for aquatic invasive species and native crustacean zooplankton. *Online First™*, 9 August 2012 *Biol Invasions* DOI 10.1007/s10530-012-0303-0

Haythorpe, K.M., Sulikowski, D., & Burke, D. (2012). Relative levels of food aggression displayed by Common Mynas when foraging with other bird species in suburbia. *EMU* 112, 129–136.

Glaser, A. & Glick, P. 2012. Growing Risk: Addressing the Invasive Potential of Bioenergy Feedstocks. Washington, DC: National Wildlife Federation.

Banks, P.B., & Hughes, N.K. (2012) A review of the evidence for potential impacts of black rats (*Rattus rattus*) on wildlife and humans in Australia, *Wildlife Research*.

Newman, S.H., Field, H., Epstein, J., & de Jong, C. (eds) 2011. Investigating the role of bats in emerging zoonoses. Balancing ecology, conservation and public health interest. FAO Animal Production and Health. ISBN 978-92-5-1070284.

Vogler C, Benzie J, Barber PH, Erdmann MV, Ambariyanto, et al. (2012) Phylogeography of the Crown-of-Thorns Starfish in the Indian Ocean. *PLoS ONE* 7(8): e43499. doi:10.1371/journal.pone.0043499

### Upcoming Events

September	Event	Participating partner	Notes
3	Pacific Environment Day (Noumea, New Caledonia)	SPREP	
4-6	23 <sup>rd</sup> SPREP Annual Meeting (Noumea, New Caledonia)	SPREP, NISC, PILN, IC and other PIP partners	Side-event on celebrating invasive species management successes. Small Islands, Big Difference
7	Pacific Environment Ministers Meeting (Noumea, New Caledonia)	SPREP	
6-15	5 <sup>th</sup> World Conservation Congress (Jeju, South Korea)	IUCN	
19-20	7 <sup>th</sup> Ballast Water Management Conference (Singapore)		

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