



# PACIFIC INVASIVES LEARNING NETWORK

## SOUNDBITES – MARCH 2013

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>

### **Hafa adai**

Our Soundbites for March focuses on the northern Pacific region of Micronesia, where important meetings were held including the Pacific Island Committee Western-Pacific Forestry Meeting, Micronesia Regional Invasive Species Council's Inter-Summit Meeting, the Micronesia Islands Conservation Network Retreat and Palau's revision and update of their National Invasive Species Strategic Action Plan. The highlight of the month is the pledge by the Palau President, HE Tommy Remengesau, of USD25,000 towards invasive species activities in Palau. It is pleasing to note that Micronesia remains at the forefront of invasive species management and conservation. As they say in the Micronesia Islands in Conservation learning network - 'One Love, One Heart and One Micronesia'.



9th PACIFIC ISLAND  
CONFERENCE ON  
NATURE CONSERVATION  
AND PROTECTED AREAS

Conference Dates:  
**2-6 December 2013**

## PILN TEAMS AND COUNTRY UPDATES

### **Fiji**

#### NEW DIRECTOR FOR NATURE FIJI – MAREQETIVITI



Nunia Thomas, NatureFiji-MareqetiViti's Conservation Co-ordinator has been appointed Director, taking charge of Fiji's most progressive local conservation organisation. She takes charge of a staff of 10 project officers with responsibility for 12 on-going projects. Her first challenge will be to oversee the merger of the BirdLife International Fiji Program with NatureFiji-MareqetiViti's domestic program.

“Nunia was NatureFiji-MareqetiViti's first recruit, five years ago and she has developed into a dedicated and passionate conservation professional. She brought to NatureFiji-MareqetiViti advanced technical expertise as a field-oriented biologist and has rapidly developed the administrative, people and community skills so important for a conservation professional,” noted Dick Watling, one of NatureFiji-MareqetiViti's Founding Trustees. “We are especially delighted that we have been able to promote

from within the organisation,” he added.

Nunia read Biology and Environmental Sciences at the University of the South Pacific, before going on to complete her Master of Science at the University's Institute of Applied Science. The subject of her thesis was Fiji's little-known endemic ground frog, one of the two currently threatened endemic frogs, requiring active conservation management. As Fiji's foremost herpetologist, Nunia was appointed to assist the Biosecurity Authority of Fiji with advice on the biological and community aspects of the eradication of the American Iguana. Her current responsibilities will see her taking charge of projects working on some of Fiji's most endangered and iconic species including the Fiji Petrel, the Fiji Sago Palm, the Red-throated Lorikeet and the Fiji Flying Fox.

## Guam

### FIELD-GUIDES TO STOP INVASIVE PLANTS AT PARK BORDER



New field-guides have been developed by Guam's National Parks Service, through the Pacific Network of Parks for park rangers and staff working in national parks in Guam and Saipan. The field-guide is made of water-proof material and it contains 15 invasive

plants that are currently not found in the park.

The field-guide will allow the rangers to identify these plants and to remove them before they become established. Similar field-guides have been developed for national parks of Hawaii and American Samoa.



National Parks Service staff, Mike Gawel and Jenny showing the invasive species field guides

## Guam

### LITTLE FIRE ANTS SPREADING LIKE WILD-FIRE



The Little Fire Ants (*Wasmannia auropunctata*) recently landed in Guam (November 2011) and since then have spread to new areas. Invasive species workers and practitioners are calling for some serious investment to tackle this invasive ant before further harm is done to the diminishing native biodiversity and the island economy. The similarity between the incursions in Guam and French Polynesia is uncanny with waste sites and landfills being a key factor. The LFA in

Guam was discovered by a team doing surveys for the coconut rhinoceros beetle.

According to Guam based researchers, LFA is an agricultural and horticultural pest that works closely with mealy-bugs, scales and other insects. These cocktail of insects contribute to the stunting of plant, premature fruit excision and fruit damage. The LFA are also pests of domestic animals and with the multiple stings can lead to hair-loss, rashes and blindness.

The spread of LFA in the Pacific includes the Solomon Islands, Australia, Papua New Guinea, French Polynesia, Wallis & Futuna, Vanuatu, New Caledonia and Hawaii. Concerns are that the ant will continue to spread to other parts of Micronesia, especially the Northern Mariana Islands.



## Hawaii

### MAUI INVASIVE SPECIES COMMITTEE MEETS

The MISC held their meeting on 23 March at the MISC Headquarters. The meeting focused on reviewing species for control status, vector, buffers for survey work and more. Further information can be obtained from Teya Penniman ([misc@hawaii.edu](mailto:misc@hawaii.edu)) or check out their website: [www.mauisc.org](http://www.mauisc.org)

## MICRONESIA – RISC PHOTO LOG



RISC participants reviewing their SAP



Russell Campbell giving a presentation on the Little Fire Ants



Brown Tree Snake – a serious invader: image courtesy of USDA, APHIS, Wildlife Services



Giant African Snail seen at a hotel's garden



Workers painting the Listen Up Guam - as part of the efforts to manage coqui frogs.

## RISC

### PUSHING THE BOUNDARIES OF PEST ERADICATION – By John Parkes

John Parkes from Kurahaupo Consultants (ex Landcare Research NZ) presented on a recent study to assess the success/failures of rodent eradication efforts, highlighting some of the key lessons for future projects.

There are two approaches to eradication that have been employed globally– i) one hit kills 100 % and ii) sequence of events to get to zero. The 'one-hit approach' on rodent had a 19 % failure rate. Most of the failures took place on tropical islands and on mice rather than rats. Some of the causes of these failures include forgetting to put toxin into bait, reinvasion, poor bait coverage or insufficient bait, natural food preferred due to unpalatable baits, innate behaviours or neophobias.

A baiting case-study on Lihua Island in Hawaii for rats used diphacinone and seven months later, rats were detected. The isolation of the islands (nearest source is 1.2 km and kiore don't swim that far) meant that re-invasion from outside is unlikely. DNA tests confirmed that the rats were survivors.

The 'sequential event eradications' is useful to plan actions in phases focusing on initial population reduction, mop-up, validation and surveillance. This eradication approach deploys new technologies and methods including radios, GPS, judas animals or decoys, sniffer dogs and others.

John concluded that there are still plenty of tractable eradications and their scaling up to inhabited islands should proceed with caution. There are still plenty of technical constraints to overcome by research and planned management.



Lihua Island, Hawaii a site for kiore eradication

## RISC

### REGIONAL INVASIVES COUNCIL MEETS IN GUAM



Participants of the RISC inter-summit meeting at the National Parks Service office

Invasive species continue to be a problem and threat to Micronesia, but good progress is being made on efforts to combat them. That was the conclusion of the meeting last week of the Micronesia Regional Invasive Species Council (RISC). All 9 political jurisdictions in Micronesia (CNMI, Guam, Palau, FSM, RMI, and the 4 FSM states of Yap, Chuuk, Pohnpei, and Kosrae) are represented on the Council.

The Council advises the Micronesian Chief Executives on policy and actions to prevent and control invasive species in the Micronesian region.

In their meeting last week, Council members shared information on activities to combat invasive species, and heard from experts on some of the serious threats to the region, and how to prevent and/or combat them. In addition, the RISC assessed progress on their 5-year action plan. Good progress has been made toward achieving all 5 goals of the plan, including improved communication, developing human and financial resources, and progress on developing a regional biosecurity plan.

Outgoing RISC Chairman, Henry Capelle of the RMI, passed the gavel to John Wichep of the FSM. “I thank all the RISC members for a job well done, and I encourage you to give your full support to our new Chairman.” He also thanked all of RISC’s partners for their continuing support.

## Palau

### PRESIDENT REMENGESAU PLEDGES \$25 K TO COMBAT INVASIVE SPECIES (*media release from Joel Miles*)



“Invasive species are not a very popular topic, not nearly as popular as sports, for example, but this only adds to the challenge of invasive species.” With these words, President Tommy E. Remengesau, Jr. opened a 3-day workshop to develop a national strategic action plan for invasive species.

The workshop was organized by the National Invasive Species Committee (NISC) with about 20 participants representing the member agencies of the NISC, various partner agencies and organizations, and state governments. President Remengesau encouraged the participants to continue their efforts despite the apparent lack of interest by many community members, and tasked them to develop a practical plan of action to enable Palau to effectively address the problem of invasive species.

The President committed his administration’s support of efforts to prevent and control invasive species, and made a pledge of \$25,000 as “seed money” to initiate implementation of the plan by addressing the most urgent need. More funding may be provided, he added, depending on what is needed to implement the plan. He encouraged the workshop participants to “think outside the box” in their efforts, and to be sure to involve the community in their actions.

Among the many invasive species needing action, President Remengesau stressed the urgent need for action to reduce the damage being caused by invasive macaque monkeys on Angaur, and to prevent the spread of monkeys throughout Palau. He said that although there are many jokes about the monkeys, it is really no laughing matter. He stressed that agriculture is no longer possible on Angaur, and reminded the workshop participants that since typhoon Bopha, the monkey problem has become worse than ever. The workshop participants responded by developing a plan to provide short-term relief to the Angaur community, while working toward a long-term solution. The plan will be presented to the President by the NISC, to utilize the \$25,000 he pledged.

The workshop concluded on Thursday, March 28, having produced a draft National Strategic Action Plan (SAP) for invasive species. The Plan has 6 broad goals, and a number of objectives and actions to enable Palau to reach those

goals. This plan will guide the work of the NISC members and partners over the next five years.

The NISC is grateful to Dr. Posa Skelton of the Secretariat of the Pacific Regional Environment Programme (SPREP) and Ms. Mereseini Seniloli of the Secretariat for the Pacific Community (SPC) for their assistance with the workshop. The NISC also thanks and recognizes the Bureau of Marine Resources for providing their conference room as the site for the workshop. Finally, the NISC thanks all the workshop participants for their enthusiastic support. Partial funding support for the workshop was provided by a grant from the Global Environment Facility (GEF).

For information about the plan, please contact the Director of the Bureau of Agriculture, Fred Sengebau at 622-5804, or Dr. Joel Miles, National Invasive Species Coordinator, at the Bureau of Agriculture (544-5804, or [joelmiles52@gmail.com](mailto:joelmiles52@gmail.com).)

## Pohnpei

i-STOP meeting



Members of i-STOP met early this month to discuss key invasive species activities. Some of the issues include detection of a new site of false sakau, participation of i-STOP to the upcoming CEPF Final Meeting in Suva and the need to focus on updating the i-STOP Strategic Action Plan in July, 2013.

## Samoa

SNITT MEETING HIGHLIGHTS EFFORTS TO CONTAIN WATER LETTUCE



The Samoan National Invasives Task-Team met earlier this month to discuss key invasive species activities and update. One of the key concerns for SNITT was the detection of the water lettuce – *Pistia stratiotes* growing in gardens. This is an invasive aquatic weed native to South Africa and introduced for gardens and ponds. The weed quickly multiplies and can overwhelmed water systems. A flyer and public awareness campaign have started to try to contain and remove this weed from spreading any further. Updates on Giant African Snails and the Rattan removal activity were shared. The Rattan survey recently collected a high number of small plants (1442 compared to

652 in 2012) indicating that the seed-bank may still be viable after 7 years of removal. Further information from the meeting can be obtained by contacting the SNITT Secretariat: [czarina.iese@mnre.gov.ws](mailto:czarina.iese@mnre.gov.ws).

## PACIFIC INVASIVES PARTNERSHIP (PIP) – NEWS

### GEF-PAS Invasive Species Project Update

- TONGA – the desktop review of invasive species has been completed. PII is going to assist Tonga in developing their National Invasive Species Strategic Action Plan.
- PALAU – Palau held their National Invasive Species Strategic Action Plan workshop recently.
- VANUATU – GEF-PAS Facilitator (Gianluca) met with the Vanuatu National Invasive Species Technical Advisory Committee and the new Invasive Species Coordinator – Lilly Fatdal. Vanuatu is now in the process of implementing the GEF-PAS project

## 9<sup>th</sup> Nature Conservation Conference Update:

### PACIFIC ISLANDS CONFERENCE ON NATURE CONSERVATION AND PROTECTED AREAS



SPREP, in partnership with host country partner, the Government of Fiji, has confirmed the date and venue for the 9th Pacific Islands Conference on Nature Conservation and Protected Areas. The conference will be held at the University of the South Pacific in Suva, Fiji, from 2nd- 6th December 2013.

The Conference theme is Natural Solutions: Building resilience for a changing Pacific. The web site is now up and running and can be viewed at: <http://www.sprep.org/pacificnatureconference>

The upcoming Conference will develop the 5 year Strategy for Nature Conservation and Protected Areas in the Pacific. Your participation will contribute to the development of this strategy and where the Pacific governments, agencies and partners should focus their attention over the next five years. For further information about the Conference please contact Neil Walkinshaw ([neilw@sprep.org](mailto:neilw@sprep.org)).

## BirdLife Pacific Partnership

### e-NEWSLETTER OUT



The BirdLife Pacific Partnership e-Newsletter is now out. Some of articles include BirdLife Partnering to battle invasive species, empowering local communities in Fiji, future leaders of the Pacific, and guitar reveals the call of the Fiji Petrel. Obtain a copy of the newsletter by subscribing online or contacting the Suva office - [suva.office@birdlife.org](mailto:suva.office@birdlife.org)

## Te Ipukarea Society website

A local non-governmental organisation in the Cook Islands have a brand new website – <http://www.teipukareasociety.com> There are lots of informative issues and stories on the website including efforts to control invasive species on Suvarrow National Park.

## VACANCY AND OTHER OPPORTUNITIES

### Pesticide training course on Maui

Charles Nagamine will be running his Pesticide Risk Reduction Education course in Maui from April 15-16, 2013 and May 15-16, 2013. Please contact Charles for further information – check : <http://pestworld.stjohn.hawaii.edu/pat/schedule.html>

### SPREP

SPREP has a number of vacancies and tender opportunities available. Please check out the SPREP's Job Vacancies page for further information. <http://www.sprep.org/Human-Resources/Job-Vacancy/>

Some of the vacancies include: SPREP-Finland Project, Project Manager and Environmental Planning Officer.

**The Rapid Response Facility (RRF)** invites small grant applications for UNESCO inscribed natural World Heritage sites, and tentative sites facing emergency threats to their biodiversity. The RRF is a unique small grant programme jointly operated by Fauna & Flora International and UNESCO World Heritage Centre. With a target processing time for grant applications of just 8 working days, the RRF provides rapid support to enable conservation practitioners to respond quickly and effectively to emergencies in some of the world's most important sites for biodiversity.

Eligible applications will:

- address a threat(s) in a UNESCO designated natural World Heritage site (NWHS), or tentative NWHS site, in an eligible country;
- address a new conservation threat(s), or one that has increased significantly in recent days / weeks;
- clearly demonstrate that an immediate response is critical to avoid / mitigate the impacts of the threat, and that more traditional funding mechanisms cannot make funding available quickly enough to ensure an effective response;
- clearly explain how RRF support will make a significant and measurable contribution to reducing the threat(s).

Please note there is no deadline for submission of grant applications. Applications are received, and funding decisions are made, on a rolling basis and in response to need. You can also email the RRF in English, French or Spanish at with any questions about eligibility and the application process. Applicants are strongly advised to contact the RRF for guidance before submitting a full application.

## INVASIVE NEWS GLOBAL



### Slow snail nabbed in container yard

A giant African Snail was nabbed crawling across the cement of a Brisbane container yard. Biosecurity officers humanely destroyed the exotic pest and have not found any more snails, eggs or snail trails. *Image: Dept. Agriculture, Forestry and Fisheries*

### Invasive Species: Understanding the Threat Before It's Too Late

Catching rides on cargo ships and fishing boats, many invasive species are now covering our shorelines and compromising the existence of our native marine life. In a study published in Ecology Letters, Northeastern University Prof. David Kimbro and his team examine what factors allow some invasive species to survive in their new environments and others to fail. Understanding what makes these invaders thrive or fail in their new environments is not only key to preventing the collapse of local marine life, but also figuring out ways to make some invaders work to benefit their new locations. For further information see - <http://www.northeastern.edu/cos/2013/03/invasive-species-understanding-the-threat-before-its-too-late/>

### Hope for Galapagos Wildlife Threatened by Marine Invaders



The spread of marine invasive species is threatening the unique plant and marine life around the Galapagos Islands. UK scientists from the Universities of Southampton and Dundee are currently investigating the extent of the problem following a grant from the UK Government's Darwin Initiative, which aims to protect biodiversity and promote sustainability around the world. Project leader Dr Ken Collins, Ocean and Earth Science of University of Southampton based at the National Oceanography Centre said: "Tourism is partly to blame for the influx of invasive non-native species, due to the huge rise in ships and planes from mainland Ecuador bringing in pests. In recent years, it was realised that cargo ships were carrying disease-infected mosquitoes, which were attracted to the ship's bright white deck lights. Simply changing from conventional filament bulbs to yellow sodium lamps, along with fumigation in the hold has substantially reduced the threat.

Another species causing concern and which has the potential to overwhelm natural populations is the Indian Ocean lionfish. This fish colonised the Caribbean through accidental release from an aquarium and has spread through the entire Caribbean in the last decade. Its rapacious appetite has led to the decimation of coral reef fish populations in the southern Caribbean. Lionfish can consume prey up to two thirds of their own length and data show that they can eat 20 small wrasses in 30 minutes. Their stomachs can expand by up to 30 times in volume when consuming a large catch. The Panama Canal could provide a short cut to Ecuador's Pacific coast and then the Galapagos.

### Tropical long-horned beetles invade New Jersey – short lived

New Jersey declared victory over its decade long war against the Asian long-horned beetle, an invasive hardwood-eating insect that arrived in 1996. The beetle tunnels through tree trunks causing some of the tree species such as

maples, planes, birches and poplars to die. More information from Department of Environmental Protection – State of New Jersey - <http://www.state.nj.us/dep/>

### What Do American Bullfrogs Eat When They're Away from Home?



Bullfrog image from Alan D. Wils via Wikipedia

Practically Everything. American bullfrogs are native to eastern North America but have been transported by people to many other parts of the globe, and other parts of North America, where they have readily established populations and become an invasive alien menace to native ecosystems. In the largest study of its kind to date, the stomach contents of over 5,000 invasive alien American bullfrogs from 60 lakes and ponds on southern Vancouver Island were examined to identify the native and exotic animals that they had preyed upon.

Over 15 classes of animals were reported from a total of 18,814 identifiable prey remains, including terrestrial and aquatic insects, spiders, crayfish, fish, frogs, salamanders, newts, snakes, lizards, turtles, birds, and small mammals. The study examined the stomach contents of adults and juveniles of all size-classes, but excluded tadpoles. These results show that bullfrogs will attack and consume virtually any organism that is within reach and can be swallowed, including their own species.

### Victory looms in long tropical fire ant war



Australia's national science agency says it thinks it may have just achieved the world's largest ant eradication, on an island off the Northern Territory coast.

Ben Hoffmann, from the CSIRO, says scientists have been trying for 10 years to get rid of about three million tropical fire ants on one of the Tiwi Islands, north of Darwin.

He says they have attacked about 300 ant nests but will have to wait for about 18 months before claiming a permanent victory against the pests.

"They sting people, and many people are allergic to ants, and they will be hospitalised by this ant," he said. "Also, with agriculture, if you've ever tried to pick fruit or flowers from a plant that is covered with these ants, you'll know how painful it is. They are a real nuisance species." [news source: ABC News; image CSIRO]

## INVASIVE SPECIES PUBLICATIONS

Wijayabandara, SMK, Jayasuriya, KMG, Jayasinghe, JLDHC. Seed dormancy, storage behavior and germination of an exotic invasive species, *Lantana camara* L. (Verbenaceae). *International Research Journal of Biological Sciences* 2013 Vol. 2 No. 1 pp. 7-14

Melanie Frazier, A. Whitman, M., & Gregory, M.R. 2013. Managing Ballast Water Discharges. Linking science and policy to prevent the spread of invasive species from the ballast water discharge of ships. *Ecological Applications*, Vol. 23, No. 2, March: 287-289.

Cheryl R. Krull, David Choquenot, Bruce R. Burns and Margaret C. Stanley. 2013. Feral pigs in a temperate rainforest ecosystem: disturbance and ecological impacts. *Biol Invasions* DOI 10.1007/s10530-013-0444-9

South Pacific Agricultural News (SPAN). 2013. February edition of the newsletter is now out. Of interest is a news item on pests found on three crop products that were intercepted by the NZ Biosecurity.

Monty, M.L.F., Florens, F.B.V., & Baider, C. 2013. Invasive alien plants elicit reduced production of flowers and fruits in various native forest species on the tropical island of Mauritius (Mascarenes, Indian Ocean). *Tropical Conservation Science* 6(1): 35-49.



Atherton, J., & Jeffries, B. (eds) 2013. Rapid Biodiversity Assessment of Upland Savai'i, Samoa. SPREP Publication.

Tye, A., & Butler, D.J. 2013. Restoration of Nu'utele and Nu'ulua Islands (Aleipata Group), Samoa, through the management of introduced rats and ants. Biodiversity Conservation Lessons Learned Technical Series. 13. Conservation International – Pacific Islands. 88pp.

## UPCOMING EVENTS

2013	Event	Participating Partner
<b>April</b>		
1 April	Easter Monday – Public Holiday	
2-4 April	3 <sup>rd</sup> Conference on invasion biology, ecology and management. University of Kentucky, KY, USA.	
8-11 April	FINS 2013: Freshwater Invasives networking for Strategy. Galway, Ireland.	
8-11 Apr	2013 Imported Fire Ant Conference. Sheraton Oceanfront Hotel, 3501 Atlantic Avenue, Virginia Beach, VA 23451.	<a href="http://www.extension.org/pages/19257/imported-fire-ant-and-invasive-pest-ant-conference">http://www.extension.org/pages/19257/imported-fire-ant-and-invasive-pest-ant-conference</a>
10-12 April	Pacific Invasives Partnership, Suva. Fiji	PIP
15-19 Apr	CEPF Final Meeting, Suva, Fiji	PIP
17-19 April	Brown-Tree Snake Technical Working Group meeting	
21-25 April	18 <sup>th</sup> International Conference on Aquatic Invasive Species (Niagara Falls, Ontario)	
22 April	Earth Day	<a href="http://www.un.org/en/events/waterday/">http://www.un.org/en/events/waterday/</a>
24-26 Apr.	Sustainable Development in Oceania – Towards a new ethic. Northern Province, New Caledonia	
28-30 April	11 <sup>th</sup> Session of IOC Intergovernmental Panel on Harmful Algal Blooms (IPHAB), Paris, France.	
<b>May</b>		
11-12 May	World Migratory Bird Day (UNEP/CMS)	
12-17 May	Impact of climate change on biological invasions and population distributions. Banff International Research Station, Banff, Alberta, Canada.	
22 May	International Day for Biological Diversity 2013: Water and Biodiversity (CBD)	
22 May – 19 Jul.	International Ocean Institute – Training Programme: Ocean Governance, Policy Law, Management. Dalhousie University, Halifax. Nova Scotia.	<a href="http://internationaloceaninstitute.dal.ca/">http://internationaloceaninstitute.dal.ca/</a>

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