



PACIFIC INVASIVES LEARNING NETWORK

# SOUNDBITES

## JANUARY & FEBRUARY 2014

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>

### **WELCOME! Invasive Battlers and Friends to your first edition for 2014**

**YOUR PILN SOUNDBITES** for the months of January & February kick-start what promises to be a big and exciting year for invasive species management in our peaceful Pacific region. I'm pleased to note some great progress made by our many invasive species battlers last year including the use of the Super Sucker, an underwater vacuum to remove about 92,000 pounds (~42,000kg) of invasive algae and deployment of 93,000 native urchins as biocontrol for the algae. Also in 2013 - ten awards were made in Hawaii in recognition of communities and individuals who have contributed to the management of invasive species. Palau also celebrated the official endorsement from President Remengesau of its revised National Invasive Species Strategic Action Plan. Strong leadership was demonstrated at the Pacific Islands Forum Leaders Meeting held in Majuro, Marshall Islands in 2013 - where a statement on the need for continued effort to address invasive species was made. We look forward to a productive year battling invasive species.

**2014**

**Celebrating the Year of Small Island Developing States**  
&  
**Pacific Year of Natural Solutions**

### **PILN TEAMS AND COUNTRY UPDATES**

#### **Cook Islands: Mauke taros under threat from armyworm**

Taro patches on Mauke are being cooked in order to save the crop from an armyworm outbreak. Sadly, other vegetables are also on the path of these predators and a concerted effort is needed to bring them under control. A biological control with Delfin (*Bacillus thuringiensis*) is also used to spray infected plants. [source: Te Ipukarea Society]

#### **French Polynesia: Tahiti Monarch crowned global conservation highlight**

SOP-Manu's work to save the critically endangered Tahiti Monarch has been voted the top conservation highlight for BirdLife International. The project to work with local school children to plant native trees and control rats which are non-native predator led to a dramatic increase in breeding success last year. However celebrations have been short-lived. The 2014 breeding season is currently being threatened by heavy rains and fire ants (which can consume chicks and adults within minutes) which have been found on the edge of the steep valley where 10 breeding pairs of monarchs cling to existence. The next 4 weeks are critical for the survival of the species. Tahiti Monarchs breed from September to June and this year's chicks will be starting to fledge soon. Manu desperately needs funding to continue its conservation work to control the invasive rat populations and tackle the emerging threats for invasive alien species such as fire ants. We are backing Manu's campaign to raise urgent funds and urging all our supporters to do the same. Please donate and help make the forest safe for fledglings and protect the last pairs. For more information contact: [species.champions@birdlife.org](mailto:species.champions@birdlife.org) or [sop@manu.pf](mailto:sop@manu.pf).

#### **Guam:**

##### **New invasive pests**

The brown marmorated stink bug, *Halymorpha halys* and spotted cucumber beetle (Southern Corn Rootworm) *Diabrotica undecimpunctata* have been detected for the first time on Guam. These species have the potential to become major pests on Guam. For more information, please download a [pdf fact sheets from the following web-address](#). These fact sheets will be updated as new information evolves. [Source: Aubrey Moore via PestNet]  
<http://guaminsects.net/anr/content/guam-new-invasive-species-alerts>

## **Guam expects to lose coconuts**

Dr Ross Miller painted a bleak picture of Guam's invasive species problem saying that we can expect the coconut rhinoceros beetle to wipe out more than half of our coconut trees and we can expect more invasive species to come. [Source: [Guam News](http://www.pacificnewscenter.com/index.php?option=com_content&view=category&id=45:guam-news&layout=blog&Itemid=156)] [http://www.pacificnewscenter.com/index.php?option=com\\_content&view=category&id=45:guam-news&layout=blog&Itemid=156](http://www.pacificnewscenter.com/index.php?option=com_content&view=category&id=45:guam-news&layout=blog&Itemid=156)

## **Hawaii:**

### **Killing with Kindness:**

On Oahu, one man is clearing the way for native plants and animals to thrive. [Source: [Invasive News](http://feedproxy.google.com/~r/invasivenews/~3/bEJIBnh9yO/back-to-paradise.html?utm_source=feedburner&utm_medium=email) - [http://feedproxy.google.com/~r/invasivenews/~3/bEJIBnh9yO/back-to-paradise.html?utm\\_source=feedburner&utm\\_medium=email](http://feedproxy.google.com/~r/invasivenews/~3/bEJIBnh9yO/back-to-paradise.html?utm_source=feedburner&utm_medium=email)]

## **New beetle invasion on Oahu**

The Coconut Rhinoceros Beetle has recently landed on Oahu - first detected at the Joint Base Pearl Harbor-Hickam in late December, 2013. The Coconut Rhinoceros Beetle is a major pest for coconut palms by burrowing into the tissue and feeding on the sap. It is native to Asia but has been introduced on most islands in the Pacific. [Source: [Hawaii News Now](#)]

## **New Little Fire Ant Video**

A new Little Fire Ant video - Invasion - Little Fire Ants in Hawaii is now available for viewing on you-tube. [Source: [Youtube](#)] [http://www.car-spaw-rac.org/?International-partners-launch-plan\\_474](http://www.car-spaw-rac.org/?International-partners-launch-plan_474)

## **Kosrae: Invasive termite**

Termite taxonomists have confirmed the presence of the highly destructive termite - *Neotermes rainbow* in Kosrae. The termite is commonly called Coconut termite or Rainbow termite is found mostly on coconuts but also on Pandanus. The termites hollow out living trunks leading to the top of the palm snapping off. A factsheet on this species can be obtained by contacting SPC or Grahame Jackson [Source: PestNet]

## **i-STOP (Pohnpei)**

The invasive species team of Pohnpei met recently (2013) and discussed a range of invasive species issues. The Pohnpei Invasive Species Strategic Action Plan was discussed and some amendments suggested. Representation of the committee to the Micronesia Regional Invasive Species Council meeting planned for Saipan was also raised. Public outreach continued to be an important task and a radio programme was held with Bejay being the main contact person. Mile-a-minute eradication effort was put on hold due to lack of community support. Funding opportunities for invasive species management were explored including linking in with the US Forestry Service.

## **Saipan (Northern Mariana Islands)**



### **Hairy banana pest detected in Saipan**

A new banana pest was detected in Saipan that appeared to be attacking banana leafs. Arnold posted pictures of the moth and caterpillar on PestNet. Entomologists (including Aubrey Moore) suggested that this could be *Olepa ricinii* (Arctiidae).

## **Samoa: Planning to restore a mountain**

A planning meeting was held between Government staff and interested stakeholders to discuss restoring native biodiversity to the Mt Vaea National Reserve. An Operational Plan was developed, funded through a partnership arrangement between the Samoa Government and Japan (Forest Preservation Programme). The Nature Reserve is approximately 79.6 hectares, and it is perhaps well known as the resting place for the renowned author - Robert Louis Stevenson. Invasive species surveys of the Reserve were undertaken in 2007 and 2013 and found that most (62% in 2007 and 90% in 2013) of the flora was comprised of invasive trees. The majority of these invasive trees were made up of five species (*Albizia falcata*, *A. chinensis*, *Castilla elastica*, *Funtumia elastica*, *Spathodea campanulata*). For more details on this project, please contact Talie Foliga (tumutalie@gmail.com).

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*If you have done successful restoration work on your island, please share some of the lessons with the team here in Samoa. If you are looking at restoring some of your natural areas and is interested in developing an Operational Plan - do get in touch. Don't forget the toolkit on Invasive Species management developed by [Pacific Invasives Initiative](http://ipm.pacificinvasivesinitiative.org/) (<http://ipm.pacificinvasivesinitiative.org/>)*

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## **Merremia data sheet needing your help!**

Anoano Seumalii-Vaai from the Samoa Quarantine Division is currently developing a data sheet for *Merremia peltata* to contribute to the CABI Invasive Species Compendium, and is requesting your assistance. She would like information on the following: Local Names | Distribution (Country, island) | Habitat | Impacts of *Merremia* | Prevention methods | References | Images. If you can help please contact [Anoano Seumalii-Vaai](mailto:anooseumalii@gmail.com) (anooseumalii@gmail.com)

## **PACIFIC INVASIVES PARTNERSHIP (PIP) – REGIONAL NEWS**

### **• Pacific scientists agree that Integrated Pest Management is the way to go**

Scientists from Fiji, Samoa, Solomon Islands and Tonga recently met to discuss the proper use of pesticides and other chemicals in the Pacific. A collaborative project is currently underway supported by partners such as ACIAR (Australian Centre for International Agricultural Research), FAO , SPC and University of Queensland to develop the capacity of agriculture workers, so that they are able to work effectively with farmers on integrated pest management and better farming practices. [source: SPAN Newsletter: Feb. 2014]

### **• Pest expert urges countries to act over African Tulip Tree pest**

A pest expert is urging Pacific countries to move quickly to control the rapidly spreading African Tulip Tree. The tree is fast becoming a pest in the region, posing a threat to native forests and farm land. The Pacific Invasives Initiative's co-ordinator, Bill Nagle, told Amelia Langford the tree may have a beautiful flower but it is also a costly pest that needs to be aggressively managed. [source: [Dateline Pacific](#)]



## From Aliens-List:

### Playing with invasive species

A number of educational games has been developed for communicating invasive species messages to schools and teachers.

- Sarah Clark (NZ) - In NZ we have a game called 'Cloak of Protection' which educates in a fun way about the impact of invasive predators on NZ native birds. <http://kakarikigames.co.nz/cloak-protection/>
- Mike Braysher (Australia) - see: <http://www.feral.org.au/education-training/primary-secondary-school-resources/>
- Sarah Brunnel (EPPO/OEPP - France) - Communicating and involving citizens on pests and invasive alien species' (<http://www.scoop.it/t/communication-and-citizen-sciences-on-pests-and-invasive-alien-species>) on which we could post experiences related to these aspects (top trump card game of invasive species, etc.).
- Nancy Bunbury (Seychelles) - developed several ideas for simple games and activities intended to educate kids about invasive species along the lines 'Native and invasive species bingo' and 'Spot the invasive species'. Also exploring a more complex 'Design an invasive species' game in which the kids would first be taught about the characteristics and impacts of invasive species and then need to invent their own invasive species and think about the reasons and likelihood for its possible introduction, how to prevent this, and what impacts their 'designer' species might have on the native ecosystem if introduced.
- Jonathan Jeschke (Technische Universität München) - developed a card game on biological invasions for my ecology class at the university. See: [www.jeschke.tk](http://www.jeschke.tk)

## From Pest-Net:

### Planet of the vines: climbing plants are taking over

If the forest were a financial system, trees would be its old money. Deeply rooted, they grow slowly, investing heavily over time in woody trunks and branches to support their leaves, and providing homes for a zoo of other species. Vines, on the other hand, would be the flashy junk-bond traders. Representing up to half of the plant species in a typical rainforest and producing up to 40 per cent of all leaves, they are down-and-dirty competitors. They invest almost nothing in supportive tissue, instead taking advantage of the trees' investments to scramble up to the top of the forest and produce great flushes of leaves that bask brazenly in the full sun. [Source: [New Scientist](http://www.newscientist.com/issue/2937)]. <http://www.newscientist.com/issue/2937>]

**Comments:** Warea Orapa: "The thinking that vines will over-run tropical forests is scary. Introduced invasive vines will overrun forests. One can see Merremia peltata doing just that in eastern Melanesia and some Polynesian islands. Its changing the ecology of whole forests, particularly the survival of epiphytic flora and fauna which not too many people are aware of."

## VACANCY AND OTHER OPPORTUNITIES

### The Nature Conservancy

Regional Aquatic Invasive Species Research and Data Manager. Fulltime post based in New York State. More information on TNC website: [www.nature.org/aboutus](http://www.nature.org/aboutus) or email [applyhelp@tnc.org](mailto:applyhelp@tnc.org). Closing date: 24 March, 2014.

### GIS Training - working with ArcGIS for environmental analysis & b advanced topics for ArcGIS

Training opportunity to be held in Fiji from May 12-23. Cost is USD\$500 per week. Classes will be confirmed in mid-March. Contact John Schaeffer ([john@junipergis.com](mailto:john@junipergis.com)) for further information.

### 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. For more information visit – [www.rapid-response.org](http://www.rapid-response.org)

### Craig S. Harrison Conservation Grants – Pacific Seabird Group

Funding opportunity for the conservation of seabirds in developing countries. Send an email to Verena Gill ([verena.gill@gmail.com](mailto:verena.gill@gmail.com)) and Craig Harrison ([harrison@hunton.com](mailto:harrison@hunton.com)) for more information. Please note that applications/proposals may be submitted at any time—there is no fixed deadline for submission.

## **SPREP (Secretariat of the Pacific Regional Environment Programme)**

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/>

## **SPC (Secretariat of the Pacific Community)**

SPC has vacancies and consultancy opportunities. Please check out the SPC's website for further information. [www.spc.int/job.html](http://www.spc.int/job.html)- or contact Christine Croombes ([recruit@spc.int](mailto:recruit@spc.int)).

## **INVASIVE NEWS GLOBAL**

### **New invasive plant parasitic nematode in Europe**

A recent study shows that a root-knot nematode species previously considered indigenous to Europe was actually introduced from Asia, and that its host range is wider than previously thought [source: [Invasive News](#)]

### **Building a better rat trap**

New technology takes humane aim at small invasive mammals that spell big trouble for endangered species. Human introduced invasive mammals (stoats, cats, rats, ferrets, possums and many others) are a serious threat to NZ's native birds. Invasive battlers are utilizing a range of tools including a new bait 'egg mayonnaise' and toxin para-amino-propiophenone (PAPP) that puts the culprit to sleep. PAPP breaks down to harmless compounds very quickly.

### **Bird smugglers caught with invasive species used for finch fighting**

<http://www.treehugger.com/natural-sciences/bird-smugglers-caught-invasive-species-used-finch-fighting.html>

### **South Texas Ants May Fend Off Invasive Species**

A multitude of ant species in South Texas, some of them invasive, has helped the region fend off the highly disruptive tawny crazy ant. [Source: <http://www.chron.com/news/texas/article/South-Texas-ant-variety-may-fend-off-invasive-ants-5198589.php>]

### **Kill 60 rats, get a cellphone**

In Alexandra, Johannesburg things are so bad that some children have had their fingers bitten off by rats while they sleep. A local charity Lifeline is asking for 60 rats in exchange for a new cell phone as a way to combat the problem. [Source: [St Lucia News Online](http://www.stlucianewsonline.com/kill-60-rats-get-a-cellphone/)] <http://www.stlucianewsonline.com/kill-60-rats-get-a-cellphone/>

### **Predatory Lionfish Decimating Caribbean Reefs**

Scientists are concerned that the introduced lionfish, native to the Pacific, will likely to wipe out Caribbean fish within two decades. [Source: [Inter Press Service - News Agency](http://www.ipsnews.net/2014/02/predatory-lionfish-prove-elusive-menu-item/)]. <http://www.ipsnews.net/2014/02/predatory-lionfish-prove-elusive-menu-item/>

### **Large, invasive lizard is taking over parts of Florida**

Authorities are concerned after spotting more than 100 black and white tegu lizards in Hillsborough County. These lizards are native to Brazil, Paraguay, Uruguay and Argentina. [Source: [NewsOK](#)]. <http://newsok.com/large-invasive-lizard-is-taking-over-parts-of-florida/article/3937523>

### **Monkeys taking over country, nuisance complaints increase**

Vervet monkeys appear to be taking over St Maarten. Complaints and reports of monkeys causing problems for residents are increasing. [Source: [The Daily Herald](#)]

### **USDA APHIS ITP announces LepIntercept: An identification resource for intercepted Lepidoptera larvae**

Lepidoptera is one of the largest and most economically important orders of plant eating insects. LepIntercept is a comprehensive identification resource for intercepted Lepidoptera larvae. For more information and use of this tool, as well as other tools (Longicorn ID) click online: [LepIntercept](http://idtools.org/id/leps/lepinintercept/) - <http://idtools.org/id/leps/lepinintercept/>

### **Release of bug could put NZ native species at risk**

New Zealand's native insects and plants will be put at risk if a proposal to release a predatory bug to protect tomato plants goes ahead, says University of Auckland biosecurity lecturer Dr Margaret Stanley. [Source: [Voxy](#)]. <http://www.voxy.co.nz/national/release-bug-could-put-nz-native-species-risk/5/182752>

## **20,000 caterpillars released to fight invasive weed in Northern Australia**

Parkinsonia weed is spreading rapidly across the northern Australia threatening over 3.4 million hectares and lowering the productivity of grazing properties. [Source: [ABC Radio Rural](#)] <http://www.abc.net.au/news/2014-02-25/parkinsonia-killer-caterpillar/5283206>

## **INVASIVE SPECIES PUBLICATIONS**

Bird, JP, Risalio, S, Seniloli, E, Tuamoto, T. 2014. A pre-eradication survey of Wedge-tailed Shearwater *Puffinus pacificus* on Monuriki, Mamanuca Group, Fiji. *South Pacific Journal of Natural and Applied Sciences*.

Carissa J. Klein, Stacy D. Jupiter, Matthew Watts, Hugh P. Possingham., 2014. Evaluating the influence of candidate terrestrial protected areas on coral reef condition in Fiji. *Marine Policy*. Volume 44, February 2014, Pages 360–365

Feussner, K-D, Waqa, T. 2014. Five new species of *Sarcophyton* (Coelenterata: Octocorallia) from the Fiji Islands. *South Pacific Journal of Natural and Applied Sciences*.

Kappes, PJ, Jones, HP. 2014. Integrating seabird restoration and mammal eradication programs on islands to maximize conservation gains. *Biodivers Conserv DOI 10.1007/s10531-013-0608-z*

Khairul Adha A. Rahim, Yuzine Esa, Aziz Arshad., 2013. The Influence of Alien Fish Species on Native Fish Community Structure in Malaysian Waters. *Kuroshio Science* 7-1, 81-93, 2013

Lin, Y., Gao, Z., Zhan, A., 2013. Introduction and use of non-native species for aquaculture in China: status, risks and management solutions. *Reviews in Aquaculture*. doi: 10.1111/raq.12052

Susan L. Williams , Ian C. Davidson , Jae R. Pasari , Gail V. Ashton , James T. Carlton , R. Eliot Crafton , Rachel E. Fontana , Edwin D. Grosholz , A. Whitman Miller , Gregory M. Ruiz , Chela J. Zabin., 2013. Managing Multiple Vectors for Marine Invasions in an Increasingly Connected World. *BioScience* 63(12):952-966. 2013

## **UPCOMING EVENTS**

<b>2014</b>	<b>Event</b>	<b>Participating Partner</b>
<b>February</b>		
2 Feb	World Wetlands Day: Wetlands and Agriculture	SPREP, SPC
<b>March</b>		
1 Mar	International Women's Day	
3-8 Mar	US National Invasive Species Awareness Week	US NISC, Hawaii Invasive Species Councils
21 Mar	International Day of Forests	
22 Mar	World Water Day	
<b>April</b>		
22 Apr	Earth Day	
<b>May</b>		
11-12 May	World Migratory Bird Day	
22 May	International Day for Biological Diversity: Island Biodiversity	
24 May	World Fish Migration Day: Connecting Fish, Rivers, People	
<b>June</b>		
5 Jun.	World Environment Day	SPREP
8 Jun.	World Oceans Day	SPREP
25 Jun.	Day of the Seafarer	SPC
<b>July</b>		
28-29 Jul.	Mid-Atlantic Biocontrol Workshop (Managing invasive plants with biocontrol agents - Washington DC)	
<b>August</b>		
12 Aug.	International Youth Day	SPREP
<b>September</b>		
1-6 Sep.	World Water Week	SPC
20 Sep.	International Coastal Cleanup Day	
23-27 Sep.	World Maritime Day: IMO Conventions: Effective implementation	SPREP, IMO

*Disclaimer: Articles contained within this or other PILN Soundbites do not necessarily reflect the views of PILN teams, SPREP or the Pacific Invasives Partnership. Contact the PILN Coordinator for further information ([posas@sprep.org](mailto:posas@sprep.org)).*