



Pacific Invasives Learning Network

Secretariat of the Pacific Regional Environment Programme.

PO Box 240, Apia Samoa. Tel. +685 21929. Fax. +685 20231.

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>

Ni sa Bula vinaka Invasive Battlers

YOUR PILN SOUNDBITES for July has been compiled from Suva, Fiji during the 12th Pacific Science Inter-Congress. The Inter-Congress provided opportunities to highlight some of the invasive species research undertaken by students and scientists throughout the Pacific region (Asia, Pacific islands and Pacific rim countries). This month we highlight a significant event, the development of an MoU between Island Conservation and SPREP. The MoU signifies Island Conservation’s commitment to PILN by providing funding support over the next 6 months – our heartfelt thanks to Bill Waldman, Ray Nias and friends at Island Conservation for this generous gesture. We look forward to a productive collaboration over the next 2-years and more. A special event will be held during the SPREP meeting in September to celebrate this auspicious milestone.



9th PACIFIC ISLAND
CONFERENCE ON
NATURE CONSERVATION
AND PROTECTED AREAS

2-6 December 2013

**Registration
closes 31 Aug**

PILN TEAMS AND COUNTRY UPDATES

French Polynesia – Detect and Destroy – eradication of the thorny shrub *Acacia farnesiana* in Tahiti



Photo - © Michael J. Plagens

Acacia farnesiana commonly called “Mimosa bush” or “Mimosa de Farnèse” in French, is a small thorny shrub (2-6 m tall). It is easily recognized by its zigzag young branches, its compound leaves with 5-25 pairs of small leaflets, the ball-shaped bright yellow inflorescences (1-2 cm in diameter), the thick and slightly curved black or dark brown pods when mature (2-8 cm long, 1-2 cm large) containing small ellipsoid seeds (7-8 mm long) slightly laterally flattened, and of course its sharp spines (1-4+ cm long). Native to tropical America, this species was first introduced to Tahiti (Society Islands, French Polynesia) in 1845 by Francis Johnston (a British surgeon and one of the first doctors in Tahiti) perhaps as a garden ornamental for its fragrant and golden yellow flowers, or as a bee-forage plant, or for the perfume industry. Commercial ventures to extract essential



Photo – © Forest & Kim Starr

oil from the plant flowers (essence de Cassie) were carried out in southern France and in the Mediterranean basin (Algeria, Egypt, Syria).

Mimosa bush is now considered one of the worst invasive plants in the Pacific region, including the Marquesas archipelago in French Polynesia (Nuku Hiva, Ua Pou, Tahuata, and the uninhabited island and protected area of Eiao) where it forms very dense and almost impenetrable thickets in coastal and dry areas, up to 500 m elevation. The species is declared invasive in Australia (Queensland region), the Hawaiian islands (where it was planted in 1864-65 and now found in dry open disturbed area up to 400 m), and is naturalized in Rarotonga, Cook Islands (where it is considered a serious weed), Fiji (where it was introduced in 1860 on Viti Levu and declared a “noxious weed”), New Caledonia (where it was introduced in 1866 as a forage plant and now widespread in pasturelands), but also on Guam, Vanuatu, Rapa Nui, and in La

Réunion and Mauritius islands (Mascarenes, Indian Ocean).

In Tahiti, *Acacia farnesiana* was reported (and collected) by botanists William Setchell & Harold Parks in 1922 in Faa,

located south of the main town of Papeete, but the species was not reported to be present on the island since. Because of its invasiveness in the Marquesas archipelago, it was legally declared a “threat to biodiversity” in French Polynesia by a Decree passed in 1998, which forbids the species cultivation, propagation, transportation and transfer from one island to another.

On the 2nd of February 2010, workers from the “Service de la Pêche” (French Polynesia Fisheries Department) informed Jean-Yves Meyer that several plants were growing in a ditch at the Motu Uta docks in Papeete. Cyclone Oli hit Tahiti a few days after (4-5 Feb.), and strong waves inundated the ditch and dried out the plants, which were considered dead. However, three years later, in February 2013, workers from the “Direction de l’Environnement” (Dept of Environment) were alerted by Marquesans that the “puke” (the local name of the species, derived from the French “bouquet”) was growing near the ditch almost at the same spot! A single large multi-stemmed plant (3-4 m tall) was found, the species identification was confirmed and the plant was cut down and destroyed. Interestingly, it appeared that this shrub has been cut in the past (with many re-sprouts from old cut-stumps), apparently by a local contractor in charge of all the harbour management, in an effort to develop green space for the “Port Autonome de Papeete”.

Several lessons can be learnt from that small, fast but efficient control operation: (1) information to the general public and local managers on invasive alien species, how to recognize them, and the legislation, is of high importance, (2) surveillance in sensitive areas (the “points of entry” for invaders) is essential for early detection, (3) long-term monitoring after control is needed to ensure effective eradication, and (4) collaboration between the different governmental agencies and other stakeholders is vital to coordinate their efforts (from detection to identification, control to monitoring) and to circulate information.

It is probable that *Acacia farnesiana* was accidentally introduced to the Motu Uta docks as seed contaminants transported on a boat coming from the Marquesas. Seeds may have been washed out in the ditch, as the plants were found at the exit of a water pipe connected to the docks. Biosecurity measures should thus be reinforced for all French Polynesian inter-islands boat companies, even when they land in the most populated island of Tahiti... which is often considered as the “main source of all invasives”!

Jean-Yves Meyer

Délégation à la Recherche de la Polynésie française, B.P. 20981, Papeete, Tahiti, French Polynesia

on behalf of the « Comité de lutte sur les espèces envahissantes »

Hawaii

Hawaii Invasive Species Council awarded \$2.55M in new awards for invasive species prevention, control, outreach, and planning. See bullet points below as to what we supported, and the full details can be found on the website at:

<http://dlnr.hawaii.gov/hisc/projects/fy14/>

Aloha, Josh

Supported projects include:

- Two planning projects relating to naio thrips and statewide ant detection and response
- Support for ballast water, hull fouling, and alien species control programs under the DLNR Division of Aquatic Resources
- Continued support for the Hawaii-Pacific Weed Risk Assessment
- Funding to continue the eradication of Little Fire Ants from Kauai
- Support for the Hawaii Ant Lab in Hilo
- Support for the Coordinating Group on Alien Pest Species
- County-based detection, control, and outreach work by the Invasive Species Committees
- A feasibility assessment for new biocontrol research facilities
- Support for axis deer control eradication on Hawaii Island and population assessments on Maui Island
- Support for mongoose detection and response on Kauai
- Miconia control on Kauai, Oahu, and Maui using Herbicide Ballistic Technology
- A demonstration project for controlling Albizia trees on Hawaii Island
- Support for the new Invasive Species Planner position as part of the HISC Support team.

Kosrae white fly update



July was another busy month for invasive battlers in Kosrae-FSM. The prime target species for the month was the whitefly. The management involved awareness, control, research, and monitoring/evaluation. In July, our program imported more Dusky Lady Beetles (*Nephaspis oculatus*) from Pohnpei-FSM, the bio-control agent used internationally to control whitefly. We also developed traps to catch the adult whitefly. An awareness video, demonstrating on how to make a White Fly trap with the use of soapy solution-mixture was aired on the local channel for the general public.



Dusky Lady Beetle, a biocontrol for the White Fly

“These are the popular methods of control we are using during this period of time. We used old wooden boards or flat tins and paint them in green color (attractive color for the White Fly), then we wipe the object with used oil (motor, coconut) or any sticky substance, then install them where the White Flies are abundant. We only reapply the oil when necessary/or when rain disrupts the sticky substance”, says Jason Jack.

Palau and Little Fire Ants

DETECTING-LITTLE-FIRE-ANTS!

Step 1: Smear a thin coat of peanut butter on one end of some wooden chopsticks or popsicle sticks (a thick coat isn't better).

Step 2: Place the sticks around your property, preferably in the shade, in plants, and at bases of trees. Check the sticks after about an hour.

Step 3: Pick up chopsticks with ants—carefully or they will fall off—and put them in a sealable plastic bag (zip-loc bag). Examine the ants on the peanut butter.

- Are they red-orange?
- Are they no longer than 1/16 inch (the thickness of a penny)?
- Are they slow-moving and do they fall off the chopstick easily when you tap the side of the stick?

Step 4: If you can answer YES to these questions, then you may have the little fire ant. Seal the plastic bag, write your name and phone number, the date, and where you collected the ants on the bag, and place it in the freezer overnight to kill the ants. **Please do not transport live ants!**

To have the identification of the ants confirmed, drop off the bag at the Quarantine Office at the [Aggei Airport](#).

You can insert this label into your bag—write with pencil, not pen.

FORMORE INFORMATION PLEASE CALL QUARANTINE AT: 587-2504 OR CALL JOEL MILES AT 544-5804

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Joel Miles has prepared a 7-slide awareness presentation on Little Fire Ant, to run on Palau’s local TV station as a public service. Viewers are encouraged to call the Bureau of Agriculture to get information, and to get instructions (see below) on how to sample around their house & property for LFA. Samples can be brought to Joel’s office for ID, thanks to the Ant ID training conducted in May.

A flyer to promote reporting of Little Fire Ants

PNG

Dear all,

We are planning to develop a programme with the view of eradicating the invasive shrub *Miconia calvescens* from PNG. We need advice from those of you in Hawaii, French Polynesia, Northern Australia and New Caledonia on how you have conducted eradication programmes on the species so we can develop ours.

For your information, we believe *Miconia* has been present in PNG undetected for at least 25 years. The task is going to be tough but not impossible as much of the *Miconia* plants are growing in accessible, ornamental situations through the highly agricultural Waghi Valley, site of the World Heritage nominated Kuk Early Agricultural Site.

Apart from natural dispersal in a small area near the original site of introduction, no natural dispersal or invasion has occurred. Much of the spread is by humans. PNG's montane forests are areas of high biodiversity as well as being highly vulnerable to disturbances of any type. The presence of *Miconia* if not eradicated, will have significant consequences.

I suspect that the species has not yet invaded natural forests because of the absence of appropriate bird species in the highly disturbed valley. But this will change as people move and cultivate plants in villages on the fringes of the Valley where natural forests commence and a variety of native bird species occur.

If members on the PIP list have information please share or email directly to me.

thanks

Warea Orapa (Mr)

Email: warea.orapa@gmail.com

Port Moresby, PNG

Samoa – all about the bees



Scott Groom and members of the Samoa National Invasives Task Team

How much do we know about bees? Well, for most of us in Samoa, bees are the flying stinging insects that give us sweet tasting honey. So it was a pleasant surprise to find out that Samoa has its own endemic bees that look very much like flies – dark and small. Scott Groom, a PhD student from Flinders University, Australia gave a presentation to the Samoa National Invasive Species Task-Team on some of the findings from his survey of local bees. Scott carried out genetic analysis of the bees and found some odd patterns with Samoan bees, including its higher diversity than those of Fiji. Most are recent introductions and one bee that relates closely with South American bees rather than those from the western Pacific. Scott also showed us images and specimens of the bees including one that looked like a horse. Scott thinks this is especially adapted to pollinate certain flowers. Most of the bees are solitary and do not form colonies, which perhaps make them less susceptible to diseases that affect most of the honey bees. According to Scott, the native Samoan bees are unlikely to be affected by the *Varoa* mite that is causing economic loss to bee farmers in many parts of the world.

Tonga to join the Pacific Invasives Learning Network as the 18th invasives team

Government agencies and civil society organisations met recently in Tonga and agreed to form a national invasive species team with the view of joining the network for island invasive species practitioners (PILN). Tonga is currently part of the ten Pacific Island Countries implementing invasive species activities under the GEF-PAS Invasive Species Project. The invasive species coordinator – Viliami Hakaumotu is pleased to spearhead the invasive species group and will be the main point of contact with other PILN teams. For further information on Tonga's invasive species activities please feel free to drop Vili an email (viliamihakau@gmail.com).

On behalf of all PILN teams – I welcome Tonga to our group and hope that we will get an opportunity to hear more of invasive species activities in Tonga.

PACIFIC INVASIVES PARTNERSHIP (PIP) – NEWS

Island Conservation signs MoU with SPREP and provide support to PILN



Island Conservation and SPREP have recently developed a Memorandum of Understanding (MoU) to collaborate on invasive species issues within the Pacific region. The purpose of the MoU is to enhance conservation of threatened island species at risk from invasive alien species, promote campaigns and opportunities to increase funding to the region for control, management and eradication of invasive species, share information and resources and develop and implement conservation and invasive species projects.

“We are very pleased to sign this MoU with SPREP to deliver better outcomes for Pacific Island Countries. The work of SPREP and PILN are a critical part of the collective effort being made by Pacific Island Countries to prevent the extinction of species threatened by invasives. We hope that this MoU with SPREP and our financial contribution to PILN will support the continuation of this vital work into the future,” says Dr Ray Nias, of Island Conservation.

A planned ceremony to mark this historical partnership will be held during the 24th SPREP Meeting in September, 2013.

13th Micronesian President's Summit

The Presidents of three Micronesian countries (Palau, Federated States of Micronesia and Marshall Islands) held their 13th Summit in Palau from July 10-12, 2013 to discuss matters of common interest. The meeting reaffirmed the strong commitment of the three nations to continue to forge friendly relations and communicate on national, regional and international issues of mutual importance.

Presidents on Biosecurity and Invasive Species

The Presidents dedicated a fair amount of time and text to discuss and communicate on biosecurity measures and invasive species. They noted that a sustainable economy is dependent on healthy natural resources, which are threatened by invasive plants, animals, insects and diseases. Managing invasive species is fundamental to adaptation efforts. The Presidents noted legislation as a key gap for invasive species management. The Micronesia Biosecurity Plan was endorsed by the Presidents and directed government agencies and officials to support the Strategic Implementation Plan. These issues will be brought to the meeting of Pacific Islands Forum Leaders in Marshall Islands in September, 2013. The Presidents support the role of the Pacific Invasives Partnership providing regional support to the region.

Pacific Islands Environment at Risk (PIER) Update

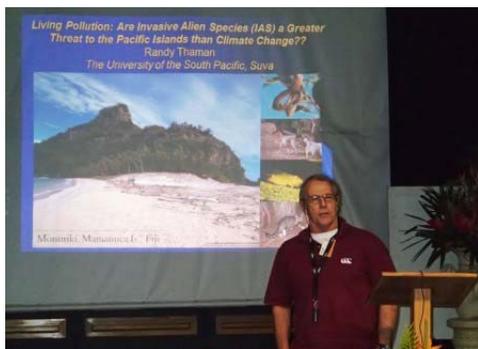
A new edition of the Pacific Island Ecosystems at Risk (PIER) web site was recently posted. It now includes over 1900 plant species of potential concern to Pacific islands. Over 800 new photos are included in this edition, as well as 42 new weed risk assessments. There are now over 1700 risk assessments listed. The PIER web site can be accessed at <http://www.hear.org/pier/>.

Note that PIER's sister site, Hawaiian Ecosystems at Risk (HEAR) is no longer funded and, while it will be available on the server indefinitely, will no longer be updated. However, this does not apply to PIER. PIER is maintained and updated on a volunteer basis and will continue to be available to provide information on invasive plants in the Pacific region. For further information or to request species be added to PIER, contact Jim Space at pier@hear.org.

Invasive resolution from Association of Pacific Islands Legislatures

The Association of Pacific Island Legislatures comprising of 12 Pacific Countries, Territories and States met recently and made note of the critical importance of preventing, eradicating and controlling invasive species on Pacific Islands at both regional and national levels, expressing sincere appreciation to the United States Government for funding the development of the Micronesia Biosecurity Plan, and encouraging appropriate involvement of regional invasive species experts and regional governmental staff from Micronesia, Hawaii and the Pacific in the consultative development of the Micronesia Biosecurity Strategic Implementation Plan.

Bytes from the 12th Pacific Science Inter-Congress, Suva, Fiji



Professor Randy Thaman – “Invasive alien species constitute perhaps the most serious short- and long-term threat to food, health, livelihood and environmental security in the region. If we don't improve awareness and capacity building and strengthening international and local biosecurity IAS will have greater negative environmental, economic and social impacts than climate change. Unlike oil spills, once introduced, IAS will not go away. They will only get worse and spread further afield!! The cost to most Pacific Island Countries & Territories in terms of lost biodiversity, food security, resilience against climate change is already in the millions.



Bactrocera fruit flies threaten food and livelihood security

Feroz Khan from SPC gave a joint-presentation with Prof. Randy Thaman on the fruit-flies belonging to the genus *Bactrocera*. These flies damage many of the important fruits and crops that are destined for export. Flies are spread naturally (they are strong flyers and can cover near 100km in 2-weeks) or by movement of infested fruits and poor quarantine controls. The Oriental fruit fly (*Bactrocera dorsalis*) has recently been found in the Cook Islands (early this year) and efforts are underway to eradicate them. So far it has been estimated that NZD\$3 million in export loss is due to this one fly.



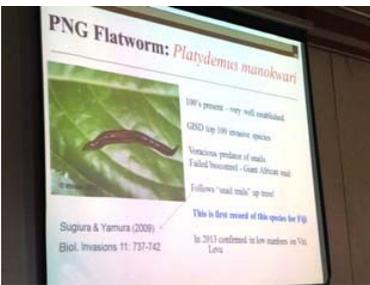
Reversing an ecological collapse – Rapa Nui part 2

Dr Jean-Yves Meyer from French Polynesia shared a project that he was involved with in restoring Rapa Nui or Easter Island. The land was seriously deforested, which led to the extinction of at least 6 birds and more than 22 plants. Introduction of grazing animals (sheep, cattle, goats and horses) added to the pressure on vegetation.



Fighting termites with an introduced weed (*Abrus precatorius*)

A few years ago – parts of Fiji were ravaged by the subterranean Asian termite. School buildings were condemned and restriction was imposed to the movement of goods from infested areas. The cost to try and contain the problem was in the millions. Ravikash Prasad is a master’s student at the University of the South Pacific and is currently exploring the use of extracts from the *Abrus precatorius* to fight the termite infestation.



Platydemus manokwari a leading cause of snail extinction!

Dr Gilianne Brodie (from USP and Fiji Invasive Species Taskforce) member presented on the surveys she carried out in Fiji – specifically on the island of Rotuma and Lau. Concerns are for the Partulid Tree Snails, which were once used widely by Polynesians for ceremonial purposes. Many species of partulids have become extinct and breeding programmes for some of these snails are carried out in London and Bristol Zoos.



Micronesia Biosecurity Plan showcased

Mereseini Seniloli (from SPC based in Pohnpei) presented a joint-paper with James Standford (University of Guam) on the MBP. This is an unprecedented multi-jurisdictional effort by the nine jurisdictions in Micronesia to harmonize biosecurity efforts. The MBP was developed through a series of steps including reviewing of draft scientific risk assessments and development of the Strategic Implementation Plan. The implementation plan began early this year and it involves consultation with the nine-Micronesian jurisdictions and others.



Report on the 12th Pacific Science Inter-congress (Josef Pisi, Ministry of Natural Resources & Environment, Samoa).

The 12th Pacific Science Inter-congress held in Suva, Fiji was definitely a bigger and rare experience for me as a public servant working as an Environment officer for the Ministry of Natural Resources and Environment (MNRE), and for that, I give my sincere appreciation to PILN of SPREP for supporting my participation.

The theme of the congress was ‘*Science for Human Security & Sustainable Development in the Pacific Islands & Rim*’. This theme correlates with almost every aspect of the modern world including us in the Pacific Islands. We face constant challenges and issues due to our vulnerability to natural disasters and climate change, isolation from the world’s markets, and the limited resources available to our younger, smaller, and cultural-based societies. As a region



Josef Pisi giving a presentation at the 12th Pacific Science Inter-Congress

striving for economic recognition, our natural resources have become threatened from a range of factors; thus posing the question on the uncertain future sustainability of the environment for future generations.

Our natural biodiversity is part of our cultural, traditional and spiritual life, which is undoubtedly the foundation of our survival and a shield to external pressures. The issue of Invasive species rapidly making their way into our Pacific Islands is of major concern. They have out-competed our native biodiversity hindering the benefits we used to enjoy. The point I learned as I participate in each presentation of the congress is, losing our natural biodiversity, means losing our culture and heritage, our livelihood, and ultimately our islands. To me as a participant of the congress, the question I keep asking myself is, if invasive alien species can cause damage to our environment, how will development damage our societies? Science is a major tool to help us project the future, trace our roots to assist us in re-defining the meaning to life. Our natural biodiversity is perhaps the only refuge we can count on in ensuring a resilient environment to impacts of global warming, climate change and other human-induced changes.

VACANCY AND OTHER OPPORTUNITIES

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

Craig S. Harrison Conservation Grants – Pacific Seabird Group

The objective of the Conservation Fund is to advance the conservation of seabirds by providing funds or supplies to individuals from developing countries as well as those from elsewhere working in those developing countries primarily in or bordering the Pacific Ocean, (1) for conservation and restoration activities that benefit seabirds in the Pacific Ocean; and (2) to help develop within-country seabird expertise in developing countries within or bordering the Pacific Ocean.

- Send an email to Verena Gill (verena.gill@gmail.com) and Craig Harrison (charrison@hunton.com), briefly explaining what you want to propose and where you want to do the work. That way, you can get a rapid determination from them of whether your proposal is eligible for consideration for funding.
- (2) If they determine that your study is eligible, then fill out and send the application form, the proposal/budget, and the letter of reference, as described below, to Verena Gill and Craig Harrison. If you have questions about the Application Form, please see the Example Form that has been filled out.

Please note that applications/proposals may be submitted at any time—there is no fixed deadline for submission. All applications/proposals will be evaluated whenever they are submitted.

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/>

Current: - Publications Officer: Close 16th August, 2013; Hazardous Waste Project Officer: Close 2nd August, 2013. Hazardous Waste Project Manager: Close 2nd August, 2013.

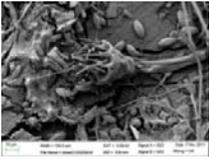
From Cas Vanderwoude and team

Hi folks,

HAL had our first ant management clinic last week and it was so well received by participants that we have decided to hold a second clinic on August 30th. Time: 9.00-3.00pm. Hawaii Department of Agriculture conference room 16 E' Lanikaula St Hilo HI. Donation towards coffee and snacks appreciated. No lunch provided but a selection of eateries nearby. You MUST email Kanoë Malani - kanoë.malani@littlefireants.com to book a place. We will contact those people on the waiting list also. Not many places left so please book early.

INVASIVE NEWS GLOBAL

Plastisphere – a whole new world!



Floating plastics not only pollute our Pacific ocean and provide habitats to a world of micro-organisms. Scientists have dubbed it the 'plastisphere'. In a study recently published online in Environmental Science & Technology, the scientists say the plastisphere represents a novel ecological habitat in the ocean and raises a host of questions.

United States – Environment Protection Agency approves invasives for biofuel



The Giant reed – *Arundo donax* – scores a 12 on the Pacific Island Ecosystem at Risk (PIER) – http://www.hear.org/pier/wra/pacific/arundo_donax_htmlwra.htm has been approved by EPA for its biofuel program. The Giant reed and the Napier grass (*Pennisetum purpureum*) are two highly invasive weeds that could wreck havoc on America's landscape and native species. Pressure from environmental groups has forced the EPA to put additional conditions on the use of the invasive weeds. Biofuel producers will be required to demonstrate that growth of these invasive weeds will not pose a significantly likelihood of spreading beyond the planted area, or that the invasive risks are being managed and minimized through an EPA-approved Risk Mitigation Plan.

Broome residents to be on the lookout for pest birds



West Kimberley residents are reminded to report sightings of unusual birds following the discovery of a starling 30 km east of Broome. Department of Agriculture and Food technical officer Roland Nicholls said a member of the local bird watching group had reported a sighting of the pest bird, which had subsequently been removed by a local landholder. Mr Nicholls said starlings posed a threat to agriculture and the environment, destroying crops, spreading disease and competing with native birds.

Catch me if you can



Lionfish continues to cause problem for Caribbean and Atlantic countries. Everyone is being asked to join in the fight and divers are especially encouraged to catch and eat them, when they can. But the lionfish is proving to be adaptable to a wide-range of temperatures, salinity and depth. Recreational divers can only dive to 130 feet deep, where lionfish lives to 250 feet deep, with the deepest recorded at 1000 feet.

INVASIVE SPECIES PUBLICATIONS

- SAPIA (Southern African Plant Invaders Atlas) – No. 29. July 2013. 100 Years of Biological Control of Invasive Alien Plants in South Africa | Mass-rearing of biocontrol agents at SASRI and the bugweed flowerbud feeder | Biological control of Australian Acacias: what you see is not what you get! More on www.arc.agric.za

- Hackerott S, Valdivia A, Green SJ, Côté IM, Cox CE, et al. (2013) **Native Predators Do Not Influence Invasion Success of Pacific Lionfish on Caribbean Reefs.** *PLoS ONE* 8(7): e68259. doi:10.1371/journal.pone.0068259
- Flores-Moreno H, Thomson FJ, Warton DI, Moles AT (2013) Are Introduced Species Better Dispersers Than Native Species? A Global Comparative Study of Seed Dispersal Distance. *PLoS ONE* 8(6): e68541. doi:10.1371/journal.pone.0068541
- Correlated recovery of five lizard populations following eradication of invasive mammals Joanne M. Monks, Adrian Monks, David R. Towns *Biol Invasions* DOI 10.1007/s10530-013-0511-2
- The National Agriculture Quarantine Inspection Authority (NAQIA) News now available for your reading pleasure. Contact NAQIA – qfaqan@naqia.gov.pg for your very own copy.
- The Caribbean Seabird Initiative: Invasives – July 2013 Newsletter is now available for viewing. Issues covered include: Allen Cay Mouse-Free | Rats Remain on Desecheo | Eradications Database | Inhabited Islands Recommendations and more. You can download a copy on <http://wicbirds.net> or contact Jennifer Wheeler (Jennifer_a_wheeler@fws.gov)
- van Klinken RD, Panetta FD, Coutts SR (2013) **Are High-Impact Species Predictable? An Analysis of Naturalised Grasses in Northern Australia.** *PLoS ONE* 8(7): e68678. doi:10.1371/journal.pone.0068678
- See a movie on Suwarrow Island - <http://wildiaries.com/trips/11128>

UPCOMING EVENTS

2013	Event	Participating Partner
August		
1-2 August	Workshop to identify invasive polychaetes. National Museum, Sydney. Australia.	
12 August	International Youth Day (United Nations)	
16 th August	Final date to receive conference materials from Working Groups (9 th Nature Conservation Conference)	
20-22 August	8 th International Conference on marine bioinvasions. University of British Columbia, Vancouver, BC, Canada.	www.icmb.info/
September		
2-6 Sept	44 th Pacific Islands Forum. Majuro, Marshall Islands.	
16-20 Sept	SPREP 23 rd Meeting. Apia, Samoa	
21 Sept	International Coastal Cleanup Day (Ocean Conservancy)	
22-26 Sept.	12 th International Conference – Ecology and management of alien plant invasions. Pirenopolis, Brazil.	Pirenopolis, Brazil http://www.emapi2013.org/index.php/br/en/
22-27 Sept	9 th European Vertebrate Pest Management Conference. Turku, Finland.	www.evpmc.org
23-27 Sept	Island Biosecurity Training, Apia, Samoa	PII/PILN/SPREP
23-27 Sept	World Maritime Day (IMO). 2013 Theme: Sustainable Development: IMO's contribution beyond Rio+20	
25 Sept	Invasive Species Working Group – GLISPA teleconference call	
26 Sept	Fiji Invasive Species Taskforce Meet	
27 Sept	World Tourism Day (UNWTO)	
October		
7 October	World Habitat Day (United Nations)	
16 October	World Food Day (United Nations – FAO)	
17 Oct.	International Day for the Eradication of Poverty (United Nations)	
23-27 Oct.	2 nd International Congress on Biological Invasions. Qingdao, China.	www.icbi2013.org
November		
14-17 Nov.	Asia-Park Congress. Japan	SPREP
20-22 Nov.	AWMS Annual Conference. Massey University, Palmerston North, NZ.	
25-29	Pacific World Heritage Workshop. Suva, Fiji	UNESCO
December		
2-6 Dec	9 th Pacific Island Conference on Nature Conservation and Protected Areas. Suva, Fiji	
9-13 Dec	Wrap-up meeting of 9 th Pacific Island Conference on Nature Conservation & PAs.	
	20 th Biennial Conference on the Biology of Marine Mammals. University of Otago, NZ	
13 Dec	Fiji Invasive Species Taskforce	FIST

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