

# PACIFIC INVASIVES LEARNING NETWORK

# **SOUNDBITES – JULY 2012**

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



Common myna (Acridotheres tristis) is listed as one of the world's 100 worst invaders. It was recently named as the most important pest/problem in Australia.



Image: Gerald McCormack – a myna feeding on a coconut stick insect

Every Action Counts
Reduce, Reuse, Recycle

# PILN teams and country updates

## French Polynesia

Statut et dynamique de Vespula vulgaris (Hymenoptères), une guêpe introduite en phase d'invasion sur les hauts sommets de l'île de Tahiti (Polynésie française)

[Status and dynamics of *Vespula vulgaris* (Hymenoptera), an alien wasp invading the highest summits of Tahiti island, French Polynesia]

Biological invasions are considered one of the main threats to biodiversity in islands, including those of French Polynesia (South Pacific). The European wasp Vespula vulgaris, already invasive in Hawaii, Australia and New Zealand, is now naturalized on the highest summits of Tahiti island. Data collection indicates a possible introduction in the 1990's. Observations and the collection of 85 specimens along an elevation gradient on Mount Aorai (between 600 and 2,100 m) confirmed that the wasp is exclusively found above 1,000 m elevation, where the mean annual temperature is below 22 °C. The lack of pronounced seasons, without a cold winter, may allow the formation of multi-annual nests, only one being found on Aorai. Sex-ratio (1 male to 5 fertile females) indicates that reproduction occurs in April. Nest activity is between 5:45 am to 5:45 pm with a peak at 12:30 am, but varies with climatic conditions. This omnivorous wasp is a generalist predator. Its potential impact on all invertebrates living above 1,000 m elevation, as well as competition with their food sources, may alter the functioning of the island unique montane ecosystem. To better assess the impacts of V. vulgaris and to try and eradicate the species or control its populations, it would be important to improve the knowledge on its life cycle and also on its diet.

Abstract of the report of Benoît VALLAS, intern undergraduate student of the Université de Saint-Etienne (France) at the Délégation à la Recherche de la Polynésie française (research Dept, Gvt of



Vespula vulgaris a recent introduction to French Polynesia



Benoit VALLAS, an intern undergraduate student undertaking research on Vespula vulgaris

French Polynesia) under the supervision of Jean-Yves MEYER between March and May 2012. The report can be downloaded on: http://www.li-an.fr/jyves/Vallas\_2012\_Rapport\_stage\_M1\_Vespula\_Tahiti.pdf

Jean-Yves Meyer at the Global Invasive Alien Species Information Partnership

Jean-Yves Meyer was invited by the CBD Secretariat to represent PILN and the Pacific region at an international workshop held at the Natural History Museum in London entitled "Global Invasive Alien Species Information Partnership" (8-9 July). About 30 experts on invasive species and databases (from CABI, FishBase, Global Biodiversity Information Facility (GBIF), Island Conservation, IUCN Invasive Species Specialist Group, Pacific Invasive Learning Network) from all continents and countries (South Africa, Argentina, Brazil, Cuba, Malta, Mexico, Philippines, Saint-Lucia, Seychelles, Thailand, French Polynesia and the European Community) discussed opportunities to set up a "portal" or "gateway" to share information, datasets and knowledge on invasive species, and to prepare a Memorandum of Cooperation between interested institutions, to be presented at the next Conventions of Parties (COP) in response to the Aichi Biodiversity Target 9 (Invasive Species) of the CBD 2011-2020 Biodiversity Strategic Plan.



Dr Jean-Yves Meyer representing PILN and the Pacific at the CBD Secretariat organised workshop on Global IAS Information Partnership

## Fiji

Nature-Fiji launches wildlife photo competition

NatureFiji is celebrating its 5<sup>th</sup> Birthday and they are holding a photo competition to promote Fiji's spectacular natural environment on land and under water. NatureFiji is requesting your stunning shots. Judges will select an overall winner, a Fiji citizens category winner and a junior category winner for 15 years and under. Winners will have their photos showcased in NatureFiji-MareqetiViti's 2013 calendar, with the overall winners photo taking pride of place on the front cover and will receive complementary NatureFiji-MareqetiViti membership. The competition closes on 31 July 2012. Email photos to <a href="mailto:support@naturefiji.org">support@naturefiji.org</a> – include your name, age (if 15 or under) and citizenship, a caption and where the photo was taken. Please send one image per email. The image must be your own work and the file size should be less than 1MB. If selected for final judging you may be asked to provide a high resolution version. For full terms and conditions please visit <a href="www.naturefiji.org">www.naturefiji.org</a>.



## Samoa

SNITT members attend the Invasive Bird Management Training Workshop

Members of the Samoa National Invasive Species Task-Team joined staff from the various divisions of the Ministry of Natural Resources and Environment to attend the Invasive Bird Management Training held in Apia from 9-18 July. The timing of the workshop could not have been more perfect as Samoa grapples with the introduced invasive myna birds. The myna was introduced in the 1960s to control ticks on cattle as well as other insect pests on agriculture production. The myna population has increased to nuisance level and efforts to control them are well under way.



Photo image -Bill Nagle (PII)

Samoa National Invasive Species Task-Team (SNITT) holds its first meeting

Members of the National Invasive Species Task-Team held its first meeting on 25 July, 2012. The meeting was chaired by the Chief Executive Officer of the Ministry of Natural Resources and Environment. Updates from the various departments, organisations and individuals were shared including control work on myna birds, Merremia vine, rattan palm and restoration work on Aleipata islands. Members also met Gianluca Serra who is facilitating the implementation of the GEF-PAS Invasive Species Project. Samoa is currently recruiting an Invasive Species Officer who will be managing the Samoa component of the GEF-PAS. A report from Quarantine summarised their participation at the 3<sup>rd</sup> PILN network meeting on Kiritimati Island. There was a request for a learning exchange between Samoa and Vanuatu for sharing experience and lessons on Merremia.

#### **Cook Islands**

Chanting for birds in Atiu – George Mateariki

George the bird-man from Atiu started his presentation with a traditional Cook Island bird chant. He spoke about the introduction of myna into the Cooks in 1916 to control pest insects. Since then the number increased to 6000 birds. Concerns of the impact of myna to native birds (like the Chattering Kingfisher), where they can compete for food, nesting and burrowing sites. The Rimatara Lorikeet (Vini kuhlii) is also threatened through harassment of adults and fledglings. George used various exclusion traps (to exclude chickens and pigs) in his effort to remove the mynas. Poison was also used, and recently he recruited professional shooters to cull the myna. A bounty was established to encourage community participation. The project started in 2009 and by the middle of 2010, the number had dropped to less than 2000 birds. The drastic reduction in myna population gave George a reason to move from myna control to myna eradication. He estimated that the myna population in 2012 is near 1000 birds. After the invasive bird management training -George agreed that he will need to increase the number of professional shooters if he is to achieve his eradication aim. Furthermore he agrees for the need to target the birds before and during the breeding season.



George Mateariki - the bird man from Atiu

Photo – Jamie Copsey/Durrell Wildlife Conservation Trust

### Kiribati

Mynas in Tarawa - Katareti Taabu, Tekimwau Otiawa

Kiribati participants of the Invasive Birds Management Training proposed to remove mynas from Tarawa. An assessment of the current situation to find out the population of myna will be a first step. Myna birds are found at Betio and it is suspected that they were brought in via ships. Concerns are that the myna has spread to nearby islands, including Tabiteuea and Onotoa islands. Even more worrying is the threat posed by mynas to the World Heritage - Phoenix Island Protected Area, and the seabird sanctuary on Kiritimati island. In 2007 a survey found one myna on Betio, which was a serious reduction from the estimated population of 300 in a 2003 survey. Other tasks that will be undertaken as part of the duo's undertaking include re-activating the invasive species management committee, identifying methods for myna control, strengthening biosecurity, raising awareness and training of communities and using other projects to survey remote islands.



Tekimwau from Tarawa:

Photo - Jamie Copsey/Durrell Wildlife Conservation Trust

### **New Caledonia**

Focus on bulbul - Fabrice Brescia, Institu Agronomique Neo-Caledonien

Fabrice from New Caledonia pledged to work on the invasive Red-vented bulbul (*Pycnonotus cafer*) at the Invasive Bird Management Training. The bulbul was a recent introduction, since 1983 possibly as a pet. Currently, it is found mostly in Noumea, although it is expanding up to 30 km beyond Noumea. The bird is closely associated with human settlement, so has a high chance of expanding to outer islands. The bird is consummate consumer of fruit crops, especially red-coloured fruits (tomatoes, lychees, strawberries), as well as papaya, peaches, mandarins, oranges and more. There is also a threat of these birds spreading the seeds of the invasive Miconia tree. The project aims to stop the spread of Bulbul in New Caledonia, through live trapping to reduce damage, and boost biosecurity to prevent further spreading.



Red vented bulbul - an invasive pest species in New Caledonia:

Photo image – JM Garg (Wikipedia)

#### **American Samoa**

ASIST meets

The American Samoa Invasive Species Team held its regular meeting on 19 July, 2012. Some of the highlights from the meeting include surveys of invasive ants, fruit-flies and the Asian Citrus Psyllid by the Department of Agriculture and Land Grant. This highlighted the need for training of locals to recognise the Asian Citrus Psyllid. Aquatic invasive species was also highlighted at the meeting and it was noted that this will be an agenda item in a future ASIST meeting. Biosecurity and legislation for protection of Manu'a was also mentioned as was the removal of the Lopa from Ta'u.



American Samoa schools appreciate the work of ASIST to combat invasive species. Photo – Tavita Togia

### Testing the efficacy of myna trap

Participants from Palau, Samoa and New Zealand agreed to collaborate on a research project to find the best myna trap to be used by the Pacific. The goal of the project is to determine the most efficient trap type for myna bird management. The participants recognise that there remains a lot to be learned on invasive bird management, agreeing that trapping seems to be the most efficient method used so far. The team will investigate two prominent traps – the myna magnet trap (mynamagnet) and a modification of the Australian crow trap. For further information contact – Mark Mitchell (Biosecurity Advisor, Auckland City Council)



Photo – Jamie Copsey/Durrell

## Pohnpei

i-STOP meeting update

The invasive species taskforce of Pohnpei met on 19 July, 2012 to update on the implementation of the i-STOP strategic action plan and other invasive species management activities. The meeting discussed the white-fly biocontrol that is giving good results on most of the farms, but not on all. No report of any False Sakau has been received for well over six months, which is a positive sign of the eradication efforts by the team. Some of the issues raised by the team included concerns over sustainability of activities, given that the Critical Ecosystem Partnership Fund (CEPF) the major funding provider will conclude next year. The taskforce noted marine invasives like the tilapia and catfish as needing to be addressed.

#### Kosrae

Crown of Thorns survey reveals low numbers – Leon Singrah

A survey carried out last month by the Invasive Species Unit under KIRMA, with assistance from local partners found only 17 crown of thorn starfish (COTS) over a four-hour period. A similar survey carried out in 2009 collected 1300 COTS over the four hour period. COTS removed were utilised by farmers for fertilizer. According to the survey team – there is strong support of local partners for this activity. They also noted with concern the depletion of coral cover due to COTS. Further monitoring of this pest species will be carried out.



Bucket of collected crown-of-thorn starfish: Photo - Leon Singrah

# Pacific Invasives Partnership (PIP) – news

# Durrell Wildlife Conservation Trust and Samoan Government host Invasive Birds Training Workshop

Durrell Conservation Trust and the government of Samoa hosted the first Invasive Bird Management Training Workshop in Samoa from July 9-18th, 2012. The training brought together 21 participants from eight island countries - American Samoa, Cook Islands, Fiji, Kiribati, New Caledonia, New Zealand, Palau and Samoa. The workshop was assisted by resource persons from NZ Landcare Research NZ, the Pacific Invasives Initiative, Wildwings Bird Management, UK and SPREP. The workshop focussed on learning the invasive bird management process, developing the action plans, sharing experiences, seeing the practice – and planning ahead. Funding of the training was provided through a grant from the Critical Ecosystem Partnership Fund (CEPF).



One of the myna birds caught during the Invasive Bird Management Training. Photo – Jamie Copsey

# Pacific Invasives Initiative releases latest Pacific Invasives News

The Pacific Invasives Initiative released its June issue of the Pacific Invasive News. The latest edition highlights the Invasive Plant Training, Island Biosecurity Training, Rodent & Cat Training, Economic Analyses Training, Invasive Bird Training and the Roundtable Meeting, plus much more. Feel free to get a copy from Natasha Doherty (n.doherty@auckland.an.nz).

# **Invasive species Opportunities**

## SPC Recruitment - Food Security Technical Officer - Land Resources Division

An opportunity to undertake research on exotic vertebrate risk analysis and invasion pathway modelling at the University of Adelaide under the supervision of Assoc. Professor Phil Cassey. Contact Phil (<a href="mailto:phill.cassey@adelaide.edu.au">phill.cassey@adelaide.edu.au</a>) for further details.

## Junior Environmental Legal Officer

The aim of the Environmental Law Programme of IUCN is to promote an integrated approach to legislation and governance for the protection of the environment, natural resources and biodiversity in all countries in the Pacific. IUCN is keen to mentor and develop in a law graduate from the region, skills and knowledge in environmental and natural resources management law, in the interests of building capacity at regional and national levels for the development of legal frameworks to value and conserve nature, for the effective and equitable governance of nature's use and for nature based solution to global challenges. Read more online – IUCN

# Invasive news global

## Defending biodiversity from alien species - role of trade rules examined

World Trade Organization (WTO) trade rules on food safety and animal and plant health can be used to control environmental damage caused by species crossing borders into new habitats, but international organizations and governments need to work together better to fill in some gaps, a seminar at the WTO on 12-13 July 2012 heard. Read more on the WTO seminar

## Eradicating weed species in NZ poses big challenge

New Zealand has been implementing a weed eradication program for the past 10 years. A recent report on Invasive Plant Science & Management assess the progress of 111 weed eradication programs carried out by New Zealand's Department of Conservation. Only four of these were successful, while 21 have been discontinued and the rest remain an ongoing challenge. Several factors of a successful weed eradication program including preventing further entry, extent of invasion, ease of access to infestations and longevity of the species seedbank. Lessons learned from discontinued eradication programs include incorrectly assessing the extent of infestations and inconsistent visitation of the infested sites.

#### New Zealand banned 13 invasive plants

Propagating, distributing or selling of asparagus fern, drooping sedge, orange cestrum, Japanese walnut, coral pea and monkey's comb will be illegal after they and thirteen other plants were declared under the 2001 National Plant Pest Accord. Read more about the 13 invasive plants.

### **Invasive species publications**

## Scientific articles

Hussner, A. 2012. Alien aquatic plant species in European countries. *Weed Research*. Doi: 10.1111/j.1365-3180.2012.00926.x

Hatcher, M. J., Dick, J. T. A., Dunn, A. M. 2012. Disease emergence and invasions. *Functional Ecology*. doi: 10.1111/j.1365-2435.2012.02031.x

S. Hervías, A. Henriques, N. Oliveira, T. Pipa and H. Cowen, et al. 2012. Studying the effects of multiple invasive mammals on Cory's shearwater nest survival *Online First*  $^{\text{TM}}$ , 5 July 2012 *Biol Invasions* DOI 10.1007/s10530-012-0274-1

Lindgren, C. J. 2012. Biosecurity Policy and the Use of Geospatial Predictive Tools to Address Invasive Plants: Updating the Risk Analysis Toolbox. *Risk Analysis*, 32: 9–15. doi: 10.1111/j.1539-6924.2011.01642.x

Farrah T. Chan, Sarah A. Bailey, Chris J. Wiley and Hugh J. MacIsaac. 2012. Relative risk assessment for ballast-mediated invasions at Canadian Arctic ports. *Biological Invasions Online First*<sup>™</sup>, 13 July 2012

# **Upcoming Events**

August	Event	Participating partner	Notes
6-9	Pacific NBSAP Workshop Review	SPREP	Mainstreaming invasive species; assist with setting national targets on invasive species
10-13	CBD-COP 11 – Pre-COP preparatory meeting for the Pacific (Rotorua, NZ)	SPREP, PII, IUCN-ISSG, Island Conservation	Regional briefing on invasive species for COP 11 negotiations
21-23	Particularly Sensitive Sea Areas and other IMO Tools for Area Specific Management Workshop (Townsville, Australia)	IMO (Tony Talouli)	
31	Hawaii Conservation Conference (Honolulu, Hawaii)	HCA	

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