



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>

Pistia stratiotes Linnaeus



Water Lettuce (Pistia stratiotes) is native to South Africa and has been introduced to many aquatic environments. It grows fast, quickly taking over rivers and lakes. It is invasive in Australia, Tahiti, Guam, Hawaii, New Caledonia and Vanuatu. A popular ornamental plant and its spread is mostly likely through the ornamental industry. The dense root systems can cause water flow to become stagnant providing ideal breeding sites for mosquitoes. Two potential bio-controls for this invasive aquatic weed have been identified – a weevil and a moth. See more on the Pacific

Island Ecosystems at Risk website: http://www.hear.org/pier/species/pistia_stratiotes.htm



2-6 December 2013

Register now!

PILN TEAMS AND COUNTRY UPDATES

Fiji – American iguana surveillance training for Taveuni Communities (by Tuverea Tuamoto, NatureFiji)



Jerry Surumi of Naivivi village and also acting as a Temporary Biosecurity Officer shares to participants some of the impacts of the American iguana

Village headman and temporary biosecurity officers attend the American Iguana surveillance and monitoring training in preparation for another breeding and nesting season. A 2 day training was organized by NatureFiji-MareqetiViti and the Biosecurity Authority of Fiji in Naivivi village, Qamea that focused on monitoring and surveillance of American iguana nesting areas. Since its introduction in 2000, the population of the American iguana was estimated to be over 2500 individuals after the last survey by Rick Van Veen in August 2011. Its numbers continue to grow exponentially and it may take 5 years or longer if eradication is to be successful. Rick Van Veen during his survey recommended that continued awareness to communities and the acquisition and training of a skilled team will be critical to the control and eradication of this invasive alien species.



The American iguana field guide that was produced recently and used during the training



About 30 participants attended the training on the 11th – 12th April and provided participants not only TBOs but Turaga ni Koro's and Mata ni Tikina's an opportunity to undergo further training in monitoring and surveillance of breeding and nesting areas. It was also a forum where they were able to discuss and share observations, changes and impacts that have been occurring in their villages since the occupation of the invasive American iguana.

There were a few recommendations from the training and one which was highlighted the most was the need to strengthen collaboration amongst government agencies, NFMV, BAF and tourist operators to control the spread of the American iguana.

Fiji – State of Birds 2013 Report now available



Fiji's first ever State of Birds report has been prepared by NatureFiji-MareqetiViti with the assistance of the Department of the Environment and local ornithologists. The 44 page report provides an overview of the issues and critical considerations facing Fiji's birds and it emphasizes birds as flagships for other elements of Fiji's biodiversity.

The book is available for sale at the NFMV office for FJD\$15.00 a copy. Discount if purchasing 5 or more copies. For more information please contact Kelera Macedru (kmacedru@naturefiji.org).

Kosrae (story and images by Jason Jack)

Hello to you all,

May activities in Kosrae involved the following invasive targets:

- Giant African Snail;
- Greenhouse whitefly

The Invasive Program under Kosrae Government continues to undertake efforts in controlling the Giant African Snail (GAS) during May by engaging local community groups to collect and destroy the snail. Nine sites out of 18 known GAS infestations on island were given to local groups to hand-collect and burn the snails. More than 37,000 individuals were collected and destroyed by the community groups. The Program is monitoring the sites and there is hope to continue monitoring for the next five months.



One of the sites that was targeted (right) for collecting of Giant African Snail. The snail were destroyed by burning

Whitefly continues to be a problem since its introduction on island. Current efforts include awareness, control, and soliciting of financial and technical assistance from partners and international organizations. The Government Program continues to provide extension services to local farmers per requests during May. More than 400 eggplants, over 100 sakau plants, over 50 peppers have been treated with the soapy solution as means of controlling this pest population.

The Invasive Species Coordinator continues to undertake awareness activities to the general public, which includes school visits, workshops and radio interviews.

Current management effort to control the whitefly is being employed including the use of two bio-control agents: *Delphaspis oculata* and *Delphaspis bicolor*. Our Program had given enormous time to do research and assessment re these agents during the past few months, with assistance from the SPC-FSM Office. We are confident to use the agents on Kosrae.



Women’s group participating at night in collecting Giant African Snails

We continue to rely on everyone's support and assistance, not only for this target but to other aspects regarding invasive species. Please give us a shout when you can.

Palau – Ant identification training held (Story and image by Joel Mile)



Got ants? Do you know what kind of ants they are? Answering this question has been a big challenge for Quarantine officers and others working to protect Palau from invasive ants. In response to this challenge, two instructors, Michelle Montgomery and Kanoe Malani, from the Hawaii Ant Laboratory visited Palau last week to conduct training in identification of invasive ants. Participants in the training were from the Bureau of Agriculture (Quarantine, Forestry, and Invasive Species staff), PCC-CRE, and Customs. They used dissecting microscopes to get a close look at the identifying features of ants, and used a guide prepared by the

Hawaii Ant Lab to determine the species of ants. Funding for the training was provided by the US Forest Service. The training was organized by the Bureau of Agriculture.

Palau is fortunate not to have two of the worst invasive ants in the world: the Red Imported Fire Ant (RIFA) and the Little Fire Ant (LFA). LFA is now found in Hawaii and Guam, so Quarantine is on the alert for this ant. The Little Fire Ant is less than 1/8 inch long, and is often transported in potted plants from infested nurseries and/or gardens. The public is requested to please obey all Quarantine laws and regulations to prevent the introduction of these and other invasive species into Palau.

Pohnpei (story and image provided by Bejay Obispo)



The Conservation Society of Pohnpei and its partner agencies wish to share the implementation based on their work of invasive species. As this ongoing project still happening CSP and its partner agencies conducted a few community awareness programs that enlightened the people to understand the impacts of invasive species and its threats to our island environment.

With all the works and awareness programs that were done across the island of Pohnpei, invasive species removal from critical habitats and the

False Sakau, *Piper auritum* being targeted for eradication

implementation of community based bio-security programs were among the positive biodiversity conservation results achieved here in Pohnpei. Whatever the reason, these non-native species get into an ecosystem with no natural

predators or means to control their population, in fact assistance from local communities led out a big positive result. Local communities started putting their efforts and interest in control and management of invasive species by reporting new sightings and by volunteering doing the ground work of eradication. Control and eradication are still on the way to maintain the following target species; *Piper auritum*, *Antigonon leptopus*, *Coccina grandis*, *Clerodendrum chinense*, *Mikania micrantha*, *schefflera actinophylla*, *Thunbergia grandiflora* and *Piper lolot*.

Overall of known target sites

TLA	Species	Number of known sites	Number of removed sites	Number of active sites	Percentage of sites removed
FSK	False sakau <i>Piper auritum</i>	126	119	7	94%
COL	Chain of love <i>Antigonon leptopus</i>	33	31	2	94%
MIK	Mile a minute <i>Mikania micrantha</i>	22	14	8	67%
IVG	Ivy-gourd <i>Coccina grandis</i>	15	13	2	87%
OCT	Octopus tree <i>Schefflera actinophylla</i>	33	33	0	100%
PTV	Purple trumpet <i>Thunbergia grandiflora</i>	9	8	1	89%
HNR	Honolulu rose <i>Clerodendrum chinense</i>	7	7	0	0%
PPL	<i>Piper lolot</i>	3	0	3	0%

Hawaii

Maui Invasive Species Council meeting – 24 May, 2013

The Maui Invasive Species Committee supports and promotes a place-based environmental education / science curriculum called “Ho’ike o Haleakala.” We are in the process of developing a study module focused entirely on Invasive Species. Some of the current work on this module can be found online at:

<http://www.hoikecurriculum.org/module/invasive-species/>

Our curriculum developer is looking for information to use in a lesson called "Prevention Pays." Specifically she would like data that demonstrate the difference in cost/effort to prevent an invasive species from becoming established as compared to managing the species once it has naturalized. Any information would be appreciated.

Many thanks,

Teya Penniman

Hawaii Invasive Species Council meet – 4 June, 2013

Aloha all,

The Hawaii Invasive Species Council will meet on June 4, 1:00 PM, in Rm 325 of the Hawaii State Capitol. Please find the agenda for this meeting, as well as draft minutes from our January 8 meeting, at <http://dlnr.hawaii.gov/hisc/meetings/>

Also, please note the following dates relating to HISC FY14 funding (these are not formal Council meetings):

- June 5: FY14 funding proposals due by email to Joshua.P.Atwood@hawaii.gov (see proposal guidelines at <http://dlnr.hawaii.gov/hisc/projects/fy14/>)
- June 18, 9am-3pm, Rm 322A Kalanimoku Building, 1151 Punchbowl St, Honolulu: Informal proposal review meeting for applicants & interested parties
- June 25, 9am-12pm, Rm 322A Kalanimoku Building: Resources Working Group Meeting

A formal HISC council meeting will be held on July 1, 9am-12pm, in Rm 325 of the Hawaii State Capitol, to review the recommended FY14 HISC budget. A notice will be sent out with a full agenda prior to this meeting, per Sunshine Law.

Aloha, Josh

I am excited to publically announce our new website for the Hawaii Invasive Species Council, located at <http://hisc.hawaii.gov> . The new website moves the HISC's online presence under the State of Hawaii network. The site is designed with a focus on products and outcome of 10 years of work by the HISC and its partners, and on providing information to the public. See below for a joint press release from DLNR and HDOA via the Governor's office discussing the new website and its reflection of some of the great partner accomplishments funded by the HISC in recent years.

Some of the features on the new site include:

- An archive of HISC resolutions (we have 11 to date, coordinating the State's position on a number of invasive species issues)
- All available HISC-funded research reports archived back to 2005, organized by species / topic
- Information on HISC strategies, plans and funding processes
- Information on all projects funded by the HISC throughout its history, organized by fiscal year, and with final reports where available
- A News tab for current events related to Council activities
- Information on invasive species, pest reporting, and individual species pages moved from our old website

Our old website, hawaiiinvasivespecies.org/hisc/, will remain visible for now while we get a suitable redirect solution in place. In the meantime, please peruse our new site, look through the archives, and let me know if you have any comments or edits.

Solomon Islands - Fighting Giant African Snails through drama (source: Agrikalsa Nius)



Humour, storytelling and acting are being used to spread awareness and knowledge about Giant African Snails amongst communities in Honiara and Guadalcanal. The Ministry of Agriculture and Livestock has engaged the Solomon Islands Development Trust (SIDT) drama group to visit communities and promote awareness on Giant African Snails and pass on knowledge on how to deal with the pest. Since 2006, the incidents of Giant African Snails infestation have continued to increase throughout Honiara and its outskirts. According to Quarantine officials Giant African Snails were introduced to the country through used logging equipment. Since then the invasive species has destroyed countless number of gardens around the greater Honiara area and has affected farmers. Quarantine Information Officer, Leon Boso, said that drama has been engaged as part of the fight against Giant African Snails because of its effectiveness in conveying important messages. "Drama is good as it is entertaining yet educational. It can hold the attention of both the young and old and at the same time pass on vital information." The drama covers the history of the spread of Giant African Snails and it highlights what communities can do to fight the pest in their own areas. MAL Permanent Secretary, Frank Wickham, says the drama will add a new dimension to the current Giant African Snails work being done by Quarantine.

PACIFIC INVASIVES PARTNERSHIP (PIP) – NEWS

Message from Grahame Jackson (PestNet) on behalf of Professor Geoff Norton

Dear Members

I know these days we get all kinds of requests to give our opinions on this or that, to fill in forms, to give feedback, etc etc. And I know how time consuming this is. But this request is very important!

We have got funds from ACIAR, the Australian Centre for International Agricultural Research for a PestNet evaluation.

I know that many of you have helped PestNet over the months and years, and we are very grateful. I know too that many have taken advantage of PestNet's services, and we hope they have been of use. But really we have no idea if we have been of use or not!

So we want some evidence that PestNet is doing the right thing and ideas from you on how we can improve.

The evaluation is being done by Geoff Norton - details below. Geoff has asked me to put out this email, to introduce him, and to ask for your help.

Very briefly, the terms of reference of the PestNet evaluation include:

- Assessing the impact and value of PestNet to users
- How the current services provided by PestNet might be improved, and
- What opportunities and constraints there might be for the future of PestNet

Since it is not possible to visit the many users of PestNet in different parts of the world, Geoff is relying on emails, Skype and other forms of communication to source information on the above issues. He will be contacting individuals associated with the operation of PestNet later. However, at this initial stage of the evaluation, he would be grateful for any feedback you can provide regarding PestNet activities, particularly any comments on the three issues listed above.

Please email your comments to Geoff at G.Norton@uq.edu.au.

Regards, Grahame Jackson, Chair PestNet

Sent on behalf of: Professor Geoff Norton

QAAFI (Hartley Teakle Building)
The University of Queensland
St Lucia, Queensland, 4072
AUSTRALIA

Durrell – seeking comments on post-graduate course on invasive species management (from Jamie Copsey)

Dear All,

Durrell Conservation Academy (part of Durrell Wildlife Conservation Trust) is considering developing a post-graduate level course in natural resource and invasive species management and would very much value your feedback as to whether or not you think such a development is a good idea. We're considering running it partly or perhaps fully on-line to enable invasive species managers working in isolated locations to be able to participate in the training, as well as enabling the best invasive species experts in the world to share their experience and skills with these people. We'd really value your time in going to the link below and filling in a short questionnaire. If you'd like to know the results or would be interested in participating in this development please let me know (Jamie.copsey@durrell.org).

Thanks for your time

Jamie Copsey,

Head, Learning and Development

Durrell Wildlife Conservation Trust

<https://www.surveymonkey.com/s/R9GBGNS>

SPREP

SPREP recently signed an Agreement with GIZ for a 5-year project on management of marine and coastal biodiversity in Pacific Island States and Atolls. This will support a range of marine and coastal initiatives in Fiji, Vanuatu, Solomon Islands, Kiribati and the Cook Islands. This project will be implemented by GIZ in cooperation with SPREP and IUCN.

PIP eyes the next Pacific Island Forum Leaders meeting

After the successful campaign to bring the attention of Pacific Island Prime Ministers, Presidents, Governors and other leaders to the adverse impacts of invasive species at the 42nd Forum Leaders Meeting held in the Cook Islands, Pacific Invasives Partnership (PIP) members are now focusing on the 43rd Forum Leaders Meeting in the Marshall Islands later this year. A number of activities are being planned to highlight progress made by PIP and country teams, especially working closely with the Micronesia Regional Invasive Species Council.

IUCN-ISSG

With unprecedented species declines and more than 20,000 of the species assessed on The IUCN Red List threatened with extinction, IUCN and other organizations come together to support the achievement of a global biodiversity target to prevent further species loss.

The partnership – Friends of Target 12 – will guide countries in their efforts to prevent further extinctions of threatened species and improve the conservation status of those disappearing most rapidly. This will help them achieve the so-called ‘Target 12’ – one of 20 ‘Aichi Biodiversity Targets’ adopted under the Convention on Biological Diversity (CBD) in Japan in 2010.

About Friends of Target 12

The purpose of this partnership is to support Government Parties to the CBD and others to achieve Aichi biodiversity Target 12 by providing practical guidance and raising awareness of initiatives and programmes that contribute to the implementation of the activities needed to bring about the recovery of threatened species and stem the tide of species’ extinctions.

Some Friends of Target 12 partners have already made specific commitments as part of the initiative and more are soon to be announced...

...Out of 65,518 species currently assessed by The IUCN Red List of Threatened Species™, 1,173 are Extinct or Possibly Extinct and 20,219 are threatened.

<http://www.issg.org/>

<http://www.iucn.org/?13036/From-words-to-action--key-organizations-team-up-to-stop-the-extinction-crisis>

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 from – 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.

1) 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/>

Some of the vacancies and tenders include: Case Study on Change Management at SPREP (closing date: 17 June, 2013).

Save Our Species – Call for Proposal

The Third SOS – Save Our Species Call for Proposal for Threatened Species Grants is now open until 17:30 (Central European Time) on 15 July 2013.

Those eligible are welcome to apply for an SOS grant for one of the following Strategic Directions:

- Threatened cycads and conifers
- Threatened sharks and rays
- Threatened Central and Western African vertebrates

SOS - Save Our Species is a joint initiative of IUCN, the Global Environment Facility and the World Bank supported by the Fonds français pour l'environnement mondial (FFEM) and Fondation Segré. Its objective is to ensure the long-term survival of threatened species and their habitats. If you are interested in obtaining more information and applying for a SOS grant, please click on to the website <http://sospecies.us6.list-manage1.com/track/click?u=26992f6c7995b36cd3b432382&id=9bc1578b0f&e=8ed35d0c9d> to learn more and download the relevant documents including the detailed Call for Proposals and Instructions for Applicants.

INVASIVE NEWS GLOBAL






Australia invasive species council appoints new CEO

The Invasive Species Council has announced the appointment of Andre Cox as its new CEO. Andrew served as President of the Invasive Species Council from 2011 where he helped strengthen the organisation's strategic approach to its work. [Read more](#)



Indian mynas not wanted in Tasmania

Along eastern mainland Australia, Indian mynas have become a major urban nuisance. They have displaced many native species, are a human health risk, and adversely impact on biodiversity. They are also increasingly causing damage on community gardens, fruit crops and feed on grain and stock food. [Read more](#)

 <p>Image by: H. Schmidtberg</p>	<p>She's not so lady after all!</p> <p>German researchers have discovered the biological keys to the success of an invasive species, wreaking havoc across Europe and the US. The Asian ladybird was originally brought in to control aphids in greenhouses. But it has escaped and is increasing uncontrollably across Europe, wiping out native species. The alien is winning, say scientists, because its body fluid contains a parasite toxic to other insects. Read more in <i>Journal Science</i>.</p>
	<p>Tropical lizards not so much in the climate change hot seat!</p> <p>A new Dartmouth College study finds human-caused climate change may have little impact on many species of tropical lizards, contradicting a host of recent studies that predict their widespread extinction in a rapidly warming planet. The findings appear in the journal <i>Global Change Biology</i>. Most predictions that tropical cold-blooded animals, especially forest lizards, will be hard hit by climate change are based on global-scale measurements of environmental temperatures, which miss much of the fine-scale variation in temperature that individual animals experience on the ground, said the article's lead author, Michael Logan, a Ph.D. student in ecology and evolutionary biology.</p>
	<p>Invasive species' away field not necessarily an advantage</p> <p>For decades, ecologists have assumed the worst invasive species -- such as brown tree snakes and kudzu -- have an "away-field advantage." They succeed because they do better in their new territories than they do at home. A new study led by the Smithsonian Environmental Research Centre reveals that this fundamental assumption is not nearly as common as people might think. <u>Source: Smithsonian institution.</u></p>

INVASIVE SPECIES PUBLICATIONS

Grarock, K., Tidemann, C. R., Wood, J. T. and Lindenmayer, D. B. (2013), Are invasive species drivers of native species decline or passengers of habitat modification? A case study of the impact of the common myna (*Acridotheres tristis*) on Australian bird species. *Austral Ecology*. doi: 10.1111/aec.12049

The risk of marine bioinvasion caused by global shipping. H. Seebens, M. T. Gastner, B. Blasius. Article first published online: 24 APR 2013 DOI: 10.1111/ele.12111 Early View

Protect. New Zealand Biosecurity Institute. Autumn 2013. ISSN 1175-043X.

Cock, M.J.W.; Burris, D.H. (2013) Neotropical palm-inflorescence feeding moths (Lepidoptera: Batrachedridae, Blastobasidae, Cosmopterigidae, Gelechiidae, Pyralidae, Tineidae): a review of the literature and new records from Trinidad, West Indies *Journal of Research on the Lepidoptera* 46, 1-21.

SPAW (Specially Protected Areas and Wildlife – Newsletter No. 9 – May 2013. Articles: Launching of a mentoring programme by the CaMPAM Network and Forum | Regional Strategy for the control and mitigation of the invasive lionfish in the wider Caribbean region | and more. *Contact PILN Coordinator for a copy.*

Glen, A.S., Atkinson, R., Campbell, K.J., Hagen, E. 2013. Eradicating multiple invasive species on inhabited islands: the next big step in island restoration? ...*Biol Invasions* DOI 10.1007/s10530-013-0495-y

Young, L.C., VanderWerf, E.A., Lohr, M.T. 2013. Multi-species predator eradication within a predator-proof fence at Ka'ena Point, Hawai'i. *Biol Invasions* DOI 10.1007/s10530-013-0479-y

Towns, D.R., West, C.J., Broome, K.G. 2013. Purposes, outcomes and challenges of eradicating invasive mammals from New Zealand islands: an historical perspective. *Wildlife Research*. 40(2).

Critical Ecosystem Partnership Fund – E-News May 2013. Issues include: Partnership key to biodiversity conservation in the Pacific Islands | Protecting petrels: showcasing project results in Fiji | Rapa Nui plants: an illustrated guide to Easter Island vegetation | Conservation initiatives result in amazing 2012 breeding season for the Tahiti monarch.

Ecosystem-based adaptation and climate change vulnerability in Choiseul Province, Solomon Islands – available online from SPREP’s website.

Anderson, K. L. and B. C. Congdon (2013). “Population genetics suggest that multiple invasion processes need to be addressed in the management plan of a plant disease vector.” *Evolutionary Applications* 6(4): 660-672.

Harmful Algae News No 46 is now available at: <http://www.e-pages.dk/ku/709/>

SPREP’s – Pacific WasteLine Newsletter is now out. Contact Esther Richards (estherr@sprep.org)

The Micronesia Challenge Newsletter is available: Vol. 19. June 2013.

Agrikalsa Nius (Solomon Islands Ministry of Agriculture & Livestock Monthly Newsletter) April 2013 edition is out. Content include: Newcastle Disease Watch | Fighting Giant African Snail through Drama.

UPCOMING EVENTS

2013	Event	Participating Partner
July		
4-5th July	Biodiversity and Integrated Pest Management – Working Together for a Sustainable Future (Manado, North Sulawesi, Indonesia)	
8-12 July	Climate Change and Disaster Risk Management meeting, Nadi, Fiji	SPREP/SPC
8-12 July	12th Pacific Science – Inter-Congress. University of the South Pacific, Suva, Fiji.	www.psi2013.usp.ac.fj
16-18 July	21st Annual Hawaii Conservation Conference, Honolulu, Hawaii Islands, USA.	
31 July – 2 Aug	NZ Biosecurity Institute National Education and Technology Seminar (NETS). Greymouth, NZ.	
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	
20-22 August	8 th International Conference on marine bioinvasions. University of British Columbia, Vancouver, BC, Canada.	www.icmb.info/

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).