

2014 SUMMARY OF ACTIVITIES

This report is a companion piece to the Island Reach (IR) introductory video, <https://www.youtube.com/watch?v=sOH2OpfKDBE> and summarizes the range and variety of activities IR has undertaken to meet its mission in Vanuatu during the 2014 fieldwork season. IR is designed to operate in partnership, offering support to existing conservation projects in Vanuatu. We are indebted to the villages, groups and individuals mentioned for their support, welcome and guidance.

Port Vila, Efate, May-June

Orientation; meetings with government, civil, and private sector stakeholders; intensive Bislama language training with Teri Firiam.

350 Vanuatu, Pacific Climate Warriors, May & September: Produced 2 videos documenting 350 Pacific's climate action campaign in Vanuatu:

- 350 Vanuatu Canoe Project: http://www.youtube.com/watch?v=vqixK_V1DS8
- Ta Reo, The Voice of Vanuatu: 350 Pacific Climate Warriors (short, 4:30) <http://www.youtube.com/watch?v=QS193BRhDIY>
- --The Voice of Vanuatu, 350 Climate Warriors (full version 9:06)
- <http://www.youtube.com/watch?v=-NhUTdu2KVs>

Buninga Water Project, Live & Learn, June

Assisted with implementation of water security project on the remote and hard-to-access island of Buninga, Shepherd Group: technical design and sourcing of materials, transportation of Live & Learn personnel and 11 x 1100 liter water tanks and gutter collection systems (project material weight estimated @ 4tons); installation of collection systems with community; and video documentation for Live & Learn and project funders: <http://www.youtube.com/watch?v=ZbzwkZZFXNU>

Partnership with Sarah Graham, M.Sc Marine Ecology, Marine Biodiversity Project Officer Vanuatu Department of Tourism, Shefa Province Office, July

Ms. Graham joined RV Llyr for a 4 week expedition (free of charge) focused on Crown of Thorns Starfish (COT) surveying, community awareness, and mitigation in the central and Northern islands and educational coral gardens on Emae Island & Tanoliu, Efate.

Loru Forest Carbon Project Film, August: Filmed and produced a documentary in Bislama for Live & Learn and project funder the European Union on the Community Conservation Area & REDD+ project at the Loru Community Conservation Area, Espiritu Santo Island.

<http://www.youtube.com/watch?v=qe2ag9tH0PU>

Crown of Thorns Starfish (Acanthaster Planci) Mitigation, March-September

– In consultation from the US with Peter Whitelaw in Vanuatu, researched and acquired 5 low-cost NJ Philips 15ml Dial-a-Dose Injection Guns with added 6' stainless-steel needle extenders and 5 liter flexi packs to be trialed for COT mitigation in Vanuatu. These injection gun units cost 70% less than available equipment currently marketed internationally for COT management. They are easy to use at both dive and snorkel depths and can be used with readily available, low cost, natural toxins. As a result of IR's work, numerous stakeholders across government, civil, and private sectors are now adopting this equipment.

--Training on COT culling methods in Havannah Harbor, Efate, and COT mitigation literature review with Peter Whitelaw, Secretary of the Vanuatu Scuba Operator's Association and Captain of SV Goldenwing.

– Produced 60 Crown of Thorn Starfish (COT) culling kits, (hook/bag/glove) in collaboration with Peter Whitelaw. Total material cost of kits: US\$300. To date, 45 kits distributed, with training in their use, to community members and Vanua Tai environmental monitors throughout Vanuatu.

– Educational presentations on coral reefs ecology, including (where relevant) Crown of Thorns behavior and management:

- Emae, Marae Community Center
- Emae, Primary School
- Lamén Bay primary school
- Lutes church, Maskelyne Islands.
- Pelonk Community Center, Maskelyne Islands
- Bwatnapni Primary/Secondary school, Pentecost
- Ranputor Community Center, Pentecost
- Pangi Primary School, Pentecost

– Worked with Marae village members and conservation area managers to build an educational coral garden.

– COT Culling Activities:

* Emae Island, Shefa Province & Sangalai, Maskelyne Islands, Malampa Province:

Teamed up with village-based environmental monitors, conservation area chairmen, and community members to survey and cull COTs. Produced short videos for the communities on their collaborative efforts.

* Crab Bay Conservation Area, Malekula Island:

Conducted field trials on COT injection using the injection guns IR brought from the US employing various natural acids in association with the Vanuatu Dept. of Fisheries. Five day campaign from RV Llyr, including surveys, 32 tank dives, 5 snorkel sorties, 8 georeferenced video transects, and 3 parallel 50 meter replicate injection transects (this last, specifically on behalf of fisheries). COT mitigation by the IR team over this period was highly successful, resulting in 3200 COTs culled over 29,000 square meters of reef. A report of activities and results was produced for Fisheries.

Additional COT culling sites:

- Lelepa Island, Havannah Harbor, Efate, Shefa Province
- Cook Reef x 2 sites

- Lamén Bay, Epi Island
- Turtle Island, Aroré Island, Sanma Province
- Ratua Resort, Aoré Island

Total Cots culled via injection Gun or hook/bag: 4,300

Promoting Awareness with Visiting Yacht Cruisers: In collaboration with Eric & Ann Simmons, NZAid VSA Volunteers, Vanuatu Tourism Office, generated daily SSB radio net announcements for Vanuatu cruising yachts promoting COT data collection for the Dept. of Fisheries and VSOA as well as culling participation.

SPC-GIZ Coping with Climate Change in the Pacific Islands Region & National Advisory Board on Climate Change May-Sept

IR disseminated print and video educational resources for Dr. Christopher Bartlett to over a dozen communities throughout Vanuatu. Integrated coral reef ecology and COT mitigation with climate change awareness and El Niño/La Niña weather impacts in school and community multimedia presentations. Video documentation of the Nguna-Pele MPA Coral Gardening Project and donation of 5 youth snorkel kits from sponsor Aqualung USA.

Coral Gardening Project, Sept.: Tanoliu Primary School, with Wan Smolbag's Vanua Tai director Donald James, Peace Corp volunteer Robert Lee (North Efate): Established 3 mobile, educational coral garden frames, donated by IR along with 5 snorkel packs from sponsor Aqualung USA. The frames were assembled, stocked with coral fragments and sited within the Tanoliu taboo conservation reef with Tanoliu primary students, alongside their giant clam project. Ongoing project development will be led by Vanua Tai director Donald James and Robert Lee.

AquaLung USA:

Distributed 31 snorkel kits, donated to IR by Aqualung USA, to schools and Wan Smolbag Vanua-Tai environmental monitors throughout the islands.

Completed 29 GoPro HD Geo-Referenced Coral Reef Benthic Substrate Video Transects and 2 Reefcheck surveys, filling in core data gaps for government and private sector

concerns on reef health and COT distribution in Vanuatu

60 Kilos general medical supplies distributed at the request of Michael Schugg,
Director, Vanuatu Society of Disabled People to:

Marae Village medical outpost, Emae Island

Emae Island Primary School Clinic

Lutes clinic, Maskelyne Islands

Lamen Bay clinic, Epi Island

- Lamap Medical Center, Malakula
 - Vao Island clinic, Malakula Island
- Bwatnapni medical Clinic, Pentecost Island
- Ranputor medical outpost, Pentecost Island
- Ranon medical outpost, Ambrym Island

Additional training, research, and volunteerism:

- RV Llyr First Mate and EMT Connor Steele-McCutchen & 2nd Mate Rowan Steele-McCutchen advance dive training to PADI Rescue Divers in Luganville, Santo.
- Site visit with Pierro Bianchessi, Director of the Venui Vanilla Company, Espirito Santo , investigating permaculture farming, marketing, and conservation challenges in Vanuatu.
- Connor Steele-McCutchen volunteered with Promedical Ambulance and the Port Vila Hospital.

Summary of Videos published or in current production onboard RV Llyr:

- Island Reach introductory video
<https://www.youtube.com/watch?v=sOH2OpfKDBE>

- Buninga Water Security Project, video documentation for Live & Learn Vanuatu:
<http://www.youtube.com/watch?v=ZbzwkZZFXNU>
- Loru Forest Carbon Project, video documentation for Live & Learn Vanuatu:
<https://www.youtube.com/watch?v=qe2ag9tH0PU>
- Crown of Thorn Starfish in Vanuatu (in production)
- IR ongoing expedition and capacity-building activities including food security and climate change adaptation (in production)
- IR transit to Vanuatu video:
<https://www.youtube.com/watch?v=fzkGX7ljVg0>
- Coral Gardening for ecotourism in the Nguna-Pele MPA (in production)
- Coral Gardening for education at the Tanoliu Primary school (in production)
- Ta Reo, The Voice of Vanuatu: 350 Pacific Climate Warriors (short, 4:30)
<http://www.youtube.com/watch?v=QS193BRhDIY>
- The Voice of Vanuatu, 350 Climate Warriors (full version 9:06)
<http://www.youtube.com/watch?v=-NhUTdu2KVs>
- 350 Vanuatu, Pacific Climate Warriors
https://www.youtube.com/watch?v=vqixK_V1DS8

2014 - Our first year of actions in Vanuatu, best captured in this video:

[Island Reach - Vanuatu 2014](#)