## **Project Update: November 2014**

During November and December 2013 and May and June 2014, 60 sites throughout the



Bocas del Toro Archipelago was explored to assess lionfish abundance and choose appropriate sampling sites. We used an intensive search method that allowed us to cover a large reef area during 15 minutes. Those sites included fringing coral reefs, patch reefs, mangrove islands, rocky reefs, seagrass beds in and out the Bastimentos Marine Park. It was a big surprise to find none of these would encompass the characteristics needed for the field experiment proposed (e.g. enough abundance to provide replicates for removal experiment). Nevertheless, we were able to find one single group of isolated small Islands (a 2 hour boat ride) with a virtually untouched lionfish population. Its isolation raised a question: Is it possible that removals by locals are being successful to control lionfish? To respond that question we then were able to identify

several parameters on our 60 sites concerning predictability of lionfish encounters (habitat quality, fishing and diving activities, wave exposure, distance to coast). We found interesting results yet to be published on a peer-review journal. Another research idea to be held on the islands was then proposed and sources of fund are being sought for that, as logistics cost will increase considerably.

We were also able to conduct in May 2014 interviews with local restaurants in order to assess their willingness to include lionfish on their menu. Sounds most like it, but we need to work around bringing awareness to the community. At least one restaurant currently serves lionfish on a regular basis and is interested in promoting to other restaurants to do the



same (should we try a cook-out with them?). Another one is willing to test it out and invited



planned with them in the near future.

us to collaborate during that period bringing some outreach content. We created a logo for our campaign 'Lionfish Patrol', t-shirts are being produced o be used on our field research and outreach activities, as much as stickers to be distributed to the local community and tourists. We contact local fishers (mainly NGOBE indigenous), because they are the main group fishing on the area and very open to provide lionfish to restaurants. Further work will be

Other funders joined us providing material, such pole spears and other material for derbies, a projector and a gopro camera to outreach and record of activities, worth US\$1400 (IDEA

WILD). Percy Sladen Memorial Fund also provided us with an amount of £700 for field research.

We established new alliances in Panama, such ARAP the national agency responsible for aquatic resources (<a href="http://www.arap.gob.pa/">http://www.arap.gob.pa/</a>). ARAP has interest in collaborating with us on the lionfish management plan as it is on their agenda and any additional help will be welcomed. CREHO (<a href="http://www.creho.org/">http://www.creho.org/</a>), the Panamanian centre for the RAMSAR convention on wetlands convention also wants to established a partnership though a MOU that is currently being evaluated by TCC board of directors. We will unite our forces to plan future projects on coral reefs and mangroves, as much as lionfish initiatives

We've been invited to start working the KUNA indigenous group concerning lionfish invasion and other marine issues, as well on land based issues. They rely mostly on fisheries and agriculture and therefore, this themes are of main interest to them. We scheduled a meeting for September 2014.

Next steps below:

## September 2014

- Meeting with the Kuna to address current issues in the community where our efforts can be directed to.
- Along with our coral reef ecology field course (<a href="http://www.tropicalcc.org/coral-reef-ecology/">http://www.tropicalcc.org/coral-reef-ecology/</a>), we will engage students to participate on the project in the monitoring by conducting visual census, they will form a group of disseminators of the project for the local community and tourists, such participating as volunteers on outreach events. They will wear a t-shirt were the funders' logo will be presented, as Rufford is the major funder it has a special spot.

## October 2014

 A promotional video with footage made from activities held in May 2014 is coming out.

## November 2014

- GCFI (Gulf and Caribbean Fisheries Institute) meeting participation by the Lais Chaves and Carlos Ormond, where partial fund from Rufford was redirected to registration costs.
- Potential submission of a manuscript to a peer-reviewed journal.