

Hola compañeros!

January 2015

This story will end with me, as improbable as it may seem, driving a car in rush hour traffic in Los Angeles. But we need some context before we get there, so let's go back to my arrival...

Recommended listening: [Prohibido Olvidar](#) by Ruben Blades.

So I'm in the Panama City airport waiting to pass thru immigration, which is divided into two lines: Visitors (Visitantes) and Panamanians/Residents (Panameños/Residentes). Looking at the people in the two lines, you'd have a hard time telling which is which. Why? Because the visitors line is populated by many latinos, and the citizen/resident line has a lot of gringos, especially retirees. An announcement was repeating (en Español), telling people in the Panameños/ Residentes line to proceed forward, but there was an old gringo couple standing confused at the front of this line. People were saying to them "Señores, Panameños/Residentes pueden ir..." but they remained confused and frozen in place. These Panamanian permanent residents spoke basically no Spanish; non-Panamanians understood the airport instructions far better than they did.

Then, the first thing you see entering the public part of the airport is the Flying Dog hot dog stand.

Bienvenidos to the strange netherworld that is Panamá!



far right: Panama City bus station food court, with many familiar fast food restaurants...

The history of Panamá –and the US influence there – isn't a pretty one. By some counts, the US intervened militarily in Panamá over 15 times since the 19th century. Although the Monroe Doctrine can be considered indirectly responsible for the decades-long US policy that all of Latin America was "our backyard", Panamá is surely the most extreme case. The reason, of course, was the strategic importance first of the trans-Panamá railway, and later the Panamá canal for movement of goods, military troops, and so on, between the Atlantic and Pacific without having to go around Tierra del Fuego.

The oversized influence of the US contributed to an intensely oligarchical system of government for virtually the entirety of modern Panamanian history, with a massive inequity between what used to be the "Canal Zone" –claimed US territory running down both sides of and including the canal, dividing the country in half– and everywhere else. Panamanian presidents for over 100 years mainly

came from one of four families, and the US relationship with Manuel Noriega in particular is in some ways a microcosm of US-Panamá relations. He started as a CIA asset, and the US turned a blind eye to his dictatorial rise to power. When he finally and overtly stepped out of line, the US in 1989 invaded in terrifying fashion and swept him from power. It took several days to capture Noriega, but not before much of his neighborhood of Rio Hato and the Chorillo barrio of Panama City (among other places) had been destroyed. To this day, the total number of civilians who died in (are you ready for this particularly Orwellian moniker?) "Operation Just Cause" is unknown and the estimates range over more than an order of magnitude.



top and middle left: Panama City's Casco Viejo barrio at night. *middle right:* the Panamá Canal Railway, the first major US interest in Panama, is now a once-a-day tourist train. *lower left:* huge mountain of dirt from the excavation of the third set of locks currently being dug and installed in the canal, that will allow the world's largest ships to pass. *lower right:* a container ship having just passed the locks.

Noriega was extradited to the US and brought up and ultimately convicted on charges of drug trafficking and money laundering. Not mentioned at the trial were his close relationship with the US and CIA (that was considered classified), and the charges for cocaine possession were dropped after it was revealed that it was tamales and not 50 pounds of cocaine found in his house by US soldiers.

In some ways, Panamá to this day has not fully come to terms with this troubled history, and as I mentioned, there still has not been a true accounting of the 1989 US invasion and its impacts. The present government of Varela might be the first example of a government that truly wants to have a full truth and reconciliation process about the past, and he seems to be mostly free of the long history of oligarchical ties that have characterized Panamá's political history for over a century.

...and the culture as well. In some ways, Panamá is the most US-like of all of the Latin American countries I've visited -with familiar fast food restaurants dotting the landscape, a fair amount of English spoken, and a currency that to this day is pegged to the US dollar (and in fact US dollars and coins can be spent fully interchangeably with the Panamanian balboa).

With all of this US influence casting a bit of shadow over the place (especially the capital), I was determined to find the Panamanian sunshine as it were. So I did what I usually do: hop on a bus, and if I come to a fork where my guidebook says there are more places of touristic interest to the right, I go to the left.

Recommended listening: [Cameleón](#) by Ruben Blades.



upper left: bus stop with bug's traveling kit (hot sauce, to-go ware) with the best of limited Panamanian veg food: arepa-like tortillas, con huevos y passion fruit juice. upper middle: \$1 huge watermelons. lower left: Panama City in the morning. upper & lower right: on the way into the highlands. Panamá brand is the best of the std beers.

Which led me to the highlands near the Costa Rica border, and a small agricultural town called Cerro Punta, 2000 meters above sea level, and point of entry to the cross-border Parque Internacional La Amistad ('friendship'). At over 400,000 hectares, La Amistad is the largest nature reserve in all of Central America. It's a huge rainforest that is almost impossible to access (at least on the Panamá side) from anywhere except above Cerro Punta.



As in much of Panamá, local transit was by shared taxi, so I stepped out into the road, flagged down a taxi and soon our car was full and heading up the mountainside. This is the breadbasket of Panamá –because so much of the rest of the country is incredibly dry– and practically every steep hillside heading up to the park is intensively farmed. We arrived near the gate, the driver told me that I needed to walk a km further up to arrive at the park headquarters, and he sped off.



As I approached the gate, puzzling a bit as to why it was shut, the sky opened up into a massive downpour. I ducked for cover, and saw that there was a guy sitting in a truck parked near the gate. The guy, Alejandro, kindly motioned me inside, and told me that because many trails in the park were washed out, it was deemed too dangerous for the public and was closed until further notice.

So let me ask you: knowing me, what do you think I did?

- a. I said, "too bad" and caught a ride back down the hill
or
- b. I tried to figure out some way to get into the park anyway?

Correct! Alejandro was waiting to be let in the gate to make a delivery, so I waited with him, the caretaker/ranger came down, and while they were arranging the delivery, I remembered back to a similar situation in Manaus Brasil where I got access to the restricted part of the primary rain forest by introducing myself (which I never otherwise do) as "Doctor Hodin, Entomologo". So I tried it again...and it worked again!

The caretaker told me just not to go down to the waterfall (where the trail was the worst of all), to be careful, and not to stay out too long. I agreed and off I went! By the time I set off, the downpour had stopped, but it was seriously wet: the trail was basically a small river. Yet the sheer quantity of vegetation and fungi in this place was mind blowing. Check out the rooting abilities of the cut palm in the upper middle image below!





I arrived at a lookout point that was fogged over, and decided to press on. From here the trail began to descend, and it seemed to be getting a bit sketchier - broken and slippery stairs and the like. And then off in the distance I started hearing rushing water - the waterfall! I had accidentally gone down the trail toward the waterfall, the one place I was told not to go! It seemed pretty close.

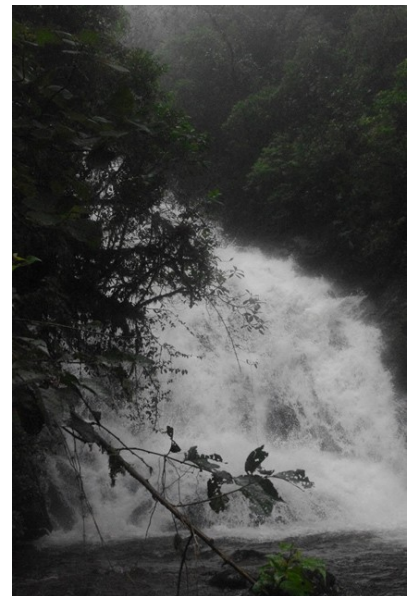
So let me ask you: knowing me, what do you think I did?

- a. I said to myself: "well, better not push it," and turned around to head back or
- b. Thought to myself: "well, I made it this far...I must be close...I'll just proceed carefully and see what happens..."

Correct! So I did actually take my time, testing each stair for stability as I descended further and further, finally arriving at a rushing river. Impressive! Especially due to the rain.

There was this huge log sitting a few steps in from the riverbank, so I waded over and sat up on the log to take the photo at right.

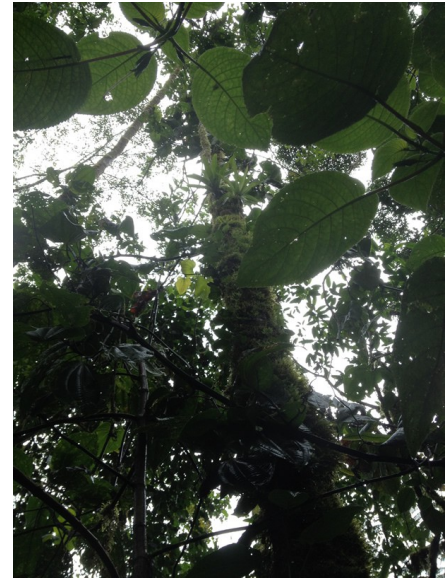
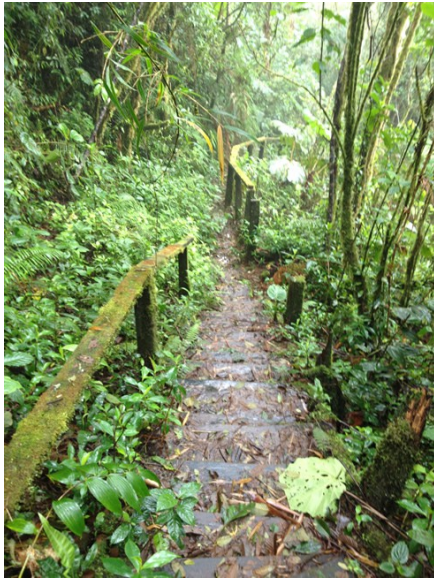
Then I had a brilliant idea- I would set my camera on the log, set the timer, and take a photo of myself with the waterfall in the background. The kids back home would love it! So I set it on a flat part of the log, pushed the button, hurried into the frame, turned around, and watched, helpless, as my camera slowly slid off the log into the river.



Crap! So I ran back to the log and managed to locate my camera, which had been fully submerged in about a meter of water for a good 10 seconds, pulled it out, ran back to shore, took out the batteries and memory card, took off the lens, and watched as about a 1/2 liter of river water spilled out of the camera. Yikes.

These next pictures are from the return walk – with my cell phone camera, which luckily I left on shore, and thus didn't have in my pocket when I practically dived in the river to rescue my camera :)





Back in town, I remembered the advice I had once been given for wet electronics: put them in rice to pull the water out. I found the ideal brand at the supermarket across the street:

What's one more kilo of dead weight to carry :)



After that excitement, it was time to do what I came to Panamá to do: head to the Smithsonian Tropical Research Institute's (STRI) Bocas del Toro lab, on an island of that name (or "Bocas" for short), on the Caribbean side. So I hopped in the next minivan speeding down the mountain.

Recommended listening: [my field recording from a minivan!](#) listen for the cobrador singalong.

Let me digress for a moment with a tribute to the cobrador panameño. Anyone who has traveled in underdeveloped countries know the score: you show up at the bus station (or perhaps just a busy intersection) in a provincial town, and a dizzying array of minivans pass to and fro. The locals seem to know each route by the color of the van, and you hope you got good advice as you pack into one –backpack on the top or in the back or under the seat– and off you go. For the next 4 hours, people continually hop on and off the van, and a good cobrador (happens to usually be a guy) not only can keep some complicated fare zone map in his head, but remembers where all of the passengers boarded so he can ask for the correct fare when each passenger leaves. Impressive!



middle: village roadside beautification, Chiriqui Grande. *right:* Panamanians seem to have a different definition of "open 24 hours", as many restaurants proudly display the lit sign all night despite closing at 10pm every day.

Aaah Bocas. It's a lovely island on the Caribbean side that has become quite the tourist destination. There is only one car ferry a day -and no car rental places on the island. Instead, it's a total bicycling culture, with shared taxis handling the rest of most everyone's transport needs (and shared boat taxis to travel between islands). The town itself is fun, with very picturesque waterfront businesses, but a little overly touristic for my tastes. Happily, the Smithsonian lab is on the outskirts of town, a relaxing 10 minute bike-ride away. And so as one of my first orders of business, I acquired a bike - that in itself is a good story. Ask me to recount that one in person :)



top row: Arriving in Bocas by water taxi. second row: STRI Bocas lab. third row: scenes from the island. fourth row: Bikes in Bocas; towers at lower left are from the lab.

photos on next page...upper left: yes, Bocas has hippies. lower left: water taxi stand. middle: mangroove! right: that is "Mburucuja" in the original Guaraní mother tongue.



I was there to study two local sea urchins- one that is mostly found on the calm side of the island, the other on the wave-exposed side. Snorkeling to collect the former (*Echinometra viridis*) was a gentle 10 min swim out to a gorgeous, shallow, mangrove-lined reef with very high sponge diversity, and upside down jellies and manta rays nearby. Collecting the urchins on the wave exposed side (*Echinometra lucunter*) was equally fun if a bit more challenging.



left to right: mangrove reef, habitat of *Echinometra viridis*; exposed reef, habitat of *Echinometra lucunter*.

One day, I was heading out to collect some *lucunter* from a population I had located about a 30 minute bike ride away, and when I was about 1 km shy of the beach, my chain broke! There was a whole group of workers across the road, and they motioned me over. They all totally stopped what they were doing to try to help me re-attach my chain - one of them even had a chain breaker tool! But alas, the chain was now just too short to reattach, so with a “que lastima” they waved as I locked up the bike and trudged down the sandy road.

The tide was up a bit so the urchins were not quite as easy to find that day - most were well ensconced in rocks, and I got tons of spine tips in my fingers pulling them out! Then I headed back to my bike, threw it in the next taxi-4x4 passing by, got dropped off at Bicileteria Ixa, one of the greatest (and with the \$5 service fee definitely the cheapest) bike shops ever, caught another quick taxi back to the lab, spawned the urchins, and while the eggs were settling, caught another taxi into town, picked up my bike at Ixa, rode back to the lab, and set up fertilizations.

photos on next page...Paki Point *lucunter* habitat, spines embedded in bug's fingers, Bicileteria Ixa.



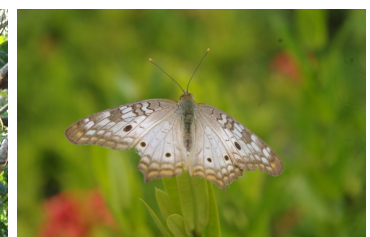
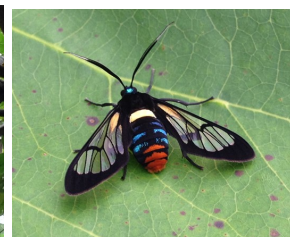
Just another day with the urchins in Bocas :)

Recommended listening: [6am in Bocas](#)

My most lasting memory from Bocas, though, may be the hostel that I stayed in for a week when lab housing was full up with a visiting class. This joint is near the lab, but bordering a more heavily forested area. Instead of rooms, they have a two story building, open on the sides, with a tin roof, and full of tents to rent! I rented a palatial one for \$7 a night, and was woken up every morning at 6am to an absolute cacophony of birds and howler monkeys, peppered with the occasional neighborhood rooster, and often the sounds of massive but brief downpours pelting the roof. I'd lie there listening dreamily for about an hour, and then wander down and have maté with the Argentino tourists before heading off to the lab. Truly idyllic.



Oh yeh...the camera! So after a week I tried it and it worked! Yay rice! And I took lots of lovely pictures for about 5 days, until one day the shutter topped working. Turns out that some rice had gotten stuck in the shutter mechanism. Boo rice.



from left: sloth!! yes, its head is green from [a symbiotic alga](#); tiger moth, genus *Cosmosoma*; howler monkey (male or female? :); a Nymphalid, perhaps a lady butterfly (*Cynthia*)?

Alas, after 2-and-a-half weeks on the island, it was time to depart, so I fertilized one last batch of embryos of each species, packed em up, caught the ferry to Almirante on the mainland (*see pictures at right*), and from there the 12 hour bus back to Panama City, embedded urchin spines slowly dissolving into my body (thus making me increasingly urchin in my morphological constitution).



The next morning at 5, I was out the door and on my way to the airport, where I arrived into total chaos, and a massive line at the Air Panamá counter. So I got in a queue that was moving forward at an absolutely glacial pace. I had arrived at the airport almost 2 hours in advance, but it was starting to look like I may miss my flight. When I finally did make it to the front of the line, I gave the agent my name and flight number and she couldn't find my reservation! Eventually I dug out my confirmation number and gave it to her and she says "Oh, that's why...your flight is mañana, señor."

Oops.

Recommended listening: [Eres mi Cancion](#) by Ruben Blades.

Flashback memory of changing return dates way back when I first booked the flight...I must have printed off the wrong itinerary!

Well, normally, I would just enjoy an extra unexpected day in Panamá - but the embryos! I had to get them to California that day or they might not survive being cooped up in the containers for so long. So I asked this nice ticket counter lady if there was any way I could fly a day early, and she took pity on me. By this time, though, boarding for the early morning flight was closed out. But luckily there was another flight in 3 hours to LA and she got me a seat on that flight! Showing incredible kindness, she only charged me the \$100 change fee, not the difference in flight price, which would have surely been at least \$400 dollars more for a same-day ticket.

She couldn't get me onto the Monterey connection from this later flight, so I was gonna have to wing it at LAX. But more than that, the whole time on the plane, I was worried about my larvae. I had to check them since they were in 1-liter liquid containers, so I packed them really well and hoped for the best. I felt OK about how they were situated, since by this time in the trip, I had arrived at a state that all backpackers will recognize: backpack arrangement nirvana – where you finally arrive at the ideal arrangement of items that fits as much as possible snugly into that cylindrical space. Still, I hadn't been separated from the larvae for this long since they were born, and who knows what was happening down there in the belly of this flying beast!

We arrive in LA, and I head down to claim my luggage; it happens to be one of the first bags off the plane. But something looks funny. The first thing I see is my snorkel projecting out the top of my backpack, as if it was trying to breathe. Next, I notice that the cooler pack –into which I had oh so carefully and lovingly placed my precious larvae, surrounded with padding– was also sticking out of the top of my pack.

I watched my larvae tumble and roll down the ramp, and when I reached to pull it off the carousel, it was soaking wet.

Crap! Clearly airport security in Panamá had opened my bag and done a totally horrendous job of repacking it! Of course, how could I blame them for not having also arrived at backpack arrangement nirvana?

So I quickly pulled out the cooler bag, opened it up, and noticed that one of my containers of larvae was cracked open and literally spilling its entire contents out of a ~1cm wide hole! So I immediately turned it upside down to halt the flow, placed it back in the cooler bag upside down with supports to keep it upright, and walked oh so calmly through customs...nothing to declare... these are not the droids you're looking for (works every time! Gracias por enseñarme, Cory!)...and strolled into LAX airport just like that.

While waiting for my flight in Panamá, I had reserved a rental car as a backup plan in case I couldn't go stand-by to Monterey, and at this point, there was no freaking way I was subjecting my larvae to another airplane trip, so I headed post-haste to the rental location. The plan all seemed to be barely coming together, but not without one final roadblock: while paying for the car, they informed me that company policy was that in order to use a debit card to pay, you have to have a return ticket. But I didn't! This WAS my return ticket! So it looked like I was out of luck, until the manager (who by this time had come over) indicated that the reason for the policy was that they needed to see some evidence that I was leaving Monterey.

Bingo! I have an Amtrak reservation in 3 weeks from Salinas to Seattle!

No one had ever used a train reservation as their "return ticket" confirmation before, but they made it work in whatever computer form they were using, and I was out the door, larvae on the passenger floor with the heat on (they're tropical larvae, remember :), driving down the streets of LA.

And so it came to pass that Enterprise car rental at LAX has an established method to authorize debit card use for train travelers.

And thusly I entered the morass that is Friday afternoon rush hour traffic in Los Angeles. But no! NOT driving a "single occupancy vehicle"! This vehicle was only occupied by a single human, true, but also along were approximately 7500 of an original 11000 or so esteemed larvas Panameñas, who made it safely to Monterey that night.

In closing, I would like to suggest a moment of silence for the remaining 3500 larvae, who must have succumbed to evaporation in the lining of my backpack in horrible fashion. My only hope is that they were slightly comforted, in their final moments, by the aroma of Panamá, likewise embedded in my pack from the long journey.

Love
bug

p.s. assorted photos below...enjoy!



Top: katydid

*Middle left: female
Darnier (Aeshnidae)*

*Middle right: Pyro-
chroidae, possibly
a Dysdercus sp?*

*Lower left: Not sure,
possibly a Coreid
(leaf foot bug).*

*Lower right: Carabid
(ground) beetle*

all from Bocas



Top row: Atta leaf cutter ants! If you ever need inspiration, watch these gals work all night, carrying way more than their weight vertically down a trunk. and then a long distance to their nest. In the time I was there, they almost completely defoliated a tree.

*Bottom row: Yes, that's milkweed - *Asclepias curassavica* I think (right Dr. Malcolm?) I did see monarchs at least once, but never got a photo.*

All photos from Bocas del Toro.



- top row: left- possibly *Tetraoponera* sp.
(slender ant)?
middle- possibly a carpenter ant
(*Camponotus* sp.)? They looked mean.
right- not sure, but these gals
constantly had sand cave-ins
that they were clearing out.
- middle: left- millipede
right- some kind of weevil!
- lower: yes, that's Noni fruit (*Morinda
citrifolia*) with some type of
stingless bees (*Meliponini*)
on it.

All from Bocas del Toro island.



top row: left- Iguana would hang out behind the dining area at STRI, and were super spooked by people (smart, because locals ate them), causing them to scurry up trees, and if really scared, to dive into the water below ; right- not sure what this lovely plant is; any ideas from the botanists in the house?

middle row: as you would expect, lots of stray cats on the island.

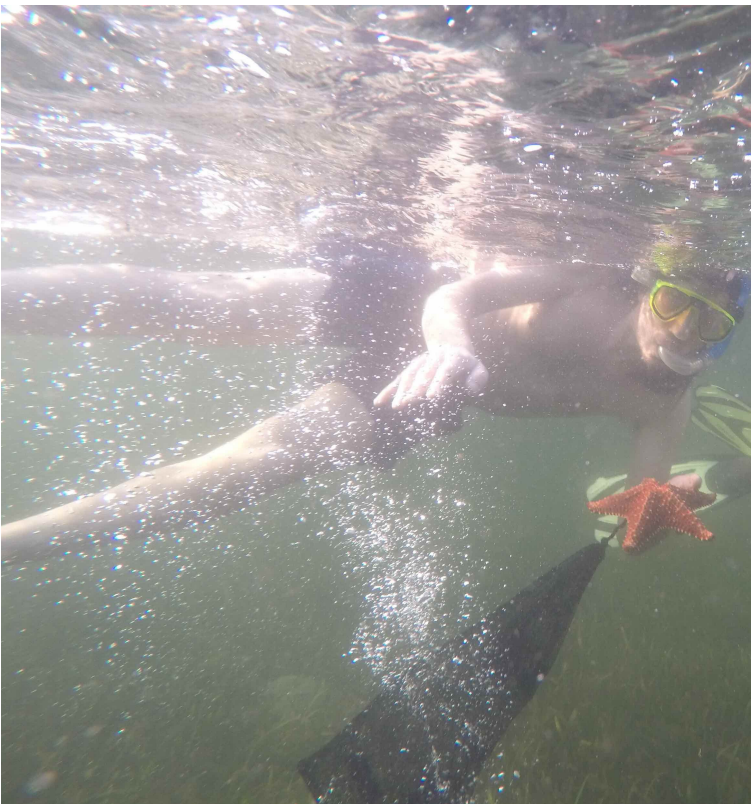
bottom row: left- wicked cool gecko with amazing camouflage; right- apparently pregnant female on the lab window

All photos from Bocas del Toro.



top row: left-oyster mushrooms (*Pleurotus* sp.); right-not sure
middle row: left-possibly turkey tail (*Trametes versicolor*); right-not sure
bottom row: parasol mushrooms (*Chlorophyllum* sp.) growing underneath the STRI lab building!

All photos from Bocas del Toro.

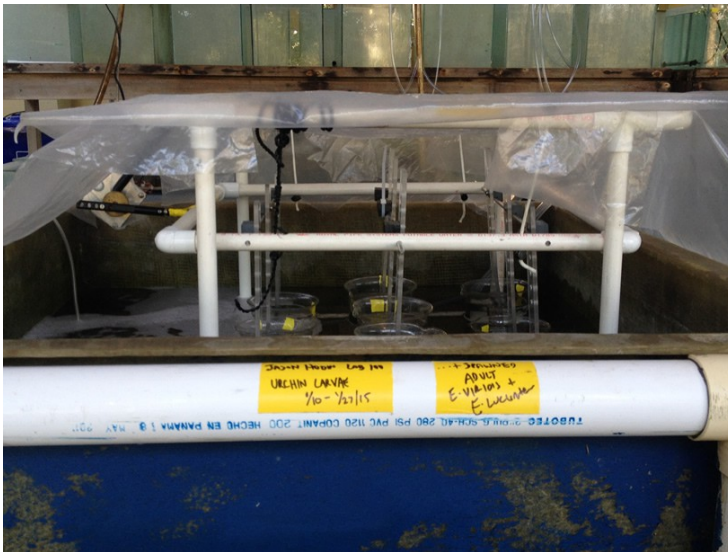
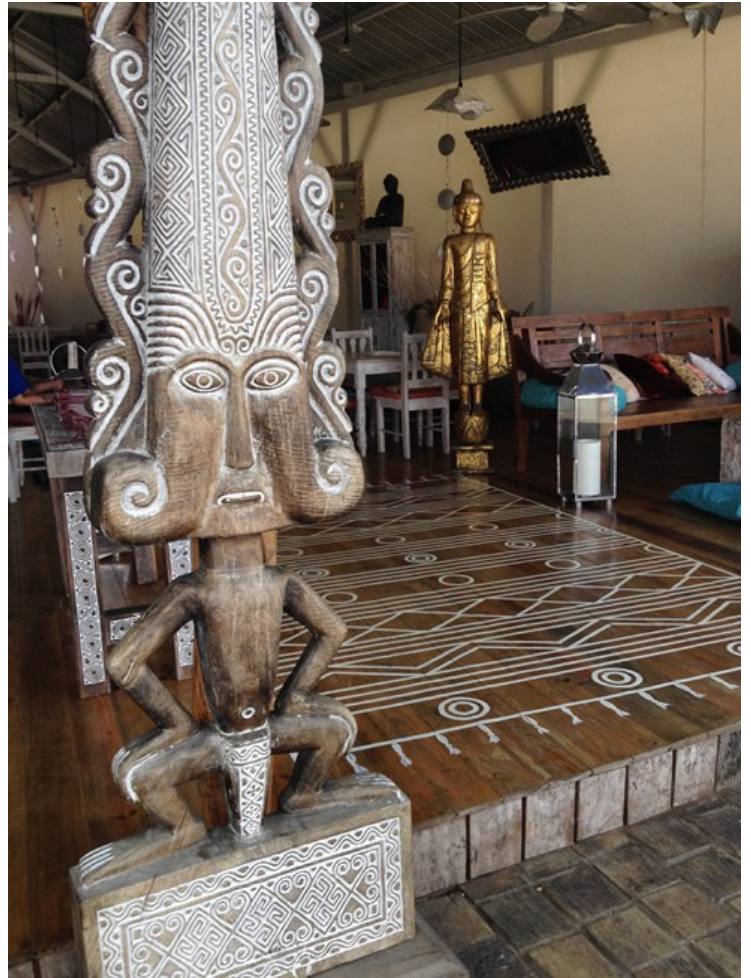


Top: left- little blue herons (*Egretta caerulea*) are way more chill than their so-called "great" cousins. I was about 1 meter away from her.
right- heron posing with juv cayman at the lab

Middle: left- raptor, not sure what
right- northern jacana (*Jacana spinosa*)

Bottom: bug with *Oreaster reticulatus*

All photos from Bocas del Toro.



top left: The view from the STRI dining area. Compare the rooting system of this palm to the earlier picture from La Amistad.

top right: A nice Indonesian restaurant in Bocas.

bottom left: my traveling larval stirring rack (gift from Cory) in full effect. Fits in a tent stuff sack!

bottom right: Sign by the beach says "The garbage that you throw on the beach doesn't talk, but it says a lot about you."

All photos from Bocas del Toro.



*Top: left- sunrise from the lab deck.
center- it appears that coconuts just grow :)
right- stream running into the ocean*

*Middle: left- typical, massive downpour in Bocas
right- sunset from the lab dock*

Bottom: double rainbow during a collecting trip

All photos from Bocas del Toro.