

## Padding glowing waters and mangroves

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Tourists prepare to paddle their kayak to the Fajardo Grand Lagoon, where they'll be able to see bioluminescence.

I didn't know we'd be paddling through mangroves. And that it would be almost pitch black. Now, after getting stuck in the roots and dangling branches, it made more sense why the guides warned us that people fall out of their kayaks — even though the water is calm. And that I shouldn't bring my digital SLR camera — even though I tied plastic grocery bags around it to protect it from the water.

Lest you think I'm a newbie kayaker, I've done two multiday paddling trips, both while pregnant: one unguided five-day trip between the Everglades' mangrove islands, the other circumnavigating La Espiritu Santo in the Sea of Cortez.

But I've never been so disoriented as I was during the 45-minute paddle to Puerto Rico's Laguna Grande, one of the island's three bioluminescent bays. It was like kayaking while blindfolded — I couldn't see any better with my eyes open than shut. The only real light was occasional red flashes from signals on the kayak sterns. Until we got stuck, I didn't even know we were near mangroves. I thought we had entered some kind of tunnel.

Obviously I hadn't done my homework. My 10-year-old daughter Dori shrieked as she hit the low-hanging branch from the kayak bow. The guide silently glided over to free our boat from the branches, shining his flashlight, which allowed me a brief moment to glance around at the surroundings.

We booked our trip purposefully for a new moon night, so that it would be even darker, to more easily see the glowing dinoflagellates in the water below. While we started to see the oar light up in the brackish mangrove waters, I was so busy paddling and steering, trying to avoid the boats in front of me and the returning kayakers on the left side, that I couldn't look down and appreciate the view.

Finally we entered the lagoon, making a side-by-side flotilla with our group, so the guide could talk about the bioluminescent bay. The waters here are filled with the prehistoric one-celled organisms, half animal, half plant. When disturbed, they glow like fireflies. I felt like I was on the Pirates of the Caribbean ride. When we dipped the paddle in, it lit up, outlined like an X-ray. Cupping the water in our hands, it looked like we were holding sparkling pixie dust. Even after the initial glow subsided, the water looked like it held twinkling stars. To say it was magical sounds clichéd, but it was true.

The dinoflagellates thrive in Laguna Grande partly because the nature reserve has limited pollution. Swimmers are no longer allowed. Sunscreen and bug repellants containing DEET were killing off the very organisms people wanted to see. The mangroves that almost tossed us from the kayaks help the organisms thrive, releasing vitamin B12 into the water. This, along with the sunlight, help them live and grow.

Spanish explorers during the 17th century thought the water was the devil's work, and they tried to kill the organisms by putting rocks at the mangrove entrance. This had the opposite effect, increasing the available food and maintaining the favored warmer water temperatures. These tiny organisms live only five days, reproducing at three days.

We were allowed to dip our hands in the water and splash about with the paddles.. While my daughter did what she was supposed to do, appreciating nature by playing with the water, I tried taking some pictures with the albatross, er camera, around my neck. It didn't work. I needed a longer exposure and no movement, which I wasn't going to get with a 10-year-old in the boat.

Laguna Grande is one of three bio bays in Puerto Rico, all with the same type of dinoflagellate, and among about a dozen such sites worldwide. Laguna Grande is on the island's northeast side, near Fajardo. While our guide said it has the same brightness and concentration of organisms as Puerto Mosquito, off nearby Vieques island (a 75-minute boat ride), die-hards disagree, saying that that Puerto Mosquito is better. If you want to go to that bio bay, you'll

need to stay overnight on Vieques unless you have your own transportation back. There, you'll take an electric boat (thereby eliminating our mangrove paddling adventure).

The other Puerto Rico bio bay is La Parguera, in the southwest part of the main island. From all accounts, the dinoflagellate concentration there is as much as 90 percent lower, due to a damaged ecosystem.

Alas, it was time to paddle back. I thought the return trip would be easier, since no groups were making their way into the lagoon at 9:45 p.m. To stay together, we played a game of telephone, with the front of the group passing back messages to the back. The most difficult message to follow was "slow down." But by the time it got to us, that really meant "stop." That's hard to do when paddling at a good pace in 25 feet of water. I floated past several others boats, with Dori whacking them with her paddle. I apologized profusely. With a child in my boat, and my self-deprecating attitude, most of our group was quite forgiving.

Though I felt like a terrible kayaker, my friend Rochelle was worse. For each time Dori and I paddled into the mangroves, Rochelle and her daughter crashed an additional two times. Her daughter eventually just put her arms protectively in front of her face to avoid any branches.

Back on land, our guide asked how many of us went into the mangroves. Everyone's hand went up. I didn't feel so bad after all.

While the glowing dinoflagellates were a trip highlight, the adventure of kayaking in the dark mangroves is what we still talk about.

<http://www.miamiherald.com/2012/07/07/v-print/2883612/paddling-glowing-waters-and-mangroves.html#storylink=cpy>

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