



Diving Below the Surface in Fiji



POSTCARDS

FROM THE

FIELD

GALA 2020



PHOTO: WCS

Greetings from Dr. Emily Darling, Conservation Scientist
- Global Coral Reef Program! One year ago in May 2019, I
joined WCS Fiji scientists for a 3-week survey expedition
underwater on coral reefs in Ra, Ovalau Island and
Leleuvia Island.





PHOTO: EMILY DARLING/WCS

WCS has some of the most comprehensive and long-term datasets of coral reef surveys in the world. This information is crucial to take the pulse of coral reef health around the world, as coral reefs face threats from global climate change and local impacts of water pollution, overfishing, disease and industrial development.





PHOTO: EMILY DARLING/WCS

In 2019, waters warmed across Fiji, raising fears about another global scale coral bleaching event. I joined WCS scientists including Dr. Stacy Jupiter, Dr. Sangeeta Mangubhai and Yashika Nand in measuring coral bleaching. Luckily, cooler waters provided some refuge to the corals, and we found only minimal bleaching during our 3-week expedition.





PHOTO: EMILY DARLING/WCS

WCS scientists underwater are crucial to monitoring coral reef health and recovery from climate change and coral bleaching. While satellites can record water temperature, only scientists or citizen divers underwater can reveal what's truly happening below the surface.





PHOTO: EMILY DARLING/WCS

Sometimes our surveys had unexpected visitors! On Ovalau Island, there are no dive shops or tourist divers, so we were some of the first divers ever to see these reefs. Here is our trusty companion, a patrolling whitetip reef shark, to help us with the day's surveys.





PHOTO: EMILY DARLING/WCS

Coral restoration makes headlines around the world. But for the majority of the world's reefs, especially healthy reefs in the Indian and Pacific Oceans, restoration can only account for a fraction of conservation, and is expensive and slow. Instead, WCS focuses our efforts on preventing damage to natural reefs, and supporting ecological recovery with effective management.





PHOTO: EMILY DARLING/WCS

At the end of every dive, we come up with our precious data recorded on underwater paper on our dive sheets. Using a new technology platform developed by WCS called MERMAID, we are revolutionizing how field scientists collect, analyze and share coral reef information in real time.





PHOTO: EMILY DARLING/WCS

Local communities graciously hosted our stay. We lived and ate with community members, who also helped provision us with local coconuts to stay hydrated at the end of long days on the water! Vinaka vaka levu (thank you very much) to our Fijian friends for taking care of us and working closely with us for a better future, for people and their reefs.





PHOTO: EMILY DARLING/WCS



PHOTO: EMILY DARLING/WCS

Harvesting local seaweed is a Fijian delicacy, and makes for a delicious lunch on the boat paired with canned tuna and chili peppers! Women play a critical role in Fiji's coastal fisheries. Look out for WCS Fiji Director's Dr. Sangeeta Mangubhai's new cookbook *Kusima Mada* highlighting the role of women in Fiji fisheries and cuisine, hopefully coming soon to a NY Zoo or Aquarium bookstore near you!





PHOTO: EMILY DARLING/WCS

Women also play a crucial role in the sustainable management of Fiji's ocean resources. As an esteemed Pew Fellow in Marine Science, WCS Fiji Director Sangeeta Mangubhai is shining a light on the crucial role of women and fisheries.





PHOTO: EMILY DARLING/WCS

Dining in Fijian style on a special Sunday lunch before we left the village. Many dishes are cooked with 'lolo', the Fijian word for coconut milk which makes everything delicious and fresh!





Some of our WCS Fiji team and local hosts over breakfast, before heading out to the ocean for the day to survey coral reefs from our small and self-supported field crew.





PHOTO: EMILY DARLING/WCS

Underwater, we saw healthy corals and fish on many reefs! Strong signs of recovery from Cyclone Winston, which thrashed these reefs and coastlines in 2016 as the strongest cyclone to make landfall in the South Pacific. Natural recovery shows that reefs are resilient, and is a crucial focus of our work at WCS.





PHOTO: EMILY DARLING/WCS

Thank you for joining us underwater on these postcards from the field! We hope to be back underwater and working closely with our community partners in person again soon. Vinaka vaka levu (thank you very much!) for supporting our work.

