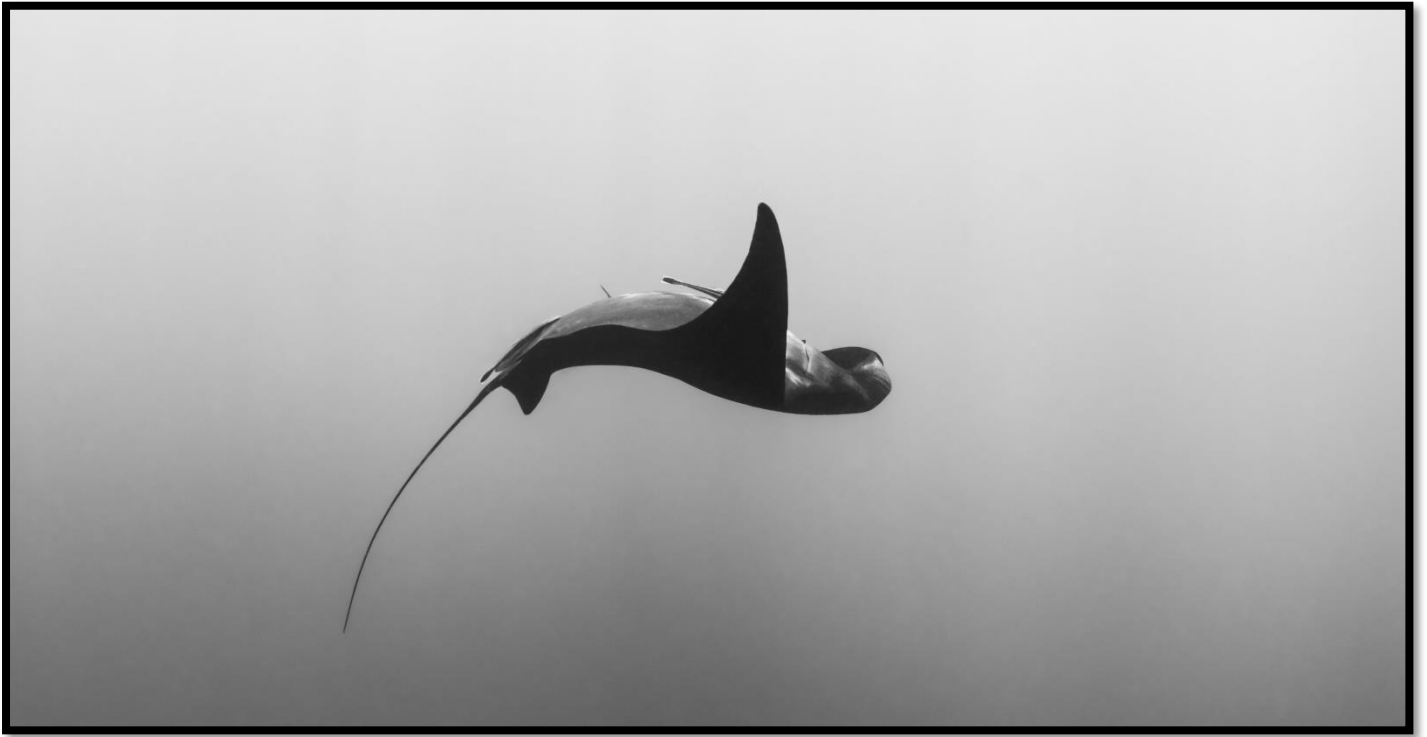




NEWSCAST – 3

January – June 2018





Officially launched in September 2016, the Manta Initiative in New Caledonia aims to enhance the knowledge on manta rays in the territory, and promote conservation through strong collaboration with government, non-profit partners, and the local communities.

Manta rays are an emblematic species in New Caledonia and the broader region. However, while they are large, there is very little known about them. In addition, these majestic animals are ambassadors for the waters of New Caledonia — a sanctuary spanning thousands of square kilometers. The data that we gather through scientific research will contribute and encourage manta ray conservation, and more broadly, better management of their habitats.

This report presents activities carried out by the Manta Initiative during August to December 2017.

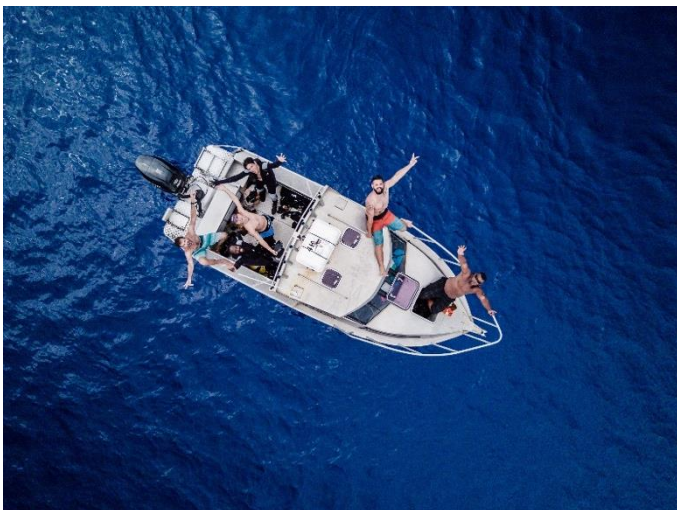
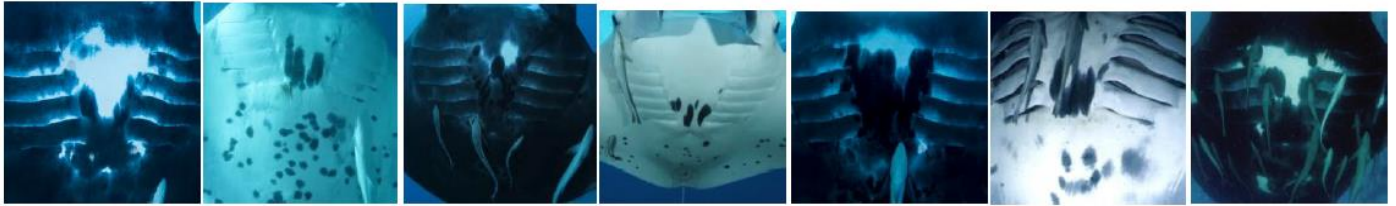
PROGRESS AND IMPACT

Our database – growing even stronger!

Our manta ray database now consists of 283 manta rays, with a whopping 43 more additions since our previous update!

We managed to also identify new manta rays in Maré and Ouano, in addition to our usual sites of Nouméa, Ouvéa, Touho and l'Île des Pins.

On one of our surveys in Ouvéa, we identified 13 new manta individuals, and identified 7 already in the database. In Nouméa, several photo IDs taken from the passages of Boulari and Dumbéa were sent to us in March — which consisted of groups of more than 10 individuals at one time! These photo IDs and others have allowed us to identify 28 new manta rays, just in Nouméa.



Taking a photo of a manta ray's belly allows us to identify it, and track its movements around New Caledonia's waters! The more photos we receive, the more mantas we can identify!

Within the last six months, we have received numerous photo ID contributions, and sometimes even videos! We thank the 26 new contributors, who have brought the total contributors up to 100 people! We also thank all of the dive operators who have encouraged their clients to participate.

Our expedition in Ouvéa!

We were aiming to get as many photo IDs of manta rays as possible within a week as our current data on mantas in Ouvéa is insufficient.

At a cleaning station in Mouli, we found that manta rays were frequently seen. As such we could easily obtain photo IDs and observe their behaviors. To maximize the number of photo IDs we could obtain, we placed a GoPro in the waters, programmed to take a picture every five seconds — capturing the presence of manta rays even when we were not able to be in the waters. We found that, in our absence, there were even more manta rays than we had thought.



Manta rays have their own personalities. Some are shy and would wait for humans to depart before visiting cleaning stations, while others are more curious.

Photos of manta rays captured by the GoPro :



Environmental conditions: What do manta rays prefer?

As part of his Masters, our trainee Solvène Solal studied the links between environmental conditions and the presence of manta rays. Together with diving clubs in Nouméa, they collected data to explore the relationship between current, visibility, wind, rainfall, tides and other conditions in the waters and the presence of manta rays.

The goal is to understand the environmental conditions in which manta rays are observed.

Due to a limited internship period, our data collection was limited to just a few months. We would need to conduct further studies with more regular sampling efforts to better interpret this data.



Thanks to the following dive clubs : Abyss, Alizé, Iatok, Kuendu Dive Safari all the divers who have kindly agreed to help us. Join us in this effort – read the section “We need your help!”

During our study, we noticed that the absence of manta rays often coincided with weak currents, rising tides or with a westerly wind. Other variables such as rainfall and visibility did not seem to affect the presence of manta rays. However, not one environmental condition stood out in these studies, and more studies are required. This excludes extreme weather conditions as it was not safe to dive during those periods.

The only factor that seemingly affects their abundance — descending tides with a medium to strong outgoing current. Manta rays tend to be more numerous in these conditions.

Manta rays tend to linger — feeding, cleaning and even breeding — during strong current or following heavy rainfall. Following a weak rainfall or visibility of more than 15 meters, manta rays seem to linger less.

Globally, similar studies have shown that the presence of manta rays is due to a food source — an abundance of plankton in the area. Thus, environmental conditions favouring this food source is related to the presence of manta rays. As the primary objective of an animal is to feed, it is likely that manta rays will choose cleaning and breeding stations that provide this food source.

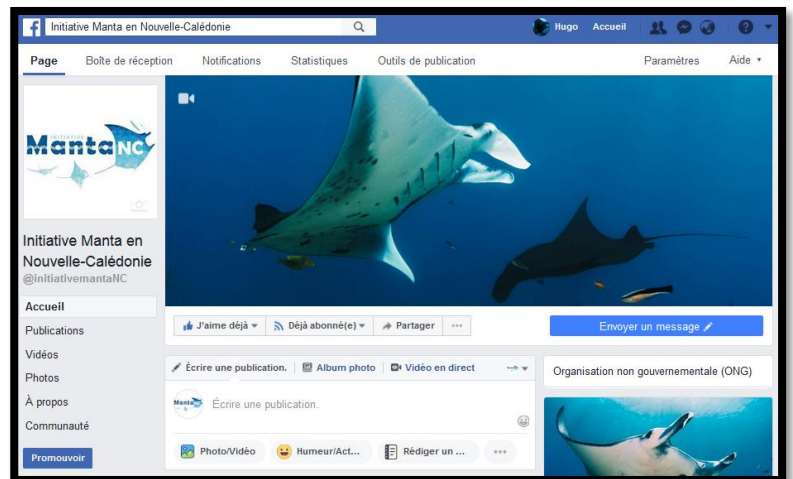
COMMUNICATIONS

A Facebook page for the Manta Initiative!

Follow us for the latest news around tagging, results, information and events related to Manta rays! We will also be sharing photos and videos so remember to tag us when you upload your own manta ray photos and videos taken in New Caledonia!

Feel free to share any Manta-related news with us too of course whether on the page or via Private Message!

Contributors to the manta ray database (via photos and videos) will receive information related to the manta rays you have observed.



[Follow us now!](#)

To date, 286 people are following us! Thank you to all and please share this with your friends.

A Manta Initiative Film: the Mother of the Coral Sea

The Mother of the Coral Sea, approximately 13 minutes long, features the best of New Caledonia and Manta Rays. Shot by Emmy-award cinematographer Shawn Heinrichs, the film brings us to the forefront of New Caledonians and their relationship with nature with stunning images and videography. Learn the story of the Manta Initiative team, community members of Ouvéa, and even about a man and his best friend — a clown fish! The waters of New Caledonia has plenty to offer — and we are committed to protecting this biodiversity.



The Manta Initiative would like to thank everyone who helped to realize this project: Shawn Heinrichs, Adrien Oneiga and Bluesphere Production, Marino Tiaou and Mio Palmo, Pierre Kaouma and Les Pléiades Sud Ouvéa, Marjorie Tiaou and Tribal Cut, Marie-Lucette Taoupoulou, the Custom Authorities of Ouvea, and Conservation International.

Watch the film here: <https://www.youtube.com/watch?v=KSeHxrbGE84>

A Preview in Ouvéa!

Community members in Ouvéa contributed the most to the making of the Mother of the Coral Sea, so it made sense that they were able to preview the film before it launched! An outdoor screening was held in Mouli, on the Family Festival, in front of more than 100 people. We also screened the film in elementary schools and colleges to educate the youth on the importance of protecting our biodiversity.





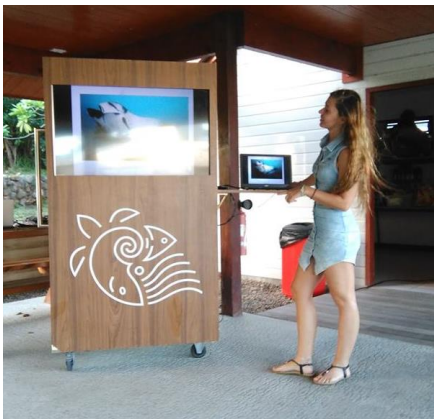
An article of the Mother of the Coral Sea, featured in the newspaper Les Nouvelles Calédonienne.

The first Underwater Film Festival in New Caledonia!

The Mother of the Coral Sea was featured in New Caledonia's first Underwater Film Fest in end May. The Manta Initiative team were present as well to share more insights and perspectives with the audience.



The Manta Initiative would like to thank Sub'Limage for allowing us to participate!



Nocturnes of the Aquarium: Manta rays and science

The Aquarium des Lagons has dedicated their monthly features to science this year. Videos, presentations and educational material allowed visitors to learn more about manta rays and the behind-the-scenes research and methods used by scientists to study these animals.

For better manta interactions, follow this guide!

A code of conduct for observing manta rays have been created in collaboration with the Manta Trust. This document will provide guidance to divers and anyone who wants to encounter a manta ray. It provides tips to avoid behavior that could disturb manta rays, and guidelines on how to best interact with these majestic animals when they encounter one. It is available online on the [Manta Initiative's Facebook page](#).

The Manta Initiative at World Oceans' Day!

On 10 June, at the first World Oceans' Day organized by PEW, the Manta Initiative and the Aquarium des Lagons connected with more than 1,000 participants at our booth, educating them on manta rays and the biodiversity in New Caledonia. Our trainee and volunteers from the Aquarium also showcased an animation on the subject.



We would like to thank PEW and the Aquarium des Lagons for their support!

WE NEED YOUR HELP!

**You can help to protect manta rays in New Caledonia,
and support the development of the Manta Initiative!**

Send us pictures

The easiest way to help the initiative is by sending us photos or videos of manta rays. Your photos will contribute to the photo-identification database and provide more robust and more accurate results regarding manta movements and behaviors.

Facebook : Initiative Manta Nouvelle-Calédonie

Email mantanc@aquarium.nc with the following information: Location, date, and comments (if any). The submitted pictures will be analyzed by the Manta Initiative team and a report detailing all the information on the observed manta will be sent to you in return.

Report manta sightings

Reporting observation of manta rays can help us study manta aggregations better. This can be done through email (see previous column) or by filling the investigation form that is continuously distributed via different platforms.

Contribute to our study in the Straits of Boulari and Dumbéa!

The Manta Initiative relies on citizen science to observe the movements of manta rays within New Caledonia. You can participate!

Each time you dive in New Caledonia, note the following information:

Water conditions (such as visibility, current strength and direction)

Date

Time

Amount of Manta rays seen

Behavior of Manta rays

Even if you did NOT see any Manta rays, your data will still be valuable to us!

