After sailing every ocean around the globe to learn more about the planktonic world, the Antarctic and Arctic Oceans, and crossing the Mediterranean to assess the damage caused by plastic pollution at sea, Tara is now heading towards the Pacific Ocean and Asia. This 2 1/2 -year expedition (May 2016 - October 2018) aims at better understanding past climate, today's threats and the future of coral reef biodiversity. From east to west and from north to south, Tara will study this rich and fragile ecosystem, and its resilience at a time when the Ocean is undergoing major upheavals.

Though coral reefs cover less than 0.2% of the ocean floor, they represent nearly 30% of marine biodiversity. True oasis of life, they provide food, breeding areas and habitat for many species: fish, crustaceans, anemones, etc. They also supply a livelihood via fishing for 500 million people worldwide. Moreover, the value of ecological services they provide – protection of coasts from erosion, tourism, etc. – is estimated at about $30 billion a year. Essential but fragile, coral reefs are affected by global warming, ocean acidification and increasing human activities. In this context of global change, Tara’s new objective is to study one of the ecosystems vital for marine life in the largest ocean on the planet. Sailors, scientists, journalists and artists will relay each other on board for over 2 years.

EL NIÑO 2015-2016: WHAT IMPACTS SHOULD WE EXPECT?

Crossing the Pacific Ocean from east to west and from north to south will give the scientists aboard the schooner the opportunity to study the impact of El Niño on the ocean. In a context of climate change and ocean warming, the temperature variations of the El Niño current have traumatic effects on reefs leading to high coral mortality. In 2016, this phenomenon is expected to be more devastating than the 1998 event, responsible for the disappearance of 38% of corals in 6 months (Hoegh-Guldberg et al., 1999).

TARA PACIFIC IN NUMBERS

- Tara’s 11th expedition since 2003
- Voyaging 100,000 km
- Visiting 30 countries
- Making 70 stopovers
- Lasting 2 1/2 years
- Collecting 40,000 samples
- Involving 26 labs - 9 different countries
- 70 scientists
- 8 artists in residence
Information about plankton collected during the Tara Oceans expedition represents an unprecedented resource for studying and understanding the Ocean. Based on these findings, the Tara Expeditions Foundation and the Fonds Français pour l’Environnement Mondial (French fund for the global environment) in 2015 launched a 4-year program of North-South cooperation, involving 6 countries. Objectives: to train young researchers from southern countries (including Senegal, Chile, Brazil and Argentina) in using this data, and to create new networks for exchanging knowledge about the planktonic world. The “Ocean Plankton, Climate & Development” project will also generate indicators to better understand the consequences of climate change.

“The recognition of Tara Expeditions is the culmination of a long process, a project of public interest since its origin. Beginnings were sometimes difficult but in the end, the project has exceeded all our expectations and it’s all the better! Tara has become an internationally recognized common good, shared by people of very different backgrounds. It is a beautiful place of creation, exchange and knowledge. With this new status, the Tara Expeditions project becomes more sustainable while remaining independent. Tara will pursue her mission of disseminating scientific knowledge to all – civil society and decision makers, large and small – and help protect our common heritage: the Ocean.”

Étienne Bourgois,
President and founder of Tara Expeditions.

During the 2016-2018 Tara Pacific expedition, Oceans by Disney, along with the Tara Expeditions Foundation, is committed to raising awareness among young people about ecological issues facing the Ocean and its marine and coral biodiversity.