



3 years
DURATION OF THE EXPEDITION:
SEPTEMBER 2009 TO NOVEMBER 2012

60
STOPS

50
LABORATORIES AND INSTITUTES
IN 15 COUNTRIES

150,000km
DISTANCE TO BE SAILED

50
COUNTRIES VISITED

122
SCIENTISTS, INCLUDING 22 COORDINATORS

A marathon around the globe
Sixty port calls planned in the 50 countries visited

HAPPY SAILING TARA

Setting sail from Lorient, France on September 5, the three-year Tara Oceans expedition will study plankton across the world's oceans and rely on the input of a large scientific community.

Several thousand people were in attendance to watch the scientific expedition Tara Oceans set sail in early September. Stationed on the pier of Lorient, the Breton town's former submarine base, the crowd cheered the 15 crew members boarding the boat: five merchant marine sailors, five scientists and five journalists. This mix of scientists and media professionals was what the mission's two directors, Éric Karsenty, head of the European Molecular Biology Laboratory (EMBL), and Étienne Bourgois, the operation's main sponsor and boat's owner, had wanted from the outset.

For several months the boat's first occupants will live together in close quarters, squeezing into the compact, unadorned 36-meter hull originally built to brave polar regions. Its captain, a former fisherman, has signed a three-year lease! The others will rotate on and off the boat during its many port calls (see map). Tara's itinerary—under prevailing winds—is worthy of any of the major scientific expeditions organized in the 19th century, which radically revised our vision of the world. The schooner Tara will explore the five oceans in search of their microscopic life, plankton, which makes up 98% of marine life biomass.

Located at the bottom of the marine food chain and the site of intense photosynthetic activity, plankton produces half of the oxygen on earth and likely holds invaluable keys to ensuring our future survival! The Tara expedition will gather vital data on marine biology (viruses and microorganisms) and the environmental sciences (salinity, acidity, upwelling currents) by collecting samples from the 50 marine regions mapped to date and reporting on never before studied ecosystems.

"Baseline Inventory"
The expedition, then, is proposing a "baseline inventory" of the ocean's

biological condition for the entire scientific community. This inventory will also help assess the effects of climate change by refining existing satellite models. The active partnership Veolia Environnement Foundation (see opposite) signed with Tara makes perfect sense. Although the primary beneficiaries are all the ocean disciplines, Veolia Environnement's businesses have even more to gain. Our engineers will have data they can use to refine both their basic and applied research in fields as varied as water quality, coastal marine environment studies and the design of probes and other sensors. Finally, via the

Veolia Environnement Foundation Expedition Partner

Veolia Environnement could not simply sit and watch a project as important as this one without becoming involved! We are especially involved in financing a revolutionary scientific tool, the CTD (Conductivity/Temperature/Depth) probe that can plunge to a depth of up to 2,500 meters to observe and study ocean plankton life (see page 16). In so doing, the Foundation is enabling Tara scientists to collect samples that will then be analyzed aboard and later at partner laboratories during port calls. Marie-Marguerite Bourbigot, Liaison Officer, Brittany Maritime Cluster, will interface with the mission's teams of scientists. Tara is a wonderful opportunity for our research teams to partner with centers of expertise during scheduled port calls. Already two cities are preparing to welcome the ship: Nice in France and Tangier in Morocco.

To learn more: www.taraexpeditions.org