



Press release

The Ocean Mapping Expedition

500 years after Ferdinand Magellan, the 33 metres long ketch *Fleur de Passion*, which is also the largest sailboat sailing under the Swiss flag, will be leaving on a four year journey around the world to observe, understand and map the state of the planet's oceans, following in the wake of the expedition headed by the explorer who named the Pacific Ocean.

The voyage will host a series of multidisciplinary scientific, socio-educational and cultural programmes, carried out in a spirit of cross-cultural exchange and experience sharing, to measure human impact on the oceans and help shape the way we think about man's place on "planet ocean".

Geneva / Seville, 8 April 2015 – Nearly 500 years ago, the Portuguese navigator Ferdinand Magellan was commissioned by the Spanish Crown to lead an expedition to find a Western maritime route to what were then known as the "spice islands". In the course of his voyage, he would discover not only the strait at the very tip of South America that now bears his name, but also an ocean vaster and far less peaceful than he thought, despite the fact that he named it the "Pacific Ocean". Above all, however, Magellan's expedition would be the first to circumnavigate the globe, revealing a world much vaster than had been imagined at the time.

On 12 April 2015, some 500 years later, the sailboat *Fleur de Passion*, a 33-metre long former German navy vessel built in 1941 (and long since disarmed), which is also largest sailing ship flying the Swiss flag, will be leaving Seville on a four-year voyage around the world, to follow in the wake of Magellan under the leadership of the Geneva-based non-profit organization *Fondation Pacifique*, which is active in sustainable development.

The objective of what has been baptized *The Ocean Mapping Expedition* is to observe, understand, map and report back on the state of the world's oceans, by following in the wake of the first circumnavigation of the world. Its ambition is to help raise and spread awareness of the challenges resulting from human impact on an environment vital to humanity, and to make us reflect about our relationship with "planet ocean".

"In a way, following the route taken by Magellan means reconnecting with the spirit of the great explorations and great discoveries of centuries past, which have never ceased to appeal to our imagination, explains Pietro Godenzi, president and founding member of *Fondation Pacifique*. "However, he continues, we must be careful not to fall into the trap of fantasy and idealization. This is not about wanting to re-enact a chapter of human history that belongs to the past. Magellan sailed westward in search of the islands whose spices were worth more than their weight in gold. The idea is rather to ask ourselves what our modern "spice islands" might be: what riches are we looking for? Material wealth? Spiritual riches?"





One expedition - three central themes

The Ocean Mapping Expedition, scheduled to take place from 2015 until 2019, will be adopting a multidisciplinary approach based on experience sharing and centred on three main aspects: the scientific, social-educational, and cultural. Each aspect will be reflected in a number of programmes, including the following:

- 20 000 sons sous les mers - 20,000 Sounds Under The Sea: this unprecedented scientific programme, carried out in partnership with the biologist and engineer Michel André, director of the Laboratory of Applied Bioacoustics of the Technical University of Catalonia in Barcelona, will help map sound pollution across the oceans. Although the marine environment is full of natural sounds, a growing number of sounds of human origin are raising general noise levels in the oceans. The extent to which theses sounds impact on and affect the marine environment and marine life has become a question of major interest and concern to both the scientific community and the wider public. Scientists' interest in this field stems from their wish to better understand how the production and perception of these sounds affect the behaviour and physiology of marine organisms, and marine ecology.

"For the first time ever, a ship will be permanently fitted with state-of-the-art sensors permitting acoustic mapping of the oceans on a scale never seen so far", explains Michel André. The programme 20,000 sounds under the sea will record and automatically classify both natural sounds and those of human origin throughout the voyage of Fleur de Passion, and transmit them in real time to researchers at the Laboratory of Applied Bioacoustics (LAB). Simultaneously, these sounds and the underwater images captured by the cameras mounted on the sensors will be made available on the expedition's public website. "The continuous flow of acoustic data will be processed to understand the challenges facing the ocean today, and will help both the scientific community and the public authorities to encourage ocean users to adopt an environmentally responsible approach", adds Michel André.

- *Micromégas*: this additional scientific programme named after Voltaire's tale and which stands for microwastes/megaproblems -, carried out in partnership with the Geneva-based Swiss association *Oceaneye*, will consist in taking regular samples of sea water to determine their content of plastic pollutants. These samples will be used in research by *Oceaneye* and will be analyzed in collaboration with the Central Environmental Laboratory of the Ecole Polytechnique Fédérale de Lausanne (EPFL). "*Fleur de Passion*'s voyage around the world is an exceptional opportunity to obtain samples from the Atlantic, Pacific and Indian oceans", explains Pascal Hagmann, executive director of *Oceaneye*. This will enable us to produce new data, complementing those obtained during our 2011 and 2012 campaigns in the western Mediterranean, and in 2013 and 2014 in the North Atlantic waste patch. The data will serve as basis for new studies of the pollution in these three oceans, enable us to put a figure on pollution levels and to offer evidence of its actual scale". The results of the programme (mapping pollution on the basis of plastic components) will be transmitted to the United Nations Environment Programme (UNEP).
- Jeunes en mer youth at sea: this socio-educational programme will offer places for several dozen adolescents and young adults from the French-speaking region of Switzerland. As part of





social reintegration or life experience projects, either in groups or individually, they will work as ship's boys and be considered an integral part of life on board. Whether for a week, a month or more, all will be joining as full members of the crew of a ship devoted to "working together", to experience the constraints of life aboard ship and, foremost of all, to discover the wide open sea, the people around them and, last but not least, themselves. It is hoped that those with a troubled life history will be able to change course for more promising horizons and to get off to a fresh start once back on firm land.

- Dans le miroir de Magellan – in the mirror of Magellan: this cultural programme will host a dozen or so Swiss and international cartoonists who, following the tradition of travel writing, will each spend one to three weeks telling the story of the expedition and life on board, without forgetting the timeless, universal themes that marked the first circumnavigation of the world and the other great journeys of discovery of the modern era: the irrepressible urge to explore and discover, the spirit of conquest and domination, access to the planet's resources, the sharing of wealth, and human relations both at war and in peace. The first artists to be joining the crew will include the Geneva-based cartoonists Zep, who is also a sponsor of the Fondation, Tom Tirabosco and Matthieu Berthod.

From cartographic to video mapping

While the scientific objective of the expedition is to map the impact of humans on the ocean, at various ports of call video mapping events will be organized in town and city centres to bring the expedition, its different aspects and the spirit behind it to the attention of the wider public, through images and sound.

Fleur de Passion, a ship whose fate turned out to be ... "Pacific"

Flagship of the Foundation and logistic platform of *The Ocean Mapping Expedition*, the sailboat *Fleur de Passion* has a remarkable history. Originally a *Kriegsfischkutter* or KFK (a motor boat belonging to the Germany navy), she was built in 1941 and used for coastal defense, mine laying and as a submarine supply ship. Having survived the Second World War intact, she was handed over to the French navy, which used her for some 30 years before disarming her in the 1970s and selling her to a private individual, who converted her into a rigged vessel and gave her her current name. Until the mid-1990s, *Fleur de Passion* travelled the Mediterranean and Atlantic as part of socio-educational and scientific programmes. In 2002 she was bought by the Geneva-based association *Pacifique*, which completely restored her over a period of six years, from 2003 to 2009, in the hope of extending her now peaceful existence under the aegis of the foundation.

About Fondation Pacifique

Fondation Pacifique is a Swiss, Geneva-based non-profit organization formally recognized as being of public utility. Since its establishment in 2007, it has been developing, organizing and carrying out theme-based expeditions combining a blend of scientific research programmes, and cultural, socio-educational and environmental awareness projects on its sailing ship *Fleur de Passion*, a 33-metre ketch. Its ambition is to contribute to a better understanding of human impact on the ocean, and to prompt us to think about man's place on "planet ocean" by enabling anyone with an interest to enlist as a member of the crew and take part in the expedition. Expeditions Fondation Pacifique - *The Ocean Mapping Expedition*





carried out on *Fleur de Passion* are marked by a multidisciplinary approach based on experience sharing, and are accompanied by projects designed to communicate with the wider public, especially at ports of call. Its most important project so far, *The Ocean Mapping Expedition*, a journey around the world following in the wake of Ferdinand Magellan, which is scheduled to take four years (2015-2019), will be an exceptional, one-of-a-kind opportunity to observe and map the state of the ocean today, echoing the spirit in which the Portuguese adventurer and his crew embarked on their journey almost 500 years ago.

Fondation Pacifique

9bis, rue de Veyrier, 1227 Carouge, Suisse www.fondationpacifique.ch www.omexpedition.ch Media contact : samuel@pacifique.ch - +41 76 563 65 43

20,000 Sounds Under The Sea In partnership with



Laboratory of Bioacoustics Applications (LAB)
of the Polytechnic University of Cataluña, Barcelona
www.lab.upc.es
Media contact:
michel.andre@upc.edu - +34 93 896 7299/ 7200

Micromégas Program

In partnership with



Association Oceaneye
www.oceaneye.eu
Media contact:
pascal.hagmann@oceaneye.ch - +41 78 637 16 73