



## **Press Release – 12/02/2016**

**Unseen pollution. Unseen plastics. Unseen toxics. Unseen women.**

Fourteen women from 10 different countries are coming together for the first time on board a sailing expedition that plans to shed new light on the link between women's health and plastic in the world's oceans.

This sailing expedition to the Caribbean sea will be the **first time** that these waters have been sampled for plastics and toxic pollution. The data will be provided to organisations, including the UN, working in the region to reduce plastics and toxic pollution.

The crew is made up of women from a range of backgrounds including exploration, sport, science, technology, enterprise and the arts. They will conduct a series of talks, workshops and beach cleans, engaging women in these essential, under-researched and under-talked about issues. At the same time, they will be exploring alternatives to toxics, inspiring entrepreneurs and industry to create innovations that are 'benign by design', whilst also campaigning for early diagnostics and a proactive approach to health monitoring.

Increasing concern about a potential link between microplastics in the marine environment have been growing since 2013, with [evidence that microplastics may be able to transfer toxic pollutants and chemicals](#) and enter the food chain.

Message from eXXpedition founder Emily Penn:

*"We've spent years sailing around the world on Sea Dragon collecting samples of plastic pollution from the gyres. The more I*

*learnt from the scientists on board, the more unanswered questions I realised there were, especially around the issue of toxic accumulation. I was alarmed by the fact that we were finding high levels of persistent organic pollutants in our oceans, the effects they could potentially have on our bodies, and most horrified about the fact that this issue is rarely talked about - so eXXpedition was born. It's all about making the unseen seen and we've kicked the boys off to have a look; this time around the Caribbean."*

eXXpedition is a series of all-female voyages with a long-term engagement programme that explores the unseen chemicals inside ourselves and inside our seas. On the 20th February 2016, the first leg of the expedition takes 14 women on Pangaea Exploration's 72 ft research sailing vessel Sea Dragon from Trinidad to St Lucia, via Barbados. The second leg of this adventure takes another 14 women from St Lucia to Antigua, via Dominica. The aim of the voyage is to raise awareness of toxic pollution and its impacts on public health.

Scientists estimate that **everyone alive today carries at least 700 contaminants** within our bodies, most of which have not been well studied. There is an evidence base building that this **exposure to chemicals is impacting health, and female specific disease research has a low public profile in the media**, whilst there is also an imbalance in research funding directed towards gender specific disease.

**All women on the crew have had their blood serum sampled for contamination.** This is known as a **body burden analysis**, to assess personal exposure to toxic substances. This analysis will be conducted by Dr. Anna Kärrman, MTM Research Centre, Örebro University, forming part of a database collected for the Safe Planet campaign, a United Nations Project. As the women sail aboard Sea Dragon **they will sample the ocean for plastics and toxics.** Plastics contaminating the oceans will be sampled according to protocols developed by the 5 Gyres Institute. Water samples will be collected and analysed for the presence of toxics and microplastics. Microplastics analysis will be conducted by Professor Jenna Jambeck, University of Georgia. Water toxics will

be conducted by Dr. Anna Kärrman, MTM Research Centre, Örebro University. **This data will contribute to growing open source global databases documenting plastic and toxic pollution and their impacts on biodiversity and ocean health globally.**

**eXXpedition will be setting sail from Trinidad on the 20th February 2016, and will sail to St Lucia via Barbados. The second leg will depart from St Lucia on the 5th March 2016 and will sail to Antigua via Dominica.**

<http://www.exxpedition.com>

Our partners include: Pangaea Explorations, [Mission Blue](#), [Ocean elders](#), CoppaFeel!, 5 Gyres Institute, [Safe Planet](#), [Indigo V Expeditions](#), ONCA, Girls in Tech, [Biodiversity Research Institute](#), [University of Georgia](#), [Marine Debris Tracker](#).

Sponsors: GoPro, Aquapac, Odina Surf, Klean Kanteen, Chico Bag, Patagonia, MarkoFoam, BAM

**For more information and full crewmember biographies, contact Emily Bell via [embell@panexplore.com](mailto:embell@panexplore.com)**

**About Pangaea Explorations – <http://www.panexplore.com>**

[Pangaea Exploration](#) is a marine conservation organisation, sailing the world to advance exploration, education, and conservation. Pangaea Exploration operates a 72 ft sailing vessel, [Sea Dragon](#), and coordinates expeditions to carry out scientific research and filmmaking around the world. They have spent the past 5 years sailing 100,000 nm, researching plastic pollution, ocean acidification and coral health. They provide a platform for scientists to collect the necessary samples to conserve the marine ecosystems.

---

Ends