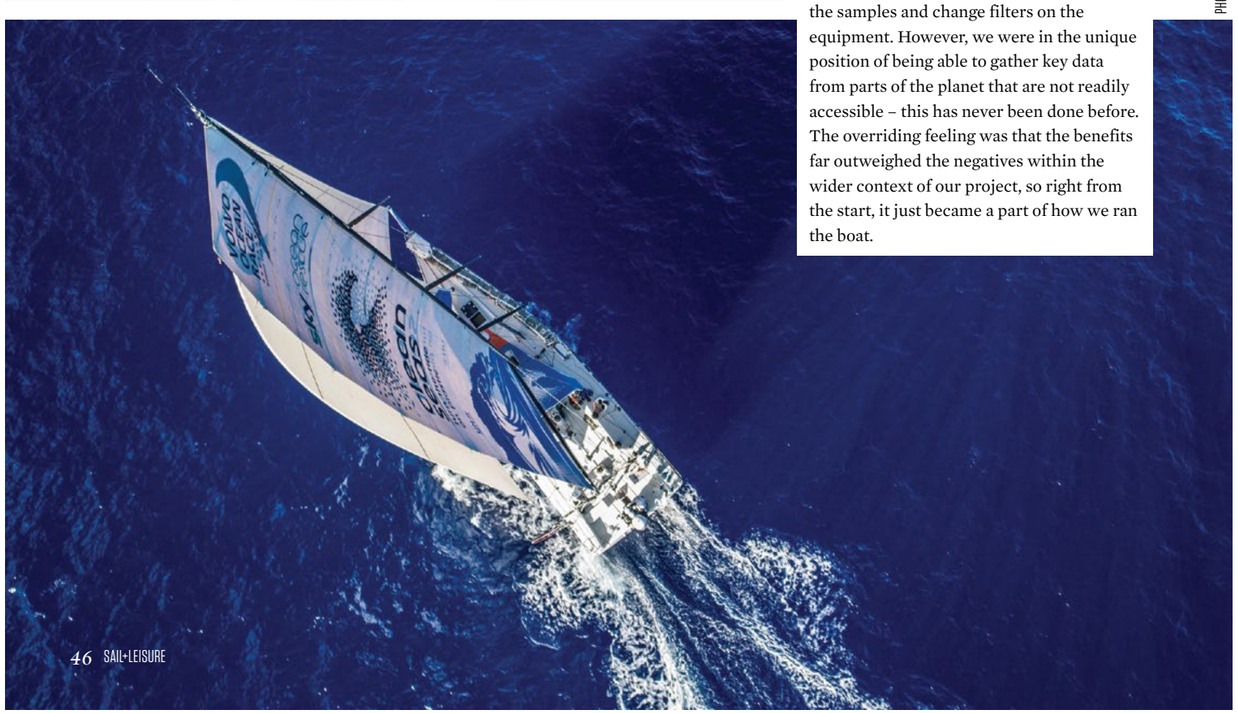
THE BIGGER PICTURE

To establish the extent of microplastic pollution in the ocean, Volvo Ocean Race Sustainability partnered with the UN Environment's CleanSeas initiative to conduct scientific research across the oceans traversed during the race. The irrepressible Dee Caffari was tasked with taking the helm for sustainability. *By Wendy Maritz*

When accomplished British sailor Dee Caffari steered her *Turn the Tide on Plastic* Volvo 65 away from the dock in Alicante for the start of the Volvo Ocean Race on 22 October last year, she did so with one of the least experienced and youngest crews in the history of the race. The boat was also compensated for additional weight carried with its scientific equipment, and during the course of the race, all of the seven competing boats deployed four drifter buoys that would ultimately transmit data on currents and drift patterns. But Dee knew that what she and her team were embarking on was groundbreaking, and extremely necessary for the future health of our oceans. She spoke to *Sail+Leisure* about the campaign's sustainability message, youth-focused team, and the considerable highs and lows of sailing in this all-encompassing and gruelling eight-month event.

Sail+Leisure: How did you feel when you were approached to lead the *Turn the Tide on Plastic* campaign?

Dee Caffari: It was a huge privilege because it was a role with a great deal of responsibility. On the water I was captain and ultimately had final say on strategy, tactics, crew management and boat optimisation. Off the water, there were business responsibilities to sponsors and stakeholders and an important environmental message to deliver. I was excited when the call came but also very aware that it was not going to be an easy task and would require total commitment.



PHOTOGRAPHY: Volvo Ocean Race/Pedro Martinez, Sam Greenfield, Brian Carlin, Ainhoa Sanchez, Jesus Renedo

S+L: Your mandate included selecting a young, 50:50 male-to-female international crew. And you didn't have much time...

DC: Sailing trials with potential crew candidates were carried out in just two months (July and August 2017). There is an enormous amount of sailing talent out there, but we were competing against teams that had started months, if not years, prior to ours, so I needed to select individuals that I believed would be able to progress at a pace and bond as a team quickly. I looked for good communicators who had the ability to adapt to a range of circumstances. Tenacity and stamina were essential as crew members needed the ability to keep going despite extreme fatigue or bad conditions. The crew I selected were predominantly made up of sailors under the age of 30, the majority of whom had not sailed around the world before and had no previous Volvo Ocean Race experience. Ten nationalities were represented.

S+L: Did you feel that performing scientific research would detract from the business of racing?

DC: Initially we had concerns about the impact it would have on our competitiveness. We would be carrying extra weight and would have to take time out to collect the samples and change filters on the equipment. However, we were in the unique position of being able to gather key data from parts of the planet that are not readily accessible – this has never been done before. The overriding feeling was that the benefits far outweighed the negatives within the wider context of our project, so right from the start, it just became a part of how we ran the boat.

S+L: Tell us more about this process.

DC: The filters were changed every two days and these were dated, time-stamped and kept in sealed packets. They were subsequently collected by scientists from GEOMAR [Helmholtz Centre for Ocean Research in Kiel] at each stopover so that the data could be collated. At each Ocean Summit the up-to-date data was presented.

S+L: And the purpose of the drifter buoys?

DC: The drifter buoys were supplied by the NOAA [National Oceanic and Atmospheric Administration] and the boats in the race each deployed four buoys in areas where more ocean data is required. They are activated by water and transmit data on ocean currents, temperatures and wave heights for up to 300 days, which helps the NOAA with more accurate weather forecasting. They are now collaborating with the scientists at GEOMAR to examine drift patterns in an effort to understand how microplastics that have been found in the depths of the Southern Ocean are getting there. Understanding how the plastics are reaching these remote areas allows us to figure out where they are coming from in the first place so we can help action change.

S+L: After encountering visible plastic pollution that hindered your sailing during the race, you and your crew must have felt these endeavours were even more worthwhile.

DC: It is always shocking to see plastic pollution in the oceans or on beaches but when you encounter it as far away from human civilisation as we did in the Southern Ocean, it really brings home how far-reaching the problem is. We see macroplastics in most places but now with the data we have collated we know that there are microplastics *everywhere*. The feelings we had as sailors seeing plastic in these remote areas ranged from despair and shame, that collectively we are all causing such damage, through to determination to be a force that drives change. I hope that, in some way, our campaign has highlighted the issue and encouraged people to make some small changes in their lives.

S+L: How did your young crew fare?

DC: We had our fair share of disappointments at the finish line. Some of the legs were incredibly tight and hard-fought by the entire fleet and there was rarely a time when *Turn the Tide on Plastic* wasn't in the mix and a real threat to our rivals. Probably the most memorable leg finish was the one into Auckland where we went from a podium finish to fifth in a devastating end to an incredible leg. Even I was lost for words when we reached the dock. The crew had sailed incredibly over the preceding three weeks and it was a cruel and swift defeat. But, over the course of the race, I saw gains in their resilience and ability to lift each other in tough times. Technically, there were clear improvements in their sailing techniques. It was a huge learning curve for all of us, particularly those that had not competed in an offshore environment previously. They were a special team and I am very proud of them.

S+L: Reflecting on the race, what were the biggest lessons, the highs and the lows?

DC: I wanted to see ongoing improvement on each leg and believe we did achieve this. We fought hard for everything. But, you can't for one minute take for granted that you are ahead of the game because everything can change in an instant. Which leads me to the greatest low of this race. Acknowledging that it is a dangerous environment in which we have chosen to compete that can ultimately result in the loss of life. Our friend John Fisher will be forever missed.

The highs for me were seeing the faces of the crew at key moments... rounding Cape Horn or crossing the Equator for the first time. And on the final day of the last race, the change in our overall positioning was like we had won the race.

S+L: What set this race apart from your other sailing experiences?

DC: This was the perfect project for me. It was the culmination of my entire career, bringing together all the skills I have learnt over the last 20 years. I was able to draw on my experiences as a teacher, my solo sailing, my crewed sailing, my previous roles in a leadership position and my time on the last edition of the race. It also enabled me to be vocal about environmental issues and ocean health from a global platform and to make a real difference in the war against plastics. **S+L**