biovStion

Case Study: Fibre Fragmentation from Textiles

Don't Feed the Fish: Crowdfunded research to identify triggers of microfibre shedding from textiles

Why?

Microfibres released from clothes during both the manufacturing and the consumer wash and wear stages, have been found to have detrimental environmental effects.

Although by 2016 there were increasing amounts of research from a marine biology perspective, the lack of textile derived research made it impossible to see how textile engineering changes could be made to influence reductions at source.

What?

- The #DontFeedTheFish Campaign was launched, to raise awareness at the industry and consumer levels
- Crowdfunding enabled the finance generation required for the the cost of laboratory-based, controlled research

How?

- Industry-based support spearheaded by the European Outdoor Group, and key brands including The North Face, Mammut and Finisterre
- A hypothesis created substantiated by desk-based research
- Work looked to identify triggers of fibre fragmentation from a sample portfolio of 40⁺ polyester filament yarn samples provided directly from suppliers



The Outcome

Industry interest generated from #DontFeedTheFish spear headed the formation of <u>The Microfibre Consortium</u>.

Early Research Findings

- UV was found to be a significant trigger on lowering tenacity in polyester
- After 72 hours UV exposure a 42% tenacity reduction was found
- Topic awareness grew through media attention including but not exclusive to Sky News, Ecotextile News and BBC Radio 4 Costing the Earth

" The pioneering research performed in the #DontFeedTheFish campaign plays an important role in our industry's collaborative endeavor to grasp the Microfibre issue in its full complexity and develop effective solutions."

Peter Hollenstein, CR-Manager, Mammut

