

A DRIVE FOR FRESH-WATER CONSERVATION

The dedicated team from explore4knowledge (E4K) are at it again, promoting and raising awareness around water conservation through adventure expeditions.

Take off your left shoe. Place your foot in the stream. Close your eyes. Now, think back to your primary school days. Imagine you are running through a field, collecting bugs, catching tadpoles and insects, watching ants walk on a blade of grass, the wind dancing through the trees. Now, pick up a miniSASS net and let's start assessing the stream.

This is how explore4knowledge founder and award-winning conservationist, John Lucas, briefed his team at the recent Water Action Weekend excursion in the Limietberg Mountains in the Western Cape.

The mountainous regions of South Africa represent eight per cent of our total land mass and produce more than 50 per cent of the country's fresh water. John, therefore, considers the remote rocky heights as some of the best spots to promote the importance of fresh-water conservation through E4K's syllabus-based, hands-on learning experience.

"We kicked off the weekend near the ocean and made our way upstream, working across three river catchment areas alongside our partners and sponsors," says John. A convoy of Land Rover Defender vehicles (supplied by Jaguar Land Rover N1 City) departed for the Liesbeek River where they met with World Wildlife Fund (WWF) South Africa interns and Chris Kastern, expedition member from the WWF SASSI programme.

Situated in the oldest urbanised river valley in South Africa, the 9km stretch of the Liesbeek River finds its origin on the slopes of Table Mountain. Originally named Amstel or Versse River after a small river in The Netherlands, members of the Dutch East India Company

were granted land to farm along the river in 1657. Today, much has changed from its original state with agriculture giving way to industry.

Kastern gave an impressive presentation about the effect humans are having on marine ecosystems. For example, did you know that nearly 60 per cent of the critically endangered loggerhead sea turtles consume plastic off the coast of KwaZulu-Natal, the greatest portion of pollution in the ocean is submerged, and litter has increased threefold since Cape Town's population boom.

Industries have also had a dramatic impact on marine life. Records indicate that over 82 000 tons of oil have been discharged into South Africa's coastal waters since 1987. To put things in perspective, one litre of oil can contaminate one million litres of fresh water.

From the Liesbeek River, the convoy navigated through the winelands of Stellenbosch to Eerste River. The miniSASS nets were handed out and the students and attendees donned their gumboots – it was time to get into the water and assess the river's health.

In half an hour, the team were fed some scary statistics, one being that land-based pollution accounts for over 80 per cent of marine pollution, and more than 800 tons of plastic end up in the world's oceans annually. Walking through the streams of the Eerste River, you can see why. The E4K team removed six bags of rubbish along the 100m stretch of river they had access to.

Once completed, the group packed their gear and headed to Tweede Tol Campsite, managed by CapeNature within the Limietberg Nature Reserve. Chris entertained everyone around the campfire that night with a proper braai demonstration and an informative session on sustainable seafood and the importance of the WWF-SASSI initiative.

The next morning, the Defender's bonnet became a makeshift classroom desk for a map of the Olifants River catchment area. As the crew pulled the nets through the water and inspected the trays for insects, it evoked a child-like fascination within them. "Time seemed to slow down and we concentrated on the small, seemingly insignificant building



blocks of life, without cellphones buzzing or newsfeed beeping," John says.

The conservationist has spent three years working in this Olifants River area. He highlights the importance and ecological value of this area to South Africa. Not only is it seen as the final frontier in many instances, and described as the last pristine and free-flowing river in the country, but it also hosts the highest diversity of fresh-water fish south of the Zambezi River.

Most of the fish species are critically endangered and eight of them are currently facing extinction. The team discussed the various land use practices in the Olifants catchment as well as John's work around the analysis of metal concentrations within water and sediments along the river's course.

The crew got to meet Deon Rossouw, reserve manager of the Limietberg Nature Reserve for CapeNature. He spent the afternoon talking about the reserve, cutting fire breaks, removing alien vegetation, working with private landowners and establishing stewardship agreements.

That evening, the crew huddled closely around the campfire, as it became evident that summer days had given way to winter nights. However, that didn't dampen spirits as discussions around the potjie

pot ranged from the pending water crisis, human overpopulation, rhino poaching, wild dog tracking and the need for environmental education.

As the flames turned the wood to coals and the last rounds of coffee were poured, John discussed how the Water Action Weekend is part of a larger Water Action Campaign that is being designed, with one of his major partners and sponsors, to annually manage workshops and camps for schoolchildren.

This is aimed at promoting holistic education, social upliftment and skills development among the youth, while living up to the explore4knowledge ethos of promoting education through adventure.

John said these educational programmes would be based around providing young people with the ability to not only partake in their activities but to also achieve something at the end of each year. "The programme is aimed at being sustainable and can be used in various socio-economic settings, though this is in its funding phase and we hope to have received enough funding to manage phase one in 2017."

Feel free to contact John Lucas and his team via e-mail or on social media, info@explore4knowledge.com or @explore4knowledge.

