

Ozedax Adventure 2015

Club members Cuddie Cudmore, Jane Axon and Bill Marmion spent a long night on a cray boat, pounding into the southern swells for 10 hours to pull three special pots in very deep water at the edge of the continental shelf south of Kangaroo Island.

Guided by the GPS, they arrived just before dawn at the drop point with a sense of despair as the sea was empty. But as the sun rose the first float was seen to general relief and the pots were pulled, the cow bones in one pot were seen to have a red colouration which has been identified as the first discovery in the Southern Ocean of the bone eating worm Ozedax. Exhausted but proud, our volunteers started on the long trek back to the SA Museum to hand the unique specimens into the welcoming arms of Professor Steve Donnellan. Greg Rouse, formerly SAM's curator of Marine Invertebrates, but now a Professor at Scripps in California was the first to describe and name the Ozedax worms. They were the subject of a well attended Sprigg Lecture by Greg last year and it was he that initiated this search and devised the traps that might recover them.

They are a remarkable example of evolution for to live on whale bones at great depth, they must reliably find a mate and another set of bones for their young to start life on. The sexes are very different, the females are often red and large and send roots down into the bone for nourishment, the males however are microscopic and plentifully reside in her reproductive tract. To ensure continuity, the female pumps out huge numbers of eggs, fertilised by the males on the way out to be dispersed by currents. The huge numbers offset the low probability of success and miraculously create a viable worldwide population. Greg was delighted with the discovery and the knowledge that it brought.

None of this could have been achieved without the cooperation, skills and generosity of "Wally" Walden of Kangaroo Island, the very experienced owner of the cray boat. It was Committee Member Gaye Fisher who made the connection and did a lot of the running around with the bones and more.

It is a great compliment to our membership that, in the interests of science and adventure, there are those of you who are willing to drop everything and, at some personal cost, embark on pursuits such as this. We thank those members for their support of the SA Museum research effort.

Antony Simpson

Club President, 8 February 2016

