My Earth science educator story – Richard Edmonds What I did, why I did it and what happened



Richard, in the course of preparing an ichthyosaur.

It all started on Charmouth beach aged 11 in 1973; a chance spot of a perfect pyrite ammonite, and the rest is history! As a teenager, I spent every weekend on the beach and exploring the depths of the Undercliffs west of Lyme Regis in Dorset. I had a brilliantly supportive geography teacher who also helped me through an A level correspondence course in geology. The results were good enough, just, to get into the University of Hull to read geology, which I really enjoyed as the course was broad, practical and with a real focus on field work. I also made a lot of life-long friends.

I graduated with a 2.1 BSc (Hons) in 1983, spent the summer curating the ichthyosaur collection in the Natural History Museum and then had a year off, collecting fossils along the Yorkshire coast and climbing mountains in the Lake District and Scotland. I really wanted to live in Scotland and after my obligatory spell mud logging in the North Sea, I volunteered with the National Trust for Scotland on the isle of Arran, battling with rhododendron and fixing footpaths. But then, in late 1985 an advert appeared in the paper; for the warden of the newly built Charmouth Heritage Coast Centre and I got it!

Back in Dorset I found that I had a real talent for communicating fossils and geology to people. It is really special to be able to take people and especially young kids, down to Black Ven to find fossils on the same piece of beach where I found that first little pyrite ammonite so many years before. And that is because the coast is so dynamic; the cliffs fall down, the sea washes away the mud and leaves the fossils to be collected. I worked hard in the summer, six or seven days a week, and that left lots of flexible time to get out on the beaches in the winter storms to collect fossils. As the warden, it is really important to 'live the coast' as it adds depth and authenticity to the role. The problem with fossil collecting is that the best opportunities are completely unpredictable – we don't know when the next storm or landslide will take place but when it does, you should want to be out there. And that is why some of the collectors are professional – it gives them that flexibility to respond to the events that uncover the fossils.

Eleven years of talking fossils was enough, however, but as luck would have it, the post of Jurassic Coast Project Officer with Dorset County Council came up, and I got that too! This was the forerunner to obtaining World Heritage Site status for the Dorset and East Devon coast and, although I did not lead on that work, a lot of what I did set the ground for that to happen. Most notable was the West Dorset fossil collecting code of conduct, developed with English Nature (as it was then), and with the museums, academic researchers, collectors and landowners. The code is simple and is based on the obvious and demonstrable role that collectors play in rescuing the fossils, some of which are of huge scientific importance. The code restricts digging in situ in the cliffs and requires collectors to record their important finds and to offer them to UK accredited museums should they be sold or donated. No one else is going to rescue the fossils

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and the cost of providing that collecting effort or, indeed, of attempting to police the beaches, would be far more than simply purchasing the best finds, but with no guarantee that they would actually be recovered. There is a lot of collecting effort and yet the really important finds are made just in time, and sometimes too late because the fossils cannot be found until they are exposed by erosion.

World Heritage Site status was awarded to the coast in 2001 and my job evolved into that of Earth Science Manager within a team working on education, tourism, the arts and economic regeneration. My role was conservation and management but it also involved helping everyone else where they required geological input to their work. I developed a pragmatic approach; the coast is maintained by erosion but that erosion threatens people, property and infrastructure and the World Heritage designation came with those conflicts already in place. A pragmatic approach allows for collaborative working based on mutual respect, leading to reasonable solutions.

As a team we did some great things, but slowly the work became a mountain of emails and a treadmill of endless meetings. More importantly, the single greatest opportunity for the coast, and the one central to its successful management, the acquisition and display of the astounding fossils that have been found, and will

continue to be found as long as people are allowed to collect, was ignored in pursuit of other capital projects that perhaps offered the easiest and quickest wins. It became intolerable and so I quit in July 2015.

I am now a freelance geologist and Chief Scientist to Jurassica, an astounding project that aims to cap a quarry on Portland Bill in Dorset, 'recreate' the Jurassic world, and acquire and display the fossils that have been retained by local collectors with the ambition, and expectation, of seeing a World Class fossil exhibit on this World Heritage Site. I am also working on projects that focus on the interpretation of the coast with organisations such as the National Trust, and I am in the process of setting up a small business in leading guided walks and short breaks. I earn about a third of the money in a quarter of the time but it is all work that I want to do, enjoy doing and which is actually worthwhile. Now I have the time to go out and collect fossils in the very best conditions, of storms, rain and landslides and also the time to prepare what I find. It is heaven! I might even sell some in the future in order to fund my retirement.

Richard Edmonds, aged: 53, Dorset, England, February 2016, jurassicrichard @gmail.com



Richard (centre) with *Goniopholis kiplingii*, a new species of crocodile from Durlston Bay, Swanage with Steve Etches (right) and Chris Moore (left) who helped with the excavation while Chris and his son Alex undertook the preparation because they are the best. Donated to the Dorset County Museum.