

# Incredible stories from Deep Time

Exceptional finds from the world of the “Kimmeridgian” Late Jurassic Era

EMSTA's 2022 Prestige Seminar focusses on the Kimmeridgian World of the Jurassic coast and the evolution of marine fossils that have been discovered there. To take us on that journey we are fortunate to have Dr Steve Etches MBE whose Etches Collection is considered to be the finest single collection of Late Jurassic age fossils ever assembled in Britain. With his colleague and fellow fossil hunter Richard Edwards, Steve will walk us along the Jurassic coast east and west of Kimmeridge Bay and explain what, when and how the fossils came to be so abundant at Kimmeridge and then significance of the many species that they have discovered in their lifetime. Professor John Marshall of the National Oceanographic centre of Southampton University will address the what and how of fossil formation and the evolution of rock strata that accommodated the proliferation of fossils at Kimmeridge.

It seems remarkable that a small coastal village in Dorset with a population of no more than 110 has become internationally renowned for its name. EMSTA's 2022 Prestige Seminar takes us back 150million years to the “Kimmeridgian Stage” of the late Jurassic era that takes its name from the “Kimmeridge Clay” first described in this area.

Kimmeridge Bay is a gateway in time, set in the dramatic and historic Jurassic World Heritage Site that stretches from Exmouth in Devon to Studland in Dorset.



It features some of the most important geology anywhere along the Jurassic Coastline. A rich variety of rock formations, including the limestone ledges that extend out into the bay, it stirs a tremendous fascination amongst scientists, historians and sightseers alike.

The Kimmeridgian World of the late Jurassic period was one of warm seas deep enough to be undisturbed by surface storms, yet shallow enough to be home to a teeming host of marine life. From ancient fish, squid, coiled ammonites, sea urchins and turtles to long necked reptiles like the Plesiosaur, the dolphin like Ichthyosaur and, at the top of the food chain, the ferocious Pliosaurus. In the air above, vertebrates, like the Pterosaurs and first birds had already taken flight and further away on the land masses, great plant eating dinosaurs were roaming the earth feeding on lush ferns and palm-like plants and being stalked by smaller but vicious carnivores, the forerunners of the ultimate dinosaur villain – The Tyrannosaurus Rex.

It was a time when Europe was an archipelago of islands in a shallow tropical sea significantly closer to the equator than it is today. The terrestrial formations and their fossil treasures, Kimmeridgian in age, have been found all over the world from Germany, France, Switzerland, Spain, Norway to India and as far as New Zealand.

A leading expert in the palaeontology of the Kimmeridgian stage is Dr Steve Etches MBE. EMSTA is Pleased have to persuaded Dr Etches to speak about his passion and unique discoveries in a lifetime of fossil hunting on the Jurassic Coast. A plumber by trade, Dr Etches has pursued a self-taught passion as a fossil collector and has realised an ambition in creating a Modern museum & centre for learning in the village of Kimmeridge, on the Jurassic Coast in Dorset. housing his amazing collection of marine fossils that tell the story of life & death in Dorset's Jurassic seas.





The Etches Collection is the finest single collection of Late Jurassic age fossils ever assembled in Britain. Many of the species in this extraordinary collection of 2,500 fossils from the Kimmeridge Clay are new to science and are of great palaeontological importance.

The exceptional preservation and preparation of the fossils provides a unique and exciting insight into the lives of these marine creatures from the Late Jurassic Kimmeridgian period, how they bred, lived and died.

A virtual aquarium and interactive exhibition brings to life the incredible stories from deep time (152-157 million years ago) and conveys the fascination and curiosity of the collector, Steve Etches.

#### DR STEVE ETCHES MBE:



The Etches Collection is the result of over 30 years dedicated and skilled discovery, collection, preparation and research of Kimmeridgian fossils by palaeontologist, Dr Steve Etches MBE.

A plumber by profession, Steve's achievements and contribution to the world of palaeontology have been recognised with awards from The Palaeontological Association (The Mary Anning Prize, 1993 and 2005), The Geological Society of London (the R.H. Worth Prize, 1994), The Geologists' Association (The Halstead Medal) and an honorary doctorate from the University of Southampton in 2017. In 2014, Steve was awarded an MBE for services to Palaeontology, the first time an MBE has been awarded for this category.

#### A NATIONAL TREASURE:

The Etches Collection receives great patronage from UK and international palaeontologists, geologists and scientists in recognition of the superior status of both the collection and its collector. It has also been the subject of great wonderment and excitement for many of the children who have come to see and learn about Steve's fossils! The collection was housed in Steve's converted garage. It had always been Steve's hope that the collection would be available to the public, housed together in the area that the fossils were found. This dream has now been realised. In 2014 Steve gifted his invaluable collection to the nation and a local landowner donated land in Kimmeridge. Planning permission and funding was secured to create a world class, accredited museum to house the collection, so that the fossils can be enjoyed and used as a basis for learning and research by all. In 2021 the museum received the accolade of Designated Status.



#### A BRAND-NEW IMMERSIVE MUSEUM:



Visitors enter the Exhibition Gallery and are taken on an immersive journey through life underwater 150 million years ago. Using CGI projected on the ceiling and wall panels, the space is transformed into an aquarium of the past in the blink of an eye. Objects that once seemed static will be brought to life and represented as if they were modern day animals.

Directly beneath the ceiling, the fossil specimens are carefully presented and interpreted to bring to life their individual stories.



Visitors leave the museum recognising that the fossils are tangible evidence of living beings and that there are a wealth of untold stories to explore and discover as well as a lot to be learnt from this former life on earth.

#### AN ONGOING VOYAGE OF DISCOVERY:

The pursuit of making new discoveries, revealing more stories about the world of the Kimmeridgian is a constant for Steve Etches.

That is why the museum space is not only a home for his collection but also a dynamic research centre and workspace that enables Steve and his team to continue his work of discovery, preparation, analysis and curation.

The centre offers an excellent visitor attraction and superb facility for community, educational and corporate groups. It is a resource for education and knowledge, a centre of excellence and facility for the local community, an ideal space for inspiring events, seminars and talks, and a must on the itinerary of every tourist and visitor to the area. For this reason EMSTA is delighted to have Dr Etches on board to promote his discoveries, collection and lifetime passion as a fossil collector for our 2022 Prestige Seminar.