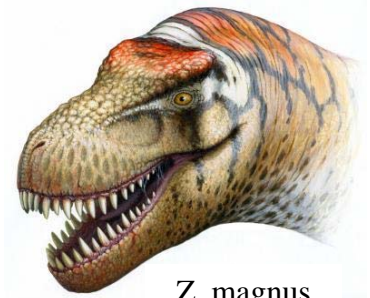


# Penzance B.S.A.C.

## Conservation Officer's Report,

### May 2011

Scientists have identified a new species of gigantic theropod dinosaur, a close relative of T. rex, from fossil skull and jaw bones discovered in China. The newly named dinosaur species *Zhuchengtyrannus magnus*, probably measured about 11 metres long, stood about 4 metres tall, and weighed close to 6 tonnes, comparable in size and scale to T. rex, this new dinosaur is one of the largest carnivorous theropod dinosaurs ever identified by Scientists. The tyrannosaurines, the group including T. rex and its close relatives, were huge carnivores characterised by small arms, two-fingered hands, and large powerful jaws that could have delivered a powerful bone-crushing bite. They were likely both predators and scavengers. A new study louses up a



Z. magnus



This 44-million-year-old louse fossil (left) discovered in 2004, helped researchers anchor the lineage of lice that today parasitize birds (right)

popular theory of animal evolution and opens up the possibility that dinosaurs were early—perhaps even first—animal hosts of lice. The study uses fossils and molecular data to track the evolution of lice and their hosts. It offers strong evidence, the researchers say, that the ancestors of lice that today feed on birds and mammals began to diversify before a mass extinction event killed off the dinosaurs about 65 million years ago. The study lends support to the idea that major groups of birds and mammals were around before the dinosaurs went extinct and a principal investigator on the study said “If the lice were around, we know their hosts were probably around”.

King Crabs are invading Antarctica. It's like a scene out of a sci-fi movie, as thousands, possibly millions, of King Crabs march through icy, deep-sea waters and up the Antarctic slope. They are coming from the deep, somewhere between 6,000 and 9,000 feet down. These shell crushing crabs haven't been in Antarctica for hundreds or thousands, if not millions, of years for they have trouble regulating magnesium ions in their body fluids and get kind of drunk at low temperatures. But something has changed, and these crustaceans are poised to move by the droves up the slope onto the shelf that surrounds Antarctica. Marine researchers are sounding alarms because the vulnerable ecosystem could be wiped out.



The north coast pod of Bottlenose Dolphins were not seen during April, but the south coast pod was seen heading east from St. Anthony Head to Polhawn Cove on the 9th and 10th of the month. A single Harbour Porpoise was seen off Gwennap Head on the 15th and 8 were seen in the tide race around The Runnelstone on the 16th. Harbour Porpoises do not usually breach, but sometime when chasing fish at high speed they do, and three were seen breaching that day. There were 3 reports of Common Dolphins, 2 of which were probably the same pod of about 30 seen off Gwennap Head and The Minack on the 14th and 15th of the month. The other report was of a pod of about 16 off Gwennap Head on the 26th. There were 4 reports of Basking Sharks, singles off The Brisons, Logan Rock and Porthgwarra, on 13th, 25th and 28th and the other sighting was of three young ones, no more than 12 ft long, off Gribben Head on the 19th