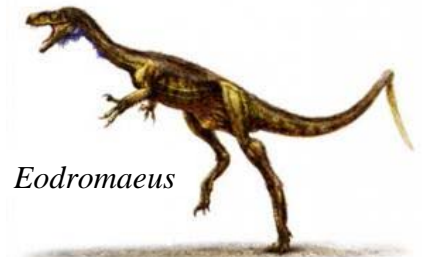


Penzance B.S.A.C. Conservation Officer's Report March 2011

A team of paleontologists and geologists have discovered near-complete skeletons of a lanky dinosaur that roamed South America in search of prey at the age when dinosaurs began approximately 230 million years ago. It had a long neck and tail and weighed only 10 to 15 pounds, and has been named *Eodromaeus*, the "Dawn runner" It's the earliest of the meat eaters that would ultimately culminate in Tyrannosaurus rex near the end of the dinosaur era. Two individual skeletons were found side by side in an area which was once a rift valley, and sediments covered the skeletons over a period of 5 million years, eventually accumulating a thickness of more than 2000 feet. Local volcanoes in the Andes Mountains occasionally spewed ash into the valley, allowing the research team to use radioactive elements in the ash layers to accurately determine the age of the sediments



Eodromaeus

Aerospace engineering students at a Dutch University have developed a micro-aircraft inspired by the Swift, which they have named The Roboswift. The small quiet aircraft is equipped with observation cameras that can be used in the future to study birds or to conduct surveillance of groups of people or vehicles. It is characterised by the continuously variable shape of the wings, known as 'morphing wings' which are modelled on the wings of a swift. These wings make the aircraft, like its living model, very manoeuvrable and efficient. Wind tunnel tests have shown that it can come remarkably close to the exceptional flying ability of the swift The wingspan of the Roboswift is about 50 cm., and weight less than 100 gms., so is a good deal smaller than



Roboswift

standard model aircraft. To gain height it is powered by a very quiet electric motor with a propeller, and in gliding flight the motor is turned off and the propeller folds up so the aircraft can fly even more quietly and save energy. The silhouette is similar to that of the swift, which make it less noticeable than other observation aircraft. The Dutch National Police Services Agency is continually looking for innovations that are applicable to police work, and sees possibilities in the Roboswift, It is therefore supporting the project financially.

Two Bream Trawlers were prosecuted early this year for fishing inside the 3 mile limit off Sussex. During inspections both vessels were found to have substantial quantities of Bream aboard. The Black Bream the vessels were targeting are particularly susceptible to over exploitation and exhibit some very interesting reproductive behaviour. In the spring many thousands of fish migrate to the shallow waters off the Sussex shore to spawn. Adult male Bream excavate 'nests', depressions in the gravel in an attempt to attract awaiting shoals of females: a female will then lay her eggs in the most 'attractive' nest. Certain areas of the coast are covered in bream nests, so much so that the seabed can be likened to the craters seen on the moon. The male bream, with the nest of eggs, will spend weeks attending to the clutch until they finally hatch. Interestingly for the first few years of their life young black bream are neither male nor female, but at around 20 cm, (2-3 years) they become male, then years later they become female! Given the vulnerability of this species during spawning it is important that harmful fishing practices are restricted by fisheries regulations which are vigorously upheld.



A pod of about 8 Bottlenose Dolphins was seen off Pentire Head Newquay on the 6th of February and a pod of 6 was seen off Mutton Cove on the 8th, probably the same pod moving west along the coast. There was a sighting of a Risso's Dolphin riding a huge wave at The Runnelstone in big seas on the 15th and a pod of Rissos was seen off Porthgwarra the same day. A pod of Risso's Dolphins was also seen off St Michaels Mount on the 25th. There were 7 reported sightings of Harbour Porpoises, off Cape Cornwall, Trevoise Head, Kenidjack Head, The Brisons, Porthcurno, The Runnelstone and Gwennap Head NCI Lookout