



# Friends of Penzance B.S.A.C. Conservation Officer's Report October 2014

A mushroom-shaped sea animal discovered off the Australian coast has defied classification in the tree of life. This tiny organism does not fit into any of the known subdivisions of the animal kingdom. Such a situation has occurred only a handful of times in the last hundred years. There are several similarities with the bizarre and enigmatic soft-bodied life forms that lived between 635 and 540 million years ago, the span of Earth's history known as the Ediacaran Period. It is thought to belong in the animal kingdom somewhere, the question is where? Two new species of this mushroom shaped animal have been discovered, *Dendrogramma enigmatica* and *Dendrogramma discoides*. Measuring only a few millimetres in size, the animals consist of a flattened disc and a stalk with a mouth on the end. Researchers may eventually find the way into an existing group of animals, because there is so little known about Dendrogrammas biology. One way to solve the question would be to examine its DNA, but new specimens will need to be found. The original samples were first preserved in formaldehyde and later transferred to 80% alcohol, a mode of treatment that prevents analysis of genetic material.



Human population will inevitably crowd out mammals and birds and has the potential to threaten hundreds of species with extinction within 40 years new research shows. Scientists have determined that the average growing nation should expect at least 3.3% more threatened species in the next decade and an increase of 10.8% species threatened with extinction by 2050. The findings suggest that any truly meaningful biodiversity conservation efforts must take the human population footprint into consideration. Leading scientists say that "You can do all the conservation in the world that you want, but it's going to be for naught if we do not keep the human population in check

A cretaceous leviathan named *Spinosaurus* swam the rivers of north Africa a hundred million years ago. It is the only known dinosaur adapted to life in water. The massive predator lived in a region mostly devoid of large, terrestrial plant-eaters, subsisting mainly on huge fish. Though over a yard long and bristling with fearsomely splayed teeth, *Spinosaurus*'s jaws were far less robust than those of predatory dinosaurs of comparable size; less suited to crushing bones than snagging fish in the rivers where it thrived. In the river system where the animal died there were big aquatic life like 8 ft lungfish, 13ft coelacanths, 25ft sawfish and similar sized turtles which would have made healthy meals for even the largest predator.



There were only 2 reported sightings of Bottlenose Dolphins during September, a pod of 7 off Gwennap Head and 12 off Newquay. 8 reports of Common Dolphins were from St Agnes on the north coast around to Fal Bay. There were pods of 200 and 300 in Fal Bay and 2 smaller pod seen from the Scillonian on different days. 19 reports of Harbour porpoises were from Three Stones Oar near Pendeen around to Fal Bay. 2 sightings of Minke Whales were a pair in Fal Bay and another from The Scillonian. An Ocean Sunfish was seen in Mounts Bay and 12 reports of Grey Seals were all from either Fal Bay or Mounts Bay. There was also a Common Seal seen in Fal Bay