



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



Researchers have determined that dolphins found in south eastern Australia represent a previously unknown species. Around 150 of these dolphins live around the Melbourne area and until recently were assumed to be some of the well known Bottlenose Dolphins. Detailed DNA studies and analysis of skulls in museums showed that they are in fact an entirely new species and are classified as *Tursiops australis*. Previous research had shown that the DNA found in the dolphins differed from that of the Bottlenose Dolphins, *Tursiops truncatus*, but in order to define a new species, more evidence is needed, so the researchers studied dolphin skulls found in a number of museums as well as more detailed analysis of the DNA, to show that *Tursiops australis* is clearly a different animal. Now that it is recognised as a separate species it may immediately qualify under Australia's criteria for endangered animals. This is especially crucial given it's endemism to a small region of the world with only two small resident populations.



Tursiops australis

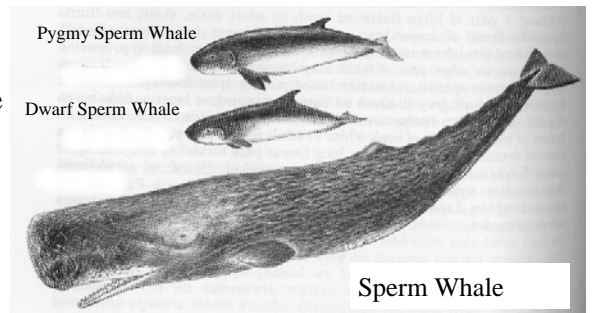
New exquisitely preserved fossils from Latvia cast light on a key event in our own evolutionary history, when our ancestors left the water and ventured onto land. It has long been known that the first back-boned land animals or "tetrapods"- the ancestors of amphibians, reptiles, birds and mammals, including ourselves — evolved from a group of fishes about 370 million years ago during the Devonian Period. However, even though scientists had discovered fossils of tetrapod-like fishes and fish-like tetrapods from this period, these were still rather different from each other and did not give a complete picture of the intermediate steps in the transition. In 2006 the situation changed dramatically with the discovery of an almost perfectly intermediate fish-tetrapod, Tikaalik, but even so a gap remained between this animal and earliest true tetrapods (animals with limbs rather than paired fins). Now, new fossils of the extremely primitive tetrapod Ventastega from the Devonian of Latvia cast light on this key phase of the transition. Ventastega was first described from fragmentary material in 1994, but since then excavations have produced lots of new superbly preserved fossils allowing reconstruction of the whole head,



Ventastega

shoulder girdle and part of the pelvis.

Sperm Whales are one of the easiest whales to identify at sea even though it rarely shows much of itself at the surface. Its huge squarish head (typically measuring a third of the body length), and wrinkly prune like skin are unmistakable. They are by far the largest of the toothed whales, males can reach 59ft and females 39ft. They do however have quite small relatives, The Pygmy Sperm Whale (9 to 11ft) and the Dwarf Sperm Whale, (7 to 9ft). They all prefer to spend time in deep water, and the Sperm Whale can remain submerged for over 2 hours, but typical dive time is less than 45 mins. On the 9th October a Dwarf Sperm Whale became stranded near the Albert Pier Penzance. The British Divers



Pygmy Sperm Whale

Dwarf Sperm Whale

Sperm Whale

Marine Life Rescue team were alerted, but members of the public had re-floated the animal before they arrived. It was watched and photographed for some time before it disappeared. This was the first reported sighting of this species on British Shores. The nearest known population is around Florida, USA , Other populations are around South Africa, and Japan. There was only one report of Bottlenose Dolphins during October, just 2 animals off Hot Point. There were 16 reports of Common Dolphins, maximum size of pod about 50. A pod of about 30 unidentified dolphins seen off Gwennap Head on the 28th were probably also Common Dolphins The only sighting of 4 Risso's Dolphin on the 15th, was south of The Longships. Harbour Porpoises were reported 15 times with largest pod of 22. Minke Whales were seen 8 times during the month. Two reports of Ocean Sunfish were both off Gwennap Head. Grey Seal were reported 11 times and 4 Whale blows seen at different times during the day off Gwennap Head on the 28 were probably from the same animal. There was of course also the Dwarf Sperm Whale mentioned above