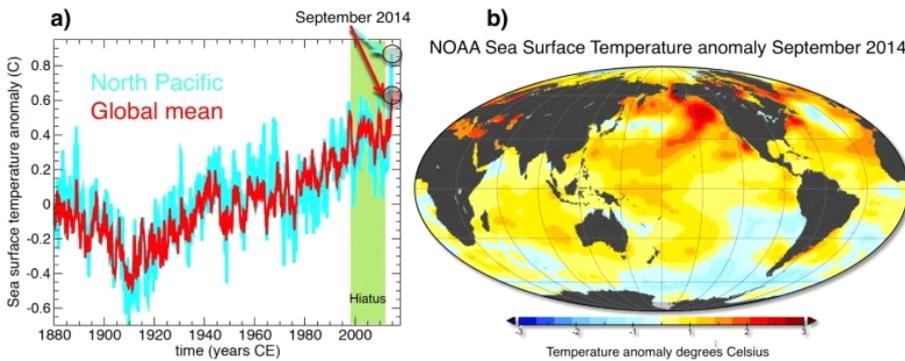


# Friends of Penzance B.S.A.C. Conservation Officer's Report January 2015

This past summer has seen the highest global mean sea surface temperatures ever recorded since their systematic measuring started. Temperatures even exceed those of the record-breaking 1998 El Niño year," says Axel Timmermann, climate scientist and professor, studying variability of the global climate system at the International Pacific Research Centre, University of Hawaii at Manoa. From 2000-2013 the global ocean surface temperature rise paused, in spite of increasing greenhouse gas concentrations. This period, referred to as the Global Warming Hiatus, raised a lot of public and scientific interest. However, as of April 2014 ocean warming has picked up speed again, according to Timmermann's analysis of ocean temperature datasets. "The 2014 global ocean warming is mostly due to the North Pacific, which has warmed far beyond any recorded value and has shifted hurricane tracks, weakened trade winds, and produced coral bleaching in the Hawaiian Islands," explains Timmermann. He describes the events leading up to this upswing as follows: Sea-surface temperatures started to rise unusually quickly in the extratropical North Pacific already in January 2014. A few months later, in April and May, westerly winds pushed a huge amount of very warm water usually stored in the western Pacific along the equator to the eastern Pacific. This warm water has spread along the North American Pacific coast, releasing into the atmosphere enormous amounts of heat--heat that had been locked up in the Western tropical Pacific for nearly a decade. "Record-breaking greenhouse gas concentrations and anomalously weak North Pacific summer trade winds, which usually cool the ocean surface, have contributed further to the rise in sea surface temperatures. The warm temperatures now extend in a wide swath from just north of Papua New Guinea to the Gulf of Alaska," says Timmermann. The current record-breaking temperatures indicate that the 14-year-long pause in ocean warming has come to an end.

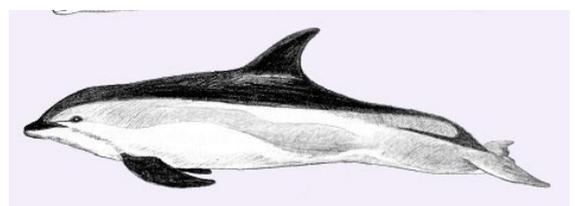


Peru is investigating the deaths of some 500 sea lions found on a beach on its northern coastline. The local governor has accused fishermen of poisoning the mammals that usually come close to the shore looking for food, but Peruvian environmental police are looking into other possible causes for the deaths, including disease and accidental ingestion of plastics. The bodies were of young as well as old animals and were considered to be a health hazard and were quickly removed from the beach which was about 250 miles north of the capital Lima. Earlier that month a similar incident happened further north, in the Piura region, where the bodies of nearly 200 sea lions, dolphins, turtles and pelicans washed ashore. Officials are still investigating the causes of those deaths. In 2012 hundreds of dolphins were found dead along a stretch of Peruvian coastline and environmental group Orca blamed the deaths on the noise and pressure waves caused by explosions it linked to oil exploration in the area but a government report by the Maritime Institute (Imarpe) ruled out oil explosions, or infection by a virus or bacteria, as triggers for the deaths of the dolphins. The report said that natural cause were to blame.



Once hunted to near extinction, the Humpback whales of Canada's Pacific are back in large numbers and the Canadian government has downgraded their status from "threatened" to one "of special concern". However there are concerns that the whales face new risks from increased oil and natural gas exploration.

A video was taken of two Minke Whales feeding off St Clements Island, Mousehole, for an hour in the afternoon on December 4th. There were 2 reported sightings of Common Dolphins, a pod of about 50 in Fal Bay on the 6th and a pod of 40 or more with several calves in Fal Bay on the 29th. Also in Fal Bay on the 29th was a pod of 7 Whitebeaked Dolphins with a single calf. Harbour Porpoises were reported 6 times, seen at Porthgwarra and Gwennap Head in West Penwith and also in Fal Bay. There were reports of Grey Seals off St Agnes Head and in Fal Bay, where a Common Seal was also seen on two different days



Atlantic Whitesided Dolphin