

NORTH DEVON LINK - MARINE ENVIRONMENT

Lucille Opie, Hilary Workman and I spent Monday, 13th October in Filleigh Village Hall with about 167 other U3A members and friends learning about the marine environment in the 21st century. The National Chairman, Jean Goodey was there, as was Fran Elkin, Regional Chairman and Paula Ferris of Coast Watch. We settled down after a welcoming cup of coffee to hear the first speaker, Dr. Jeff Ridley who is a Climate Scientist working at the Meteorological Office, Exeter. His talk was entitled "Melting Ice, Sea Level Rise and the South West". He said he was called the "Ice Man" as this was his speciality. The rise in sea level is about 3 metres per year and it is rising faster in the Indonesian/Indian region where about 50 million people are at risk in the islands in the short term and where a quarter of a billion people will be at risk around this area by the year 3000. Statistics show sea levels have been rising slowly for the past 100 years and in England, the Thames barrier would not be sufficient to hold back floods with its current structure. CO₂ remains in the atmosphere for approximately 100 years, although if we didn't have any greenhouse gases, methane in particular, the temperature of the earth would be -18C. The earth is still "taking back" its shape since the Ice Age and 30 GPS satellites in space monitor the changes to the nearest mm. Happily the South West is not so much at risk (perhaps Weston-Super-Mare and Plymouth being the exceptions) from the melting glaciers as say, Holland or Denmark. Food for thought!

The second lecture was by Dr. Richard Kirby, a Royal Society University Research Fellow, Marine Biological Association, Plymouth. This lecture, "Studying the Plankton and the Effects of Climate", was about the creatures which live at the bottom of the sea which underpin the whole of the food chain. He named and showed slides of plankton, (both phyto- and zoological) - did you know it was the Greek word for "drifter"? of various varieties (why do the smallest creatures have the longest and most complicated names)? One of the most interesting pieces of information Dr. Kirby mentioned was the apparatus designed by Alistair Hendy in 1986 which, in effect, is a large box with a filter in it to catch a sample of plankton and anything else in the sea which is floating at the same level. He said that Brittany Ferries regularly trawl these "boxes" behind their boats in the Channel at a depth of approximately 7 metres and there is a similar survey in the North Atlantic and they hope to get one under way in the Pacific. He talked about the complicated food chain of pipe fish, cod larvae, jelly fish, not to mention the marine bird life and how the sea needs to be between 4-6 degrees to trigger the reproductive cycle down in the depths. A very scientific lecture and I think Dr. Kirby hoped we were a lot brighter than we thought we were!

After lunch, Dr. Andrew Turner, Reader in Aquatic Geochemistry, School of Earth, Ocean and Environmental Sciences, Plymouth talked to us about Pollution and started with the oldest of sea-going activities, that of painting boats with anti-fouling paint. About 4,000 species colonise the hull of a boat (oysters, mussels, corals, etc.) and this anti-fouling substance contains mercury, arsenic, copper, polymers, plastic and various other toxins and can cause the change in sex of some organisms. The manufacturers have been very active in making this substance less toxic and it is now possible to buy anti-fouling paint which is biologically safe. When we think of pollution, we think of the things we can see, mainly plastic bags, fish nets and all the other detritus found either floating in the sea or left on the beach, but old boats are also sunk or left in the water to rot. Public awareness is being raised and is essential if we are to keep the waters round our coasts clean and unpolluted.

The last lecture was by Dr. Keith Hiscock, Associate Fellow, Marine Biological Association, Plymouth, about Lundy Island Marine Nature Reserve - 2008 Update. No pie charts and not many statistics here, but lovely slides of Lundy Island and pictures of divers discovering some of the 307 marine species of algae in Great Britain.. Dr. Hiscock was pleased to have found the Sunset Cup Coral on Lundy and talked about the huge difference the No Take Zone on the west side of the island had had in regenerating both the flora and fauna in the area. There is a Draft Marine Bill 2008 going through which will make Lundy part of a marine conservation zone and, although there are no new laws, it is essentially a tidy-up bill.

We all enjoyed the day and left feeling we had been to university ourselves for few hours and admired the organisation and thought that had gone into bringing about all that information and the hospitality we had enjoyed with the seven U3As that made up the Taw and N. Devon Link.

MD