

## **Teesdale u3a Monthly Meeting 22 June 2023**

Human evolution was the title of Sarah Elton's talk at the June meeting of Teesdale u3a. Sarah began by asking the audience what human characteristics were. Evidence of being cared for, the ability to use tools, intelligence and walking upright on 2 legs (bipedalism) were some of the answers suggested. Our nearest living relative is the chimpanzee. We evolved from apes about 25 million years ago and there was then a massive radiation and many different apes evolved, although there are now only a few species left, and these are endangered. Evolution started in Africa, spread to Asia and then to Europe.

Evidence is obtained from a variety of sources including fossils, archaeology, genetic analysis and from the effects of climate change. Using information from the analysis of tooth enamel, it is possible to find out which plants have been eaten which gives an indication of the types of vegetation around at the time.

Sarah listed the names of hominids (erect bipedal primate mammals) which had been identified so far from 'homo erectus' and including Neanderthals and lastly homo sapiens. Remains of some familiar animals have been discovered in unexpected places e.g., a hippopotamus tooth has been found in the River Tees near Stockton and the Victoria cave near Settle shows evidence of hyenas and other mammals. The earliest of these appear at about 125,000 years ago and date to the Upper Pleistocene period when the climate was much warmer than today. There were no humans in this area at this time. It seems clear now that the 'ladder' description of evolution is not always appropriate and the process is more of a branching tree or bush, called cladogenesis.

This was a fascinating and comprehensive talk which included new research, posing more questions about our evolution.

The next meeting will be held on Thursday 27th July when Roger Browne will be speaking on and playing 'the Great American Songbook'.

Ian Reid  
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