

Teesdale u3a Geography – Report by Ian Royston

Thursday 15th February had been scheduled for a talk by Andrew Griffiths, the founder and director of Droneflight Ltd (UK) but unfortunately, Andrew was forced to withdraw, and it was left to stalwarts Gerald Blake, Richard Boothroyd and Phil Johnson to entertain a packed meeting in the Witham Room. Gerald began a captivating meeting by introducing several items from his “January Geography Scrapbook”.

Gerald had received Tim Marshall’s latest book: “The Future of Geography” for Christmas. He rated this book as highly as Tim Marshall’s best seller “Prisoners of Geography” and promised a review of the new work at a future meeting. It argues that we should become familiar with the geography of space, and with “astro-politics,” which seemed particularly pertinent in the week Putin’s intentions to deploy nuclear weapons in space was revealed.

With Christmas still in mind Gerald revisited the Journey of the Magi, using his original maps, tracing their 1,000 mile journey to Bethelhem via the fertile crescent. We were fascinated to learn that the return of the entourage to avoid Herod may have led them to ford the southern Dead Sea via the Lissan peninsula.. Who knew?

Gerald confided that he was a member of the ‘Cloud Appreciation Society’ and shared with us some spectacular images of nacreous clouds which are rare and very high clouds, known mainly for the coloured light they reflect after sunset and before sunrise created by ice crystals..

Next, a glimpse at a map used for ‘old-school’ air navigation and huge admiration for the navigators of WW2 bombers who plotted their course on such maps with deadly accuracy using little more than compass, ruler and dividers in cold, noisy and dark conditions.

We heard about the 50 smallest states of the world by population, two thirds of them island states. Many island states have printed superb maps of their territories on postage stamps to assert their place in the world. Sealand, off the Suffolk Coast is the world’s smallest unrecognised state (based on the former Maunsell Forts and declared independent by Paddy Bates in 1967). Gerald’s interest in becoming a citizen stems from the fact that the flag of Sealand shares its colours with Collingwood College of the University of Durham!

Richard Boothroyd enlightened us with some stark details of the Dzud (or Zud, Djut and half a dozen other spellings) an extreme weather phenomenon which afflicts Mongolia bringing extremely low temperatures, typically -40°C and chilling winds. The White Dzud brings deep snow to a depth of several metres which may blanket much of the huge land-locked state, but it is the Iron Dzud, a period of snow-thaw-freeze which is most feared. What had been a rare event, perhaps happening once in a decade now seems much more frequent. It can affect more of the country and extends into China.

Phil Johnson gave us a very comprehensive introduction to the use of drones in research, in part based on what he had learnt from building and operating drones with his son, Mark. It was a tasty appetiser for the postponed talk by Andrew Griffiths.

Though most of us are familiar with the idea of hobbyist drones, we have become more aware of the military importance of drones through their widespread use in the Ukraine conflict. However we were intrigued to learn that the military application of un-manned aerial devices started in the eighteenth century and saw practical, though not widespread examples in WW1 and WW2.

Today military drones are largely autonomous but depend on the instructions of an operator perhaps thousands of kilometres away having the final decision to launch an attack.

Commercial drones which can employ specific spectrum photography can be used to identify particular plants or infestations, the health of crops, find leaks in pipelines, determine geomagnetic profiles and through LIDAR detect archaeological remains. They may also be used for air-sampling. Similar autonomous technologies can be applied to ROVs operating underwater.

Whilst military and commercial drones are becoming increasingly autonomous and the same technology can now be found in relatively low-cost hobby drones, most still depend on an operator with a control pad and perhaps a 3D headset. Phil seemed particularly keen to try drone racing and he remarked that the job of 'drone pilot' could be one career path for the current generation of gamers to pursue.

Phil completed an informative and entertaining afternoon with a brief demonstration of his cartographic wizardry by using an ultraviolet pen to dramatically highlight railway lines on a Cassini (1903-04) map, having painstakingly traced them with fluorescent ink. This is part of the ongoing Railways of Teesdale project (with Tim Meacham).

POSTAGE STAMP CARTOGRAPHY (from the David Yeadon collection photographed by Pete Redgrave)

NEXT MEETING:

Thursday 18 April 2.00 pm in the Witham. Dr Jonathan Mitchell: "The use of online mapping tools to unlock historical geography". Jon will show examples from his own research.

