

Cirencester Science and Technology Society

Prof. Chris Gaskell, Principal of the RAC gave the May lecture entitled “Some Epidemic Diseases of Animals”. His particular expertise is related to farm animals and he is an advisor to the Government and to BBSRC.

An epidemic is a disease that spreads rapidly by infection through a population. A pandemic is a worldwide spread. An epidemic has a widespread effect beyond just the farmer and the Government. It also affects the tax payer, the food industry and tourism with political, social and emotional repercussions.

The speaker chose two diseases to illustrate his point. The first, Foot and Mouth has been with us since 1839, but the last three outbreaks have been well-documented and lessons have been learnt, e.g. the 2001 outbreak involved widespread slaughter of cows and restrictions on the movement of animals and people. The farming industry lost £3.3M and the tourist industry an enormous £3.3billion. He said that this expense and disruption would no longer be acceptable to Government or society, and although prevention was the ideal, science in identifying the virus would now make it possible to combine vaccination with limited slaughter.

The second disease, Blue Tongue, has advanced from Africa , where it is prevalent amongst cattle and camels, into Northern Europe. This shows the potential of climate change to spread the likelihood of epidemics. Although it is spread by infected midges, vaccination offers hope of control.

The current pandemic of Swine Flu shows how easily animal infections can transform to infect humans as well. It is normally present in poultry, pigs and ducks. This highlights the danger that international flights can rapidly spread an infectious disease worldwide.

Finally Prof. Gaskell showed that DEFRA is indeed protecting our farm animals by warning pig farmers to prevent any contacts with Swine Flu from their animals

The last lecture of the session will be held at the RAC on Wednesday 10th June at 7:30pm, when David Wollen CEO, Innovision will talk on “Touch is the new click...How silicon chip design is enabling consumers to use the latest technology”. For further information see <http://www.cirensience.org.uk/> or ring Geoff Richards 01285 651972.