

Using maths to save the bees (and us)!

Dr Martine J Barons

(Director of the Applied Statistics and Risk Unit, University of Warwick)

6.30pm on Tuesday 4th December 2018
(Refreshments from 6.00pm)

Mitchell & Kenyon Cinema, Foster Building, UCLAN, Preston



Pollinator insects (Hymenoptera, Lepidoptera, Hemiptera) by Nbharakey, via Wikimedia Commons

Abstract

“Professor Einstein, the learned scientist, once calculated that if all bees disappeared off the earth, four years later all humans would also have disappeared.” Abeilles et fleurs, June, 1965. It is unlikely that Einstein said this, but it is certainly true that loss of pollination services would make human life very difficult. It is estimated that 70% of important food crops are insect-pollinated, including fruits, nuts, vegetables, seeds, spices and coffee.

In recent years there has been much concern about declining insect pollinator populations, particularly honeybees. This led to the production of the UK’s national pollinator strategy and a temporary Europe-wide ban on the use of Neonicotinoid insecticides.

The insect pollinator system is typical of today’s ever more interconnected world, where decision-making in dynamic environments is often extremely difficult despite vast streams of data, huge models and ever-growing disparate domains of expertise. How can we use maths to overcome this problem? How can we use structured expert judgement as a robust and systematic way to derive probability distributions?

I will outline the answers to these questions through the example of food security and pollination.

For further information, please contact Danielle Bewsher DBewsher@uclan.ac.uk
or Margaret Eastwood margareteastwoodimanw@gmail.com

No charge is made to attend meetings. Non-IMA members are welcome.