

THE CAMBRIDGE STATISTICS DISCUSSION GROUP

Wednesday 2nd February 2005 7:15 for 7:45

Large Lecture Theatre,
MRC Cognition and Brain Sciences Unit,
Chaucer Road, Cambridge

A Bayesian analysis of the citrus canker epidemic in urban Miami

Lara Jamieson

Department of Plant Sciences
University of Cambridge

Abstract: The study of epidemics within urban environments presents many complications with regard to consistency within the data. In a plantation or experimental system there are set uniform distances between individuals and trees are of the same type, age and general health. The introduction of the Asian citrus leaf miner is a further complication, greatly increasing the spread of the canker bacteria.

We present a spatio-temporal framework and a number of feasible models. Reversible Jump MCMC is then used to determine which dynamic predominates thus giving insight into the epidemic mechanism and implications to control measures.

Speaker: Lara completed a BSc at Auckland University with first class honours in both Statistics and Mathematics. She then lectured at Massey University before coming to Cambridge to do a MPhil and then a PhD at the Statistical Laboratory. Lara is currently doing a post-doc in the Epidemiology and Modelling group at the Department of Plant Sciences in Cambridge. Her research interests lie in applied statistics and more recently Bayesian methodology and reversible jump. Specific areas of application include population ecology and epidemiology.

Directions: Chaucer Road is off Trumpington Road – if you are heading away from the city centre it is the first right after the junction with Brooklands Avenue. Number 15 is at the end on the left and is a large Victorian House with a more modern extension to its right. The entrance is in the porch located in the middle of the older section on the left as you come in and is accessed by ascending a few steps from the car park. Cars may be parked there. The outside door will be locked at 7:45. Arrivals after 7:45pm can gain admittance by contacting the secretary on 07761769436.

Provisional Next Meetings:

2nd March – Mary Garratt on 'Dead Dutch Cats'.

11th April – Anthony Edwards (Gonville and Caius) on 'Cambridge Statistics from Venn to Fisher and Beyond'.

19th May – Adam Kleczkowski (Plant Sciences).

Supper: Some members eat regularly in the University Centre before each meeting at 5-45pm. Feel free to join them.

Subscriptions: of 4 pounds are now due for the 2004-2005 session.

Secretary: Peter Watson, MRC Cognition and Brain Sciences Unit, 15 Chaucer Road, Cambridge CB2 2EF;
telephone 01223 355294 Extension 801; E-mail peter.watson@mrc-cbu.cam.ac.uk

For security purposes could you please let Peter Watson know if you intend attending the talk.

Approved Minutes of Annual General Meeting 2002-2003

The Annual General Meeting for the year 2002-2003 was held at the MRC Cognition and Brain Sciences Unit, Chaucer Road, Cambridge on 14th October 2003. Present: Ted Harding (in chair), Prue Allgood, Tim Cole, Margaret Corbett, Melanie Cooray, Suzanne Degge, Irene Ferreira, Pamela Morris, Helen Tate, Peter Treasure, Jamie Tunks, Peter Watson. Apologies: Margaret Ely, Mary Garratt, Krys Kelly, Haidee Philpott.

The **minutes** of the previous A.G.M. were circulated and approved.

Reports: The Treasurer's Accounts were presented. A group bank account had been opened and £150 had been placed in it. Warm appreciation was expressed on the raising of such an amount. It was decided to keep the group subscription at £4 for 2003-2004. The **Secretary** reported attendance was consistent with previous years.

Election of officers and committee: The committee were re-elected unopposed. The committee for 2003-2004: *chair* Ted Harding; *secretary* Peter Watson; *treasurer* Margaret Ely ; *officio* Dave Andrews; *ordinary* Margaret Corbett, Tim Sparks, Helen Tate.

Any Other Business: None.

Draft Minutes of Annual General Meeting 2003-2004

The Annual General Meeting for the year 2003-2004 was held at the Department of Applied Mathematics and Theoretical Physics on 24th November 2004. Present: Ted Harding (in chair), Margaret Corbett, John Dickins, Blaise Egan, Mary Garratt, Simon Godsill, Krys Kelly, Andrew Lynch, Pamela Morris, Matt Scarisbrick, Peter Treasure, Peter Watson, Gary Young. Apologies: Margaret Ely, Helen Tate.

The **minutes** of the previous A.G.M. were circulated and approved.

Reports: The **Treasurer** reported a healthy balance of £200 in the bank account. Further details to follow. Subscriptions will once again be £4 for the 2004-2005 session. The **Secretary** reported attendance was consistent with the previous year.

Election of officers and committee: The committee were re-elected unopposed. The committee for 2004-2005: *chair* Ted Harding; *secretary* Peter Watson; *treasurer* Margaret Ely ; *officio* Dave Andrews; *ordinary* Margaret Corbett, Tim Sparks, Helen Tate.

Any Other Business: None.