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Veterinary Epidemiology and Tuberculosis Investigation Unit

University College Dublin

Selected Papers 2002 - 2003

Edited by

J.D. Collins and R.F. Hammond

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Introduction

The Veterinary Epidemiology and Tuberculosis Investigation Unit was established by ERAD in co-operation with Teagasc in May 1989 as part of the National Strategic Plan for the Eradication of Tuberculosis in Cattle.

The **purpose** of the Unit is to investigate the factors that militate against the eradication of tuberculosis in cattle at the national or regional levels, and to identify means of improving the rate of eradication. This function has been extended to include the control of other animal diseases of major importance.

The **objective** of the Unit is to manage and analyse retrospective and concurrent data relating to the occurrence of tuberculosis and brucellosis in cattle and other animal diseases so as to define those factors which are responsible for the emergence or recurrence of infection and to identify ways of eliminating or otherwise controlling these factors.

This publication is a collection of papers, presented in summary form, which describe projects undertaken by members of the Veterinary Epidemiology and Tuberculosis Investigation Unit during 2002 and 2003, and comprises the twelfth report of the Unit.

This report includes papers on the practical application of Geographical Information Systems (GIS) in the control of tuberculosis and brucellosis (contagious abortion) in the national herd. Statistical analyses of data relating to the bovine tuberculosis eradication programme and the assessment of the prevalence of the disease are also described. The extensive study of the interactions between badgers and cattle in four designated areas was completed during this period and serves as a reference for future management decisions regarding the control of tuberculosis in cattle. This study is the result of the work of many dedicated officers and operatives of the District Veterinary Offices in the cooperating counties and of the staff of the collaborating laboratories and the Unit over the past seven years. Finally, a further progress report on the development of a vaccine against tuberculosis for use in badgers is presented.

A list of current Associate Members of the Unit is presented in Appendix I.

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