Mapping Brucellosis Herds

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Introduction
The mapping programme initiated in co-operation with ERAD in 1990 continues with the updating of the national distribution of herds restricted due to brucellosis during 1995.

Method
Data entry of restrictions is made at the District Veterinary Offices with validation within the ERAD section of the Veterinary Division of the Department of Agriculture, Food and Forestry. The validated data are processed through EPIINFO software to Dbase III format which allows the creation of point file coverages in Environmental Systems Research Institute (ESRI)\(^1\) PC ARCINFO\(^{\text{TM}}\). A new software programme from ESRI, ARCVIEW\(^{\text{TM}}\) v2.0c is now used to produce the map output.

Discussion
The national distribution of brucellosis restricted herds is shown at two levels of scale. Figure 1 illustrates the national scene for the years 1994 and 1995. Figure 2 is an example of larger scale mapping at county level.

The detailed levels of mapping now available have been applied to the “special blackspot area” programme in Co. Limerick and the adjoining areas in Counties Cork (North), Kerry and Tipperary (South). Figure 2 illustrates the distribution of the brucellosis restricted herds for part of the area in Counties Limerick and Tipperary (South) for the years 1994 and 1995. This approach will eventually facilitate a more detailed epidemiological analysis of disease in the country to be undertaken.

\(^1\) Environmental Systems Research Institute, Redlands, Ca.
Figure 1. Distribution of Brucellosis Restricted Herds

Brucellosis Restrictions
- Non-active Infection
- Active Infection

Tuberculosis Investigation Unit - 1996
Figure 2. Larger scale map showing the distribution of brucellosis restricted herds.

1994

1995

Legend
- Non-active Infection
- Active Infection
- Primary Road
- Secondary Road
- Third Order Road

0  5 Kilometers