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Geographic information systems

Paolo Calistri, Annamaria Conte,
Jerome E. Freier & Michael P. Ward, Editors
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**Importance of GIS for the monitoring of animal
diseases and zoonoses**

GIS application in surveillance activities

Spatial analysis in veterinary epidemiology

Data collection and remote sensing applications

Web – GIS as tool for data and knowledge sharing

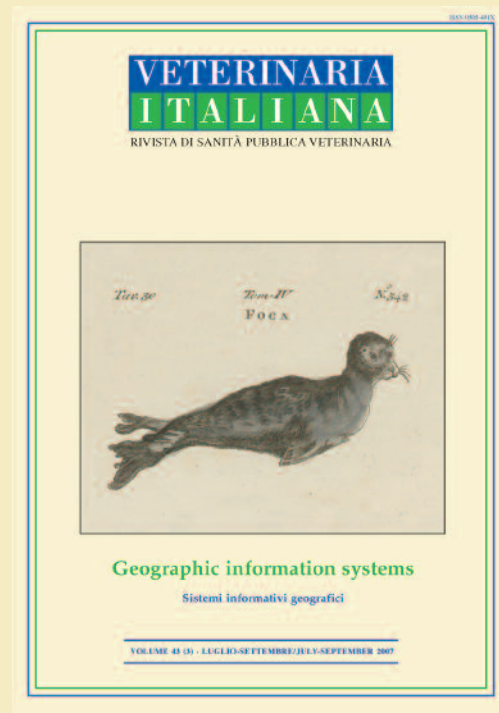
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Geographic information systems (GIS), spatial analysis and remote sensing provide valuable methods for the collection and management of information for epidemiological surveys and are now generally accepted by the scientific community as a major tool contributing to the understanding of epidemiological processes. The revolutionary developments in computer performance of the last decade have made available easy-to-use GIS desktop and Web-based software which in turn have meant that GIS are more widely accessible by veterinary services at all levels. At the same time, the increased awareness of the possibilities offered by these tools has created new opportunities for decision-makers to enhance their planning, analysis and monitoring capabilities. These technologies offer a new way of sharing and accessing spatial and non-spatial data across groups and institutions.

This 412-page book includes 43 peer-reviewed papers originally commissioned for the First international conference on the use of GIS in veterinary activities organised by the Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise 'G. Caporale', Teramo, Italy, and the World Organisation for Animal Health (OIE: Office International des Epizooties) that was held in Silvi Marina, Italy, from 8 to 11 October 2006. The contributions (see Contents opposite) presented in five chapters covering the following:

- importance of GIS for the monitoring of animal diseases and zoonoses
- GIS application in surveillance activities
- spatial analysis in veterinary epidemiology
- data collection and remote sensing applications
- Web – GIS as tool for data and knowledge sharing.

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