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VS Atlas: A Geographic Data Library

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Veterinary Services (VS) is moving toward a greater investment in geographic information technologies to aid in disease surveillance, research, and other tasks. It has become apparent that there is a need within VS to provide a centralized system for managing and distributing geospatial data important to VS' mission. The Center for Emerging Issues' Geographic Information Systems (GIS) unit has developed VS Atlas, a central repository of spatial data suitable for use in surveillance, emergency response efforts, spatial analysis, modeling, and other GIS activities within VS.

The VS Atlas is a spatial data library containing data important to the APHIS mission. The intent of VS Atlas is twofold: to provide geographic data important to APHIS in a standard format, and to provide a centralized system for storing, maintaining, and distributing geographic data. The VS Atlas contains data for a large range of topic areas including:

• Agricultural Census

 National Agricultural Statistics Survey (NASS)

• Animal Diseases

• Current status in the generic database (GDB)

Base layers

• Water, roads, etc.

• Disease Vectors

• Mosquitoes, fleas, ticks, etc.

Land Cover

- Land cover
- Land use (NLCD, GAP, etc)
- Raw imagery (Landsat, aerial photography, etc.)

Surveillance

- VS surveillance grid
- Other disease-specific grids
- Predictive models

Topography

• Selected elevation, slope, aspect, etc.

Veterinary Resources

• VS and industry infrastructure (slaughter and rendering plants, truck washes, office locations, etc.)

• Wildlife / Insect

- 169 families; 7,000+ species
- Exotic and invasive species
- Arthropod distributions

These datasets are obtained through free distribution, agreements and collaborations with Federal agencies, State agencies, and private organizations. The data are reviewed for quality, content, and accuracy before they are included in VS Atlas.

Once VS Atlas is completed, users will be able to access the data via a client application used within the ArcGIS / ArcMap environment. The client will literally be provided with one-click access to the data. Users that are less skilled with GIS software will be able to

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access the data via an Internet map service, which will provide users with the ability to browse the volumes of data without GIS Software.

The scheduled release date for VS Atlas is spring 2005. For more information concerning VS Atlas contact Jerry Freier at 970.494.7275 or via email at Jerome.E.Freier@aphis.usda.gov.