

GEO-ENABLING GOVERNMENT BUSINESS PRACTICES



NATIONAL BIOLOGICAL INFORMATION INFRASTRUCTURE GLOBAL WILDLIFE DISEASE NEWS MAP

Background: The National Biological Information Infrastructure (NBII) is a collaborative program that links information and tools from a wide range of partners to report on the nation's plants, animals and ecosystems. The Global Wildlife Disease News Map, developed by the NBII Wildlife Disease Information Node (WDIN) http://www.nbii.gov/wildlifedisease/ displays recently published media reports in a geographical context allowing users to see where news-worthy wildlife disease events are occurring around the globe.

Value Statement: Before disease outbreaks become well-known, they often appear in informal sources, such as the news media. The Map visually organizes these news reports to show the global status of wildlife disease and to help government agencies and the general public stay abreast of ongoing developments. The news stories are provided by a companion application, the WDIN's Wildlife Disease News Digest (http://wdin.blogspot.com/), a frequently updated "blog" style publication. The Map also makes data freely



available in compatible formats, which allows anyone to integrate this wildlife disease information with other applications, as seen in HealthMap, http://www.healthmap.org. This disease alert mapping system incorporates the Map's GeoRSS feed, which enhances the coverage of wildlife disease in their application and increases the analytical information available to human health researchers.

Challenges: While WDIN primarily works on the Wildlife Health Monitoring Network, a formal data aggregation effort, the Map focuses on wildlife health events reported in mass media to help provide early alerts about what is happening around the world. The application had to reach a wide variety of audiences with an accessible and understandable user interface, while also integrating and displaying data from numerous global news sources.

How Has the NBII WDIN Addressed These Challenges?

- WDIN developed the Map using the Google Maps application programming interface, which is open source and provides a familiar look and feel for users.
- WDIN staffers indexed and assigned geocodes to those stories from the Digest that have a geographical reference to disease detection or spread.
- Future iterations of the Map will include access to other data layers which are useful in examining patterns on the landscape. One possible source is the NBII Geospatial Interoperability Framework http://www.nbii.gov/portal/community/Communities/Toolkit/Geospatial_Framework/>.

What Key Functions Does the Map Provide?

- Users can customize their experience through search filters
- GeoRSS/KML formats allow users to easily link the Map data to their own mapping applications as a data layer in software such as Google Earth

How Can You Leverage the NBII WDIN Model?

- Use the Map to increase your awareness of wildlife disease
- Learn from WDIN's approach:
 - Use RSS feeds to make information easy to re-purpose and integrate with other applications (e.g. Web sites, maps)
 - Consider open source technologies to reduce costs
 - Leverage partnerships and collaboration to optimize the value of your data

For Additional Information, Please Contact:

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Some Key Uses of Map Data:

- USGS National Wildlife Health Center
- HealthMap Project
- CDC's Zoonoses Integration Project
- DHS' Nat'l Bio-Surveillance Integration System
- IBM Mashup Center- Disease