MAP673 Final Project Topic, Objectives, Data, User Interaction, Thematic Represenation

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**Topic**

The University of Kentucky Veterinary Diagnostic Laboratory has requested we build a map using historical data for specific species to create an interactive map that will show relative caseloads over a period of time in Kentucky to give insights as to how caseloads have changed overall and any area insights.

**Map Objectives**

Development of an easy to use map of Kentucky showing data from 1995-2015 (20 full years) that illustrates how animal species submitted and overall caseload has changed geographically in that time period.

User selected input- we intend to allow the user to select what they are interested in looking at:

Accessions- just total cases, independent of number of animals that were submitted and from where

Species

Equine

Cattle

Sheep

Goats

Pigs

Avian -mixed poultry (i.e. layers, broilers, turkeys)

Cats

Dogs

Wildlife

Miscellaneous (anything that doesn’t fit into the other species that we don’t get much of )

Slider to show the changes over time (1995-2015). Easily updated each time a year is completed.

Symbolization- I anticipate circles indicating relative numbers; expanding and contracting with slider movement.

**Mapping Scenario and User Interaction**

Typical user will be UKVDL employees (mostly administration, business, director, and epi section.

User is expected to interact with the map in following way:

* View spatial distribution of cases or animal species across Kentucky
* Zoom and pan
* Scroll a time slider bar to see amounts of cases or animal species by year and location

**Data Source**

Animal and accession data will be in a csv file. SQL queries have already been written and data has been mined for the last 20 full years across two different lab information management systems by Dr. Jackie Smith. Data file is attached.

I may add county outlines, but haven’t decided yet.

**Technology Stack**

The csv data will be imported by omnivore plugin.

The map will use Leaflet for the primary map development and MapBox for the clustering functionality.

The map will be hosted on GitHub pages to start, with maybe hosting it on the UKVDL website after final build.

**Anticipated Thematic representation**

* Proportional symbols that will expand and contract based on year slider.
* Mousing over a county will give information for that county and year combination for the drop down option selected.