

Introducing Web Mapping to Writing and Journalism Classes at the University of Minnesota Duluth

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Overview

- ▶ GAC Background
- ▶ Engaging cross-disciplinary faculty
- ▶ Goals of using ArcGIS Online in non-geography classes
- ▶ Examples of classroom activity using ArcGIS Online
- ▶ Conclusion

Geospatial Analysis Center Mission

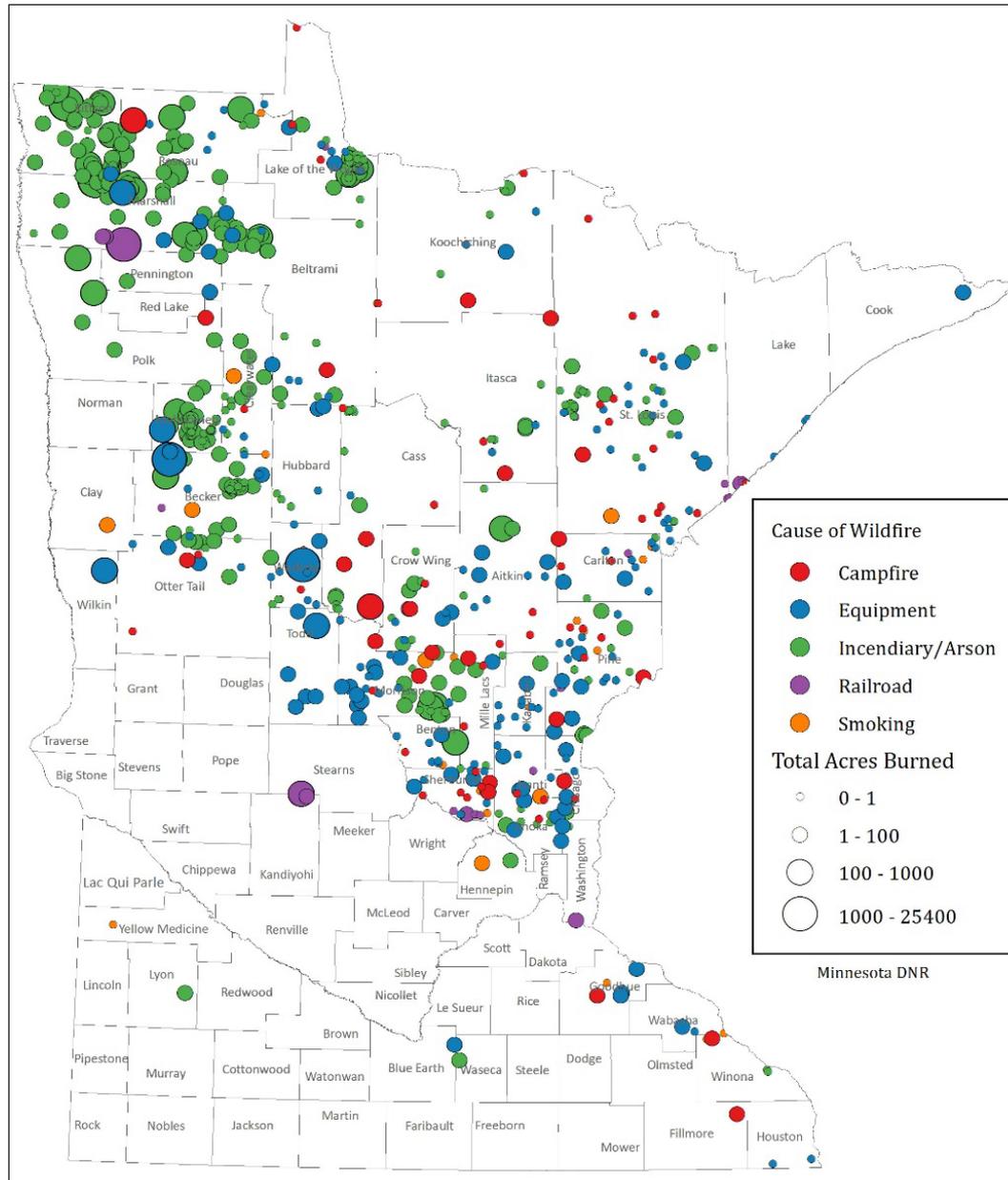
To promote and facilitate the sustainable integration of geospatial tools and perspectives into UMD teaching, student curriculum, research, services, and operational activities

Goals for Non-Geography Students

“How did the ArcGIS project affect your reading of the text *How Writing Came About?*”

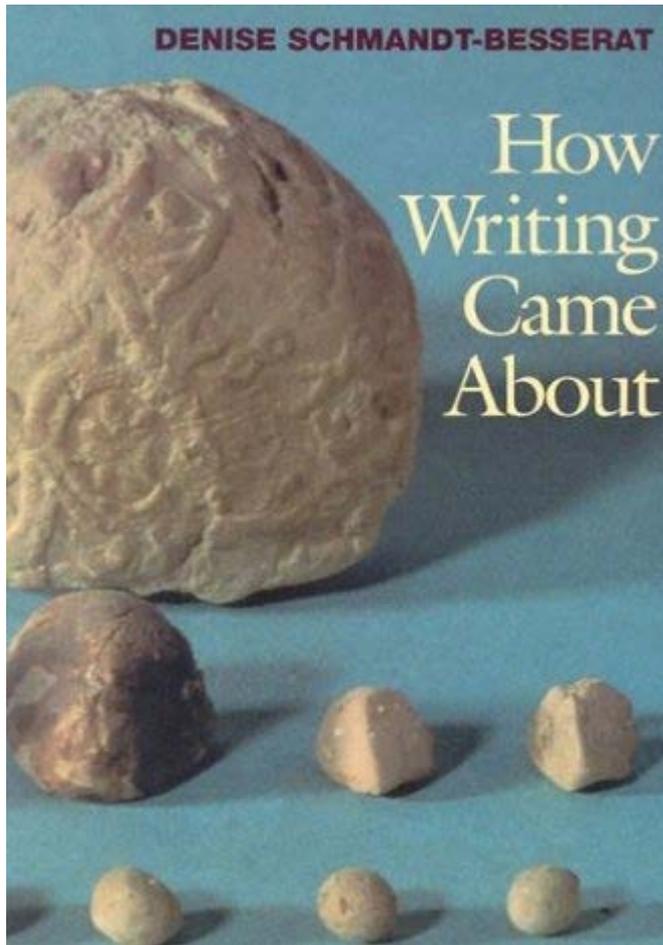
“What were you able to show or explain through the use of ArcGIS that you would not be able to do through writing alone?”

Wildfires by Cause and Size, 2012



In addition to giving the students a great picture of opportunities for storytelling, you also gave me some ideas for projects...I think there could be some real cross-over appeal between the journalism and GIS programs [at UMD]...Visual Journalism and Data Journalism are two subsectors of the industry that are actually hiring right now... Having this resource for students in the journalism program has allowed us to expand and modernize our curriculum to match industry demands...It would be great to figure out even more ways to get our journalism students exposed to GIS.

- Chris Etheridge, UMD Instructor of Journalism



"How Writing Came About" A Mapping Exercise

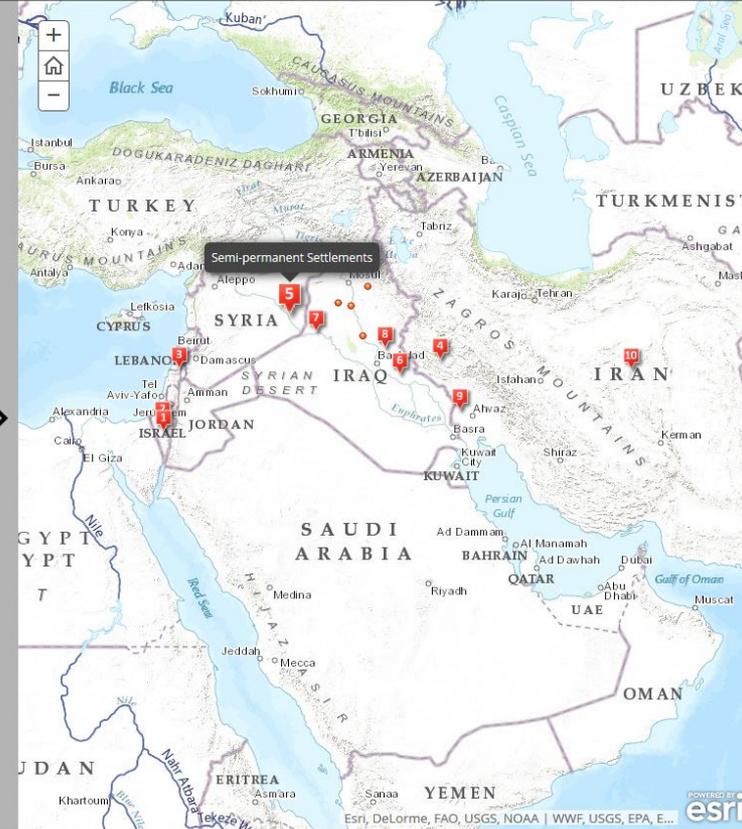
We've mapped and provided a timeline of the concepts, artifacts, and places that correspond with those presented in Denise Schmandt-Besserat's dissertation, "How Writing Came About."

A story map   



Semi-permanent Settlements

This form of settlement was found in present-day Iran in villages as Tell Mureybet and Cheikh (mapped here). Their architecture reflected the moderate stability of the settlement by having smaller rounded huts and open-air facilities. The instability and possible lack of commerce also reflected that less tokens were found between these two locations in comparison to the sedentary locations. The semi-permanence nature of these settlements and reflects early use of commerce and trade.



Lower and Middle Paleolithic Symbolism



Pebbles, Twigs, and Grain



Tally Marks, Incised Bones



Clay Tokens



Semi-permanent Settlements



Sedentary and Agricultural Communities



Plain and Complex Tokens



Ancient Trash Deposits



Envelope



Tablet

Visual History Map of How Writing Came About

Based on the book "How Writing Came About" by Denise Schmandt-Besserat

A story map   



Tablets

The earliest tablets were used around 3500 BC. They evolved from envelopes; the tablets were basically flattened envelopes. The symbols were pressed onto the surface of the tablets to represent tokens. This made things easier for the people who used them because they had fewer things to carry. The markings on the side of the tablets were made by impressions from tokens. This system was taken from the system used with envelopes, but instead of having tokens inside, the markings represented them instead. This essentially eliminated the need for tokens any further. Chogha Mish is mapped here as a popular site where tablets were found.



Content may not reflect National Geographic's current... 

-  1 Uruk
-  2 Plain Tokens
-  3 Transition from Plain to Complex Tokens
-  4 Complex Tokens
-  5 Transition from Complex to Envelopes
-  6 Envelopes
-  7 Strings of Tokens
-  8 Transition from Envelopes to Tablets
-  9 Tablets
-  10 Transition from Tablets to Pictographs
-  11 Pictographs
-  12 Pictographs

As a class, we were lucky enough to not only be introduced to this remarkable, functional program, but be educated on how to use it at the same time...By mapping several settlements throughout the Middle East and associating a specific token type, either complex or simple, with each settlement, it not only displayed where each token type was concentrated, but also sparked the idea of possible trade routes between the sites, depending on token type. Without mapping, this idea and thought would not have been possible.

- Writing Studies student

Conclusion

- ▶ Students in from a range of majors - English to Neuroscience - learned about the power and potential of web mapping
- ▶ Students gained both hands-on experience and learned how GIS and web mapping are being used in writing and journalism
- ▶ Potential to spark new interest was created, as they move forward in their education and work
- ▶ Students were introduced the possibilities resulting from both spatial thinking and spatial problem solving