Wisconsin State Cartographer's Office

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Your resource for mapping and geographic information in the state of Wisconsin

January 2014

Pronounce Wisconsin

Introduction

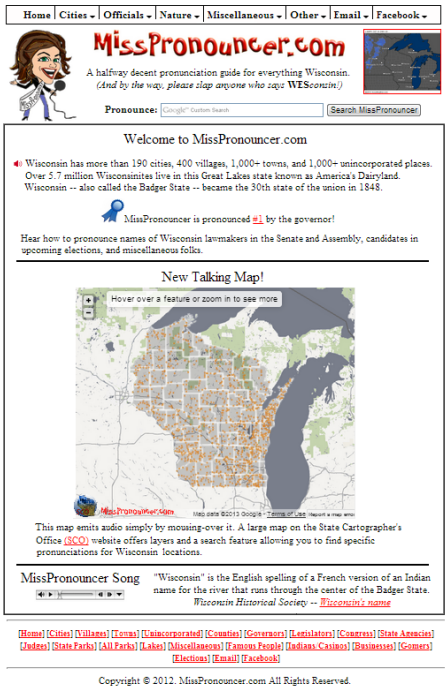
Pronounce Wisconsin[1] is an online mapping application first released by the State Cartographer's Office (SCO) in 2012. It delivers audio pronunciations for over 1700 Wisconsin places – including counties, cities, villages, and unincorporated communities – through an easy-to-use map interface. By mousing over the map, users can hear how the names of these places are pronounced.

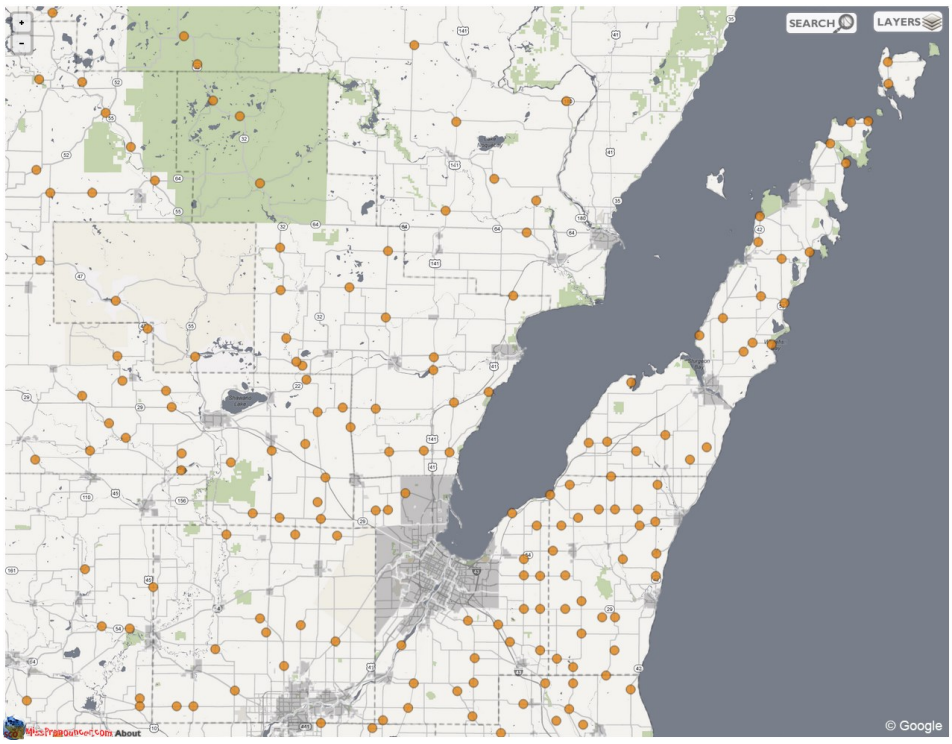
MissPronouncer.com

Pronounce Wisconsin is a collaborative effort between the SCO and Jackie Johnson, creator of MissPronouncer.com.[2]

MissPronouncer.com was created to help people correctly pronounce the names of places, elected officials, parks, famous people, and other phenomena specific to Wisconsin. *Pronounce Wisconsin* links MissPronouncer.com's digital audio archive to an interactive map interface to allow users to explore Wisconsin's unique place names geographically.

Pronounce Wisconsin is an online





https://maps.sco.wisc.edu/pronouncewi

pronouncing gazetteer. A gazetteer is a list of places, often used in conjunction with a map or atlas; a pronouncing gazetteer also gives the pronunciation of each place name. Gazetteers are a standard feature within many printed atlases. Examples are also available online. In the United States, the definitive gazetteer is the Geographic Names Information System (GNIS)[3] maintained by the US Geological Survey. GNIS is the official repository of place names in the US, having been developed to support the US Board on Geographic Names. However, GNIS does not include pronunciations.

Printed pronouncing gazetteers have long been produced by mapping companies and geographical societies. Place name pronunciations are also the subject of academic research, including some ground-breaking work at UW-Madison. Frederic G. Cassidy's 1947 book *Dane County Place-Names*[4] remains a valuable example of an effort to systematically capture place name etymology and pronunciations.

Cassidy, a Professor of English at UW-Madison for many years, went on to become Chief Editor of DARE, the Dictionary of American Regional English.[5]

Printed pronouncing gazetteers require users to be familiar with pronunciation marks or phonetic alphabets in order to decipher correct pronunciations. MissPronouncer.com is unique in that it makes use of Web technology to deliver pronunciations as audio content – sounds that can be heard by the user – based on modern audio file formats and the playback capabilities of Web browsers. While this technology has been around for some time, MissPronouncer.com is the first of its kind, providing online access to a comprehensive set of place name pronunciations for Wisconsin that users can actually hear. No understanding of arcane phonetic alphabets and codes is required – a huge benefit for English and non-English speakers alike.

Origins of *Pronounce Wisconsin*

Pronounce Wisconsin began as an effort by the SCO to compile an authoritative map of Wisconsin's unincorporated places. An unincorporated place is a concentration of people that is geographically not part of an incorporated city or village. Unincorporated places do not have legal boundaries or official government functions. Despite their nebulous character, these places are quite real. Their names may appear on maps, on roadside signs, on restaurants or shops, and on letters delivered in the mail. They certainly exist in the mental maps of their inhabitants.

One difficulty with unincorporated places is that they are not tracked by any single agency. For example, only a handful of the largest unincorporated places are identified by the US Census Bureau, which refers to them as Census Designated Places, or CDPs. Attempts to

enumerate and map unincorporated places in Wisconsin have led to inconsistent results, with no real consensus about how many of them exist.

Students and staff at the SCO compared available data sources to create an integrated unincorporated place dataset. Our sources included GNIS, the Wisconsin Department of Transportation county map series,[6] a listing prepared by the Wisconsin Department of Health Services,[7] and hardcopy and online maps maintained by individual counties. The current dataset contains 1051 unincorporated places, all of which are displayed, with their pronunciations, in *Pronounce Wisconsin*. Further refinements in this dataset will occur over time as we work with others to make improvements, including adding places.

Building *Pronounce Wisconsin*

Pronounce Wisconsin is built using open source software. The backend is comprised of a Postgres/PostGIS database, as well as static GeoJSON files, while the front end relies on CSS and Javascript, including Leaflet.js, jQuery, and jQuery UI. jQuery is used primarily for map control interaction, and jQuery UI is used for the autocomplete search function.

Leaflet[8] was chosen as the mapping framework because of its light weight, ease of use, mobile compatibility, and strong development community. Google map tiles were chosen as the default basemap layer because of the ability to remove place names, helping to minimize confusion with our own place name labels. Google map tiles were restyled using a more neutral color scheme that is more appropriate for a basemap. To provide the audio for place name pronunciations, *Pronounce Wisconsin* links each geographic place on the map to an audio file on Misspronouncer.com, where all audio data is maintained.

Pronounce Wisconsin has a help page that provides simple directions for the user, including how to use the navigation tools, how to switch the basemap, and how to search for places. Known problems and limitations of *Pronounce Wisconsin* at this time include an occasional short delay in loading features, and features loading more quickly than the basemap (in the case of Google tiles). In addition, the app may not run well on older versions of some Web browsers. The app runs on mobile devices, although some behavior may not be optimal.

Pronounce Wisconsin is an example of a project that has benefitted tremendously from student assistance and support. The SCO provides opportunities for University of Wisconsin students to gain practical experience with GIS and geospatial technology through applied service-learning projects. Data development for *Pronounce Wisconsin* was provided by John Czaplewski, Scott Moucka, Erik Myers and Kim Ness, all of whom were then students in the GIS Certificate Program[9] in the Geography Department at UW-Madison.

The interactive mapping application itself – including interface design and software development – was created by John Czaplewski as part of his internship project. AJ Wortley, Senior Outreach Specialist at the SCO, provided John with assistance. Throughout the project, we interacted closely with Jackie Johnson to ensure smooth interaction between *Pronounce Wisconsin* and MissPronouncer.com. At the SCO we feel fortunate to be able to support student work that not only yields practical benefits for the student, but also provides a valuable resource for the SCO's community and the citizens of the state in general.

Contribute to *Pronounce Wisconsin*

We are interested in your feedback, suggestions, and ideas. If you have information you would like to share, please use the contact link on the *Pronounce Wisconsin* site.[1]

Web References

1. *Pronounce Wisconsin*: maps.sco.wisc.edu/pronouncewi
2. MissPronouncer.com: www.misspronouncer.com
3. GNIS: geonames.usgs.gov/domestic/index.html
4. Dane County Place-Names: uwpress.wisc.edu/books/4648.htm
5. Dictionary of American Regional English: dare.wisc.edu
6. Wisconsin Department of Transportation county map series: www.dot.wisconsin.gov/travel/maps/county.htm
7. Wisconsin Department of Health Services listing of Wisconsin communities: www.dhs.wisconsin.gov/vitalrecords/pdf/cvt.pdf
8. Leafet: leafletjs.com
9. GIS Certificate Program at UW-Madison: www.geography.wisc.edu/giscertificate

Wisconsin State Cartographer's Office

The Wisconsin State Cartographer's Office provides a wide range of services to the state's geospatial community, including educational workshops and presentations, technical consulting, print and online publications, web-based mapping applications, and information about events, jobs and emerging trends. We collaborate with state and national associations to promote effective utilization of geospatial technology, and serve as a liaison between geospatial data producers and consumers in Wisconsin to help coordinate the needs of these groups. The office also assists the public with map-related inquiries. The State Cartographer's Office has operated from the University of Wisconsin-Madison since 1974.

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