

One of my particular interests is bats, and so this week I decided to make a map that was related to bats. Background: I currently live in a neighborhood in midtown Memphis called Central Gardens; this area consists of around 511 acres in 83 blocks, with 1540 structures. It is filled with trees, and has been designated a level 3 arboretum by the state of Tennessee, only one of two in the entire state (Central Gardens Association, 2014). It is unique because of the size, number, and age of trees, as well as being particularly unusual in that it is a neighborhood (most arboretums are in botanical gardens, parks, etc.). I myself have noticed bats flying around at dusk; there are many factors in the neighborhood which could be considered conducive to making a good bat habitat. One factor that I wanted to look at was available water sources. New studies are looking at bat use of swimming pools for water sources in urban areas (Gwynne, 2014), so I wanted to map how many pools were available in the Central Gardens district for bats to possibly use as a drinking source. I used ZeeMaps in coalition with GoogleMaps to create a map with all of the swimming pools in Central Gardens. I scanned through every structure to see if a pool of any sort was visible, and I walked the neighborhoods to see if I could spot others (this proved somewhat futile, as there is so much fencing in the neighborhood, it is often difficult to see into others' yards). Seventy-five possible pools were mapped the link is <http://bit.ly/1uURgJj>, but I also took a screenshot of the area which is attached in this post, which I liked better, as it saved in satellite view. Pools were of varying sizes, and seemed to be fairly well-distributed, with some clusters. It actually made me want to learn even more about other habitat factors for bats in my particular area (availability of bat houses, etc.). I found the included bat habitat mapping article to be helpful as well (University of Leeds, 2013), although a little disheartening in the fact that it showed once again how far ahead of America the UK is when it comes to bat conservation in particular.

As for thoughts on the mapping readings, I found them to be very thought-provoking. I had read just a little about mapping before, in an anthropological environmental studies class, but I had not considered the implications in depth. Rocheleau's article (2005) did a very thorough job of really articulating the relationships between empowerment and mapping, which was not something that I had really considered before. The mention of mapping as a tool was reiterated, using examples from colonial times up to the present; this was certainly breakthrough for me. It seems so obvious, but using maps as a way to control or spin things can be incredibly powerful.

We do also have to be careful of oversimplifying things when it comes to mapping, however; not all complex issues can be boiled down to a single concept that can be documented in a map. Additionally, when considering mapping, it is always important to consider the source, as maps can have agendas and political uses, and therefore may not always be one hundred percent unbiased. Rocheleau (2005) also provided great information breaking down the various types of maps that can be created. The article by Kudrayavstev et al. (2012) on the issue of the sense of place was also very pertinent to me. I feel that there are a lot of native Memphians who share that strong sense of place. What is now needed is a way to tap into those people-place relationships to encourage and empower people to become more involved in working on their community and improving their city and their environment. I feel like there is a great deal of untapped potential in this city. It certainly has its issues, like any city, but there is still so much potential, if we can only find a way to unlock it. The articles by Mears (2012) and Santilli et al. (2011) relating to involving youth in community mapping were very interesting as well. I do believe that involving youth is one of the most vital ways to work towards environmental awareness and preservation. The difficult part for me locally is still figuring out what community I can work to tap into, without becoming too overwhelmed.

Literature Cited

Central Gardens Association. (2014). History. Retrieved from <http://centralgardens.org/history>

Gwynne, P. (2014, June 25). Mom, there's a bat in the pool: New research aims to reduce chances of bats drowning in pools. Inside Science. Retrieved from (<http://www.insidescience.org/content/mom-there%E2%80%99s-bat-pool/1711>)

Kudryavstev, A., Stedman, R.C., & Krasny, M.E. (2012). Sense of place in environmental education. *Environmental Education Research*, 18 (2), 229-250.

Mears, J. (2012). The many benefits of community mapping. *Connect*, 25(4), 1-3.

Rocheleau, D. (2005). Maps as power tools: Locating communities in space or situating people and ecologies in place? From Brosius, J.P., Tsing, A.L. and Zerner, C. (eds.), *Communities and Conservation*. New York, NY: Altamira Press. Chapter 13, pp. 327-362.

Santilli, A., Carroll-Scott, A., Wong, F., & Ickovics, J. (2011). Urban youths go 3000 miles: Engaging and supporting young residents to conduct neighborhood asset mapping. *American Journal of Public Health*, 101 (12), 2207-2210.

University of Leeds. (2013, July 2). Bat maps! The conservation crusade. eScience news. Retrieved from <http://esciencenews.com/articles/2013/07/02/bat.maps.the.conservaion.crusade>