



Architecture for bats

Posted on October 6, 2010 by [Nina Boccia](#)

Categories: [Architecture](#), [Q&A](#)

In the current issue of Azure, we show architect [Joyce Hwang](#)'s Bat Tower outside of Buffalo. In this web exclusive, Hwang discusses the full range of her Pest Architecture, which brings visibility to critters that are ecologically important yet often overlooked.

Having recently completed designs for Pest Wall and Pest Pavilion, Hwang, who teaches at the University of Buffalo's School of Architecture and Planning, took a moment to answer a few questions on the unique oeuvre of her firm, [Ants of the Prairie](#).

Azure: What made you decide to create a home for bats?

Joyce Hwang: For the last few years, I have been thinking about how architecture can bring visibility to animals that are ecologically critical, but often overlooked - if not disregarded as pests. That began a series of projects that I am calling Pest Architecture. I began with a few speculative studies in designing large-scale, sculptural bat houses. In 2008, I received a grant from the New York State Council of the Arts to design and build a prototype of a bat house, which jump-started a process of designing and building in the shop at the [School of Architecture and Planning](#) at the University of Buffalo.

AZ: Why did you choose [Griffis Sculpture Park](#) as the place to erect the Bat Tower?

JH: It was initially intended to be installed in a much more urban setting, but we decided to approach GSP as a location for installation as it is an ideal environment for testing out the tower. We were able to find a suitable site for the project, near a pond along one of the park's hiking trails.

AZ: The interior of the Bat Tower is comprised of interlocking wooden pieces through which the bats climb up. Can you discuss why you chose to make a perforated pattern on the wooden pieces using Braille?

JH: Since we were cutting literally hundreds of wood pieces of similar dimensions and shapes, we wanted to find a way to systematically label each piece. We decided on using Braille for a few reasons: First, a system of holes, we thought, would add another aesthetic dimension to the project – rather than using a series of etched letters and numbers.

Second, since we were interested in developing an installation process that could include community members, we were speculating that maybe this might be a way to allow blind people to participate in the assembly process. Although no one on our design and construction team was blind, we were thinking, "Would it be possible to organize the pieces for assembly, just based on a system of touch?"

Next, the system of holes gave us an opportunity to incorporate a design for ventilation in the "skin" panels. Lastly, we thought that this could be a way to "salute" the bat (in a metaphorical way, I suppose) as an animal which lacks a good sense of vision, but is able to feel its way around through echolocation.

AZ: How important is the structural base of the tower?

JH: We wanted to create a tower that would not require a deep, poured-in-place foundation, so we looked for ways to create a wide base on-grade that would resist overturning moments of the tower. We took this on not only as a structural exercise, but also as a design opportunity. The base is a system of lumber pieces that are staggered in a way to create various openings. In these openings, we planted some herbs (chives, garlic chives and oregano) in hopes of attracting the insects that attract bats. I visited the project a few days ago, and the

plants have already started to grow quite nicely.

AZ: Since the Bat Tower at GSP is a prototype, what are you hoping to learn from it?

JH: During the construction and installation process, we were looking at how easily the project could be built and installed. Part of the intention is that it would be something that a group of community members could help put together. Now that it is installed, we are studying how it works: what creatures does it attract (bats or otherwise)? What is its internal temperature during different weather conditions? We're also looking at how the structure will survive the extreme climate weather of Western New York. We will be making observations and finding ways to refine the design.

AZ: Are there other versions currently in development that may go into production?

JH: There has been some interest from several organizations, but nothing is certain yet. I'm also working on a couple of other projects, Pest Wall and Pest Pavilion – they're still in early schematic design phases – which are both drawing from some of the lessons we are learning from the tower.

AZ: What "pests" are you considering for the wall and pavilion?

JH: Both projects would be designed with bats in mind. But it is possible that insects may begin to make homes within in these projects as well. The Bat Tower, for example, hosts quite few insect and spider populations. Over the summer there were some cocoons in the project as well.

AZ: What would be the potential location of the Pest Wall and Pest Pavilion?

JH: Pest Wall's ideal location is in Buffalo, or another rust belt city. The intention is to build it as a new exterior wall for an existing building. A rust belt city, with its stock of decaying/abandoned buildings might provide a great context for the project.

Pest Pavilion, at the moment is being considered as a prototype and does not have an 'ideal' site.

AZ: Your firm, Ants of the Prairie, is unlike a typical office. How would you describe it?

JH: The structure is very fluid. I often work with collaborators on projects (both speculative or realized). Sometimes the same people might work with me on several projects, but often times, my collaborators vary. So far they have included colleagues (in architecture), experts in other disciplines, such as scientists, family members, and students. In the case of Bat Tower, almost all of the collaborators were students (or alumni) of University at Buffalo's Department of Architecture.

AZ: How long will Bat Tower be up for?

JH: The project will be up semi-permanently, that is, it will stay up until it falls apart due to weather or otherwise.

As of mid-September, Hwang reported that bats have been flocking to the tower. Read more about the project in Azure's [October](#) issue, on stands now.