BAT TOWER JOYCE HWANG ANTS OF THE PRAIRIE

While much of current ecological thinking centers on the relationship of human actions with the environment, the Bat Tower takes a different approach. Side stepping client demands and disciplinary boundaries, the project explores ways in which architecture can engage with natural ecosystems in a direct, productive, and visible way. It also acknowledges that the smallest intervention can, and must, sustain an impact at a larger scale.

Led by Joyce Hwang and her firm, Ants of the Prairie, the Bat Tower is part of a series of design studies and research devoted to bats, pests and other seemingly undesirable wildlife. Taking on "the pleasures and horrors of our contemporary ecologies," Hwang seeks to show that these animals play a crucial and underestimated role in the health and balance of their ecosystem.

The tower is more than a comfortable place for bats to live. Hwang describes the tower as a vertical cave that is heavy and intense, a contrast with off-the-shelf bat houses. With the design, Hwang hopes to counter the misconception that bats, nocturnal animals largely out of public view, are pests to be exterminated. Instead, the tower provides a visible structure that maintains and celebrates the bats' vital importance to the environment. This is particularly important in light of the spread of White-nose Syndrome, a disease which has wiped out significant numbers of bats in recent years and threatens to alter entire local and regional economies of production.

Perhaps the most provocative aspect of the Bat Tower is its large-scale ambition. As a prototype to be erected and repeated in areas of bat hibernation, the tower can begin to resist, and even reclaim, ground lost to White-nose Syndrome. The proposal of a regional network of Bat Towers is a way to protect and strengthen related ecosystems through small-scale, calibrated design moves. **–IRINA VERONA**





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Joyce Hwang: Bat Tower 35

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facing page: The Bat Tower prototype consists of five individual structural and spatial modules. Each module is composed of a combination of plywood and cedar ribs that allow access into the structure. Dark wood panels clad the upper two modules.

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top and bottom left: View of Bat Tower top and bottom left: View of Bat Tower on site. Located on a pond in Griffis Sculpture Park in East Otto, New York—a 400-acre preserve where art is intermixed with hiking trails—the Bat Tower could pass for another sculpture. Constructed of wood ribs and panels, the tower has a twisted, orgular competer designed to fossili and panels, the tower has a twisted, angular geometry designed to facili-tate the bats' access and movement through the structure. The dark-colored upper panels enclose an "inhabitation zone" where bats can live and thrive.

top right and center: View of interior cavity (center) and heat-sensor studies (right). By absorbing sunlight, the dark panels provide a warm environment suitable to bat inhabitation and roosting.

above: Detail view of modules 3 and 4. The bats can move from the ribbed structure up into the enclosed area via a series of vertical and horizontal grooves. The upper area is ventilated through a pattern of small holes, designed according to the Braille system.

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above: Braille system of holes. In order to keep track of more than four hundred prefabricated components. Hwang and her team designed a pattern of holes based on the Braille system. The holes index the location of each rib and panel and also provide air circulation. According to Hwang, the Braille is also a "nod to the bat, as an animal that does not see well and relies on echolocation."

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left: Detail image of structural plywood rib with Braille holes (left) and CNC panel layout.

facing page: Detail view of upper tower portion.

Project Director Joyce Hwang, Ants of the Prairie / Design Collaborators Thomas Giannino, Michael Pudlewski, Laura Schmitz, Nicole Marple, Mark Nowaczyk / Construction Collaborators Michael Pudlewski, Laura Schmitz, Nicole Marple, Mark Nowaczyk, Dan Dimillo, Matt Salzer, Jake West / Installation Collaborators Matt Bain, Albert Chao, Joshua Gardner, Shawn Lewis, Sergio López-Piñeiro, Nellie Niespodzinski, Mark Nowaczyk, Michael Pudlewski, Joey Swerdlin, Angela Wu/ Consultants Katharina Dittmar, Mark Bajorek / Installation Photographers Albert Chao, Nellie Niespodzinski, Angela Wu

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