

Building the Forest: Forestry Openings as Architectural Design

Jana VanderGoot
University of Maryland

Quabbin Agrowatershed Park, Quabbin Reservoir, Massachusetts

This project envisions forestry as a medium of architecture and a radical tool with which to re-imagine the city of the future. In the context of this project, forestry acts as a larger urban construct that is not necessarily limited to tree schemes. Instead, forestry is an aesthetic language that opens up new ideas about permeable floors, protective canopies, and resilient systems.

Quabbin Agrowatershed is designed as a new park in the public portion of Quabbin Reservoir that is called Quabbin Park. Agroforestry in Quabbin Agrowatershed Park is the foundation of a visible design language. The park is a museological and civic landscape that co-opts agroforestry as a generator of architectural form. Visitors chart many paths through the park:

Market Thoroughfare

An urban moment occurs as one enters the wetland market by car from Route 9. A two-lane market thoroughfare lined with bike paths, vegetated buffer strips, and a water spillway stretches north and offers direct vehicle access to the reservoir edge. The access entry point of the thoroughfare is a modular steel structure that houses both permanent and temporary produce markets, prepared food vending, and plant nurseries. The steel structure, like a gridded tree plantation, floats on piles above a wetland that slows and filters water, as it drains from the hills and through the valley along the spillway.

Arboretum Circuit

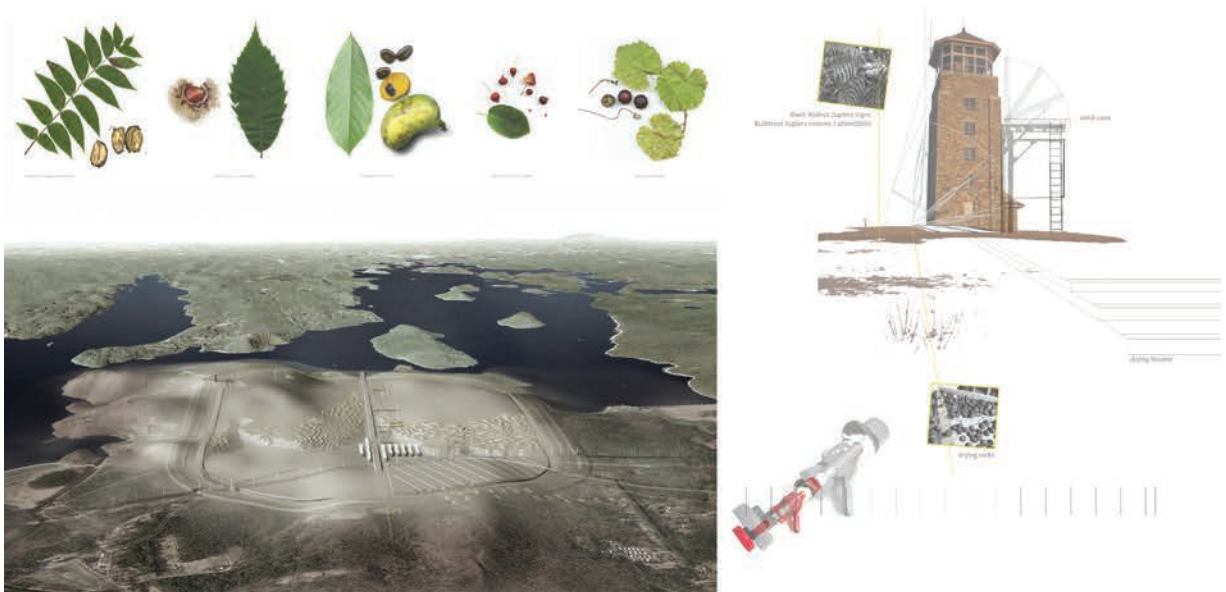
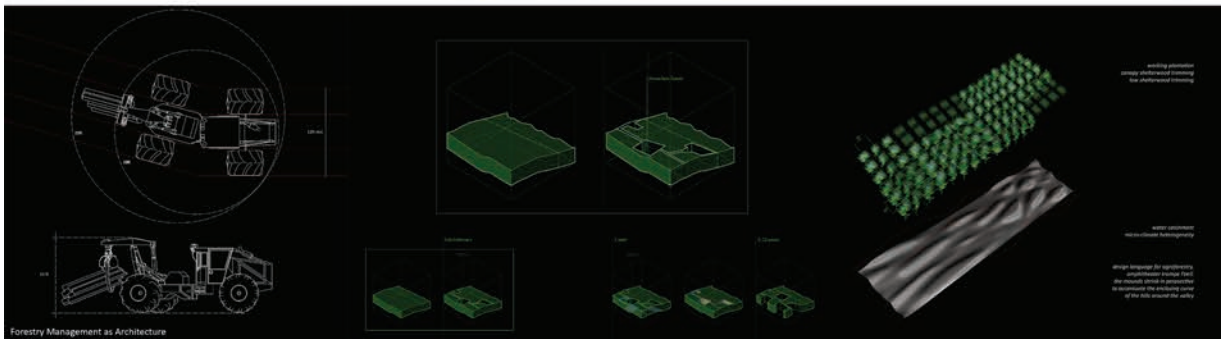
A pedestrian circuit lines a south-facing amphitheater of hills and offers views into the valley below. The circuit is lined with a theater of trees. Ground cover and shrubs line the edge of the path and bleed into understory and towering canopy trees. Every plant type is labeled with a description of its edible uses. Periodic views into timber plantations beyond highlight garden rooms as the intersection of agroforestry and timber harvesting operations.

Orchard Forest

An accentuation of the south-facing amphitheater, the orchard forest superimposes a quin-cunx grid planting strategy with a new undulating topography of nutrient-rich soil mounds. The mounds are situated on the steepest terrains and act as water detention structures to maximize irrigation and minimize erosion. The pattern of the orchard forest is visible as a large-scale landscape gesture from the valley thoroughfare and wetland market.

Building the Forest

Critical questions for the 21st century are about how the forest might be re-interpreted and engaged. Is there a new model for building the forest that would fit in the plans for rapidly developing cities and expanding populations? If so, what are the threats and limitations of the forest? What are the new discoveries and radical propositions? Is there such a thing as a digital forest? Could the concrete jungle do better at processing storm water and providing food? Who or what can take on the social role of Robin Hood? The discipline of architecture is rich with strategies for synthesizing, organizing, and design thinking outside of the box. In this respect it is ideally poised to take on these questions.



Building the Forest: forestry openings as architectural design at Quabbin, Massachusetts