## A garden in the sky

Historic Bronx building gets green roof By BILL EGBERT DAILY NEWS STAFF WRITER

The idea of a rooftop garden evokes images of high-life and penthouses, but a pilot project will install a "green roof" atop a historic building in the South Bronx.

Plans for the rooftop meadow on top of the American Banknote Building in the largely industrial area of Hunts Point were unveiled at an environmental conference recently held at The New York Botanical Garden.

The "Green Roofs, Cool City," confab brought urban planners, architects, environmentalists, developers, building owners and community activists together to discuss the potential of green roof technology in the borough.



Kathleen Bakewel

Rooftop of the American Banknote Building in Hunts Point will be transformed into a meadow complete with grass, wildflowers and other plants when a green roof is installed in May.

A green roof is a rooftop covered with a layer of soil and seeded with grass, wildflowers or other ground-cover plants. The practice has been popular in Europe for years, but is just catching on in American cities.

Michael Berkshire, Green Projects administrator for the city of Chicago, was a featured speaker, giving an overview of its successful green roof projects - including a rooftop meadow atop City Hall.

Susanne Boyle of HM White Site Architects landscape firm discussed the green-roof phenomenon in Germany, where about 14% of rooftops installed last year were greened.

The project to green the rooftop of the American Banknote Building began as a glimmer in the eye of Majora Cater, executive director of Sustainable South Bronx, which is located in the historic building.

She brought Con Edison officials up onto the roof one day to pitch the concept, and the energy utility agreed to sponsor it - literally on the spot.

Carter hopes the pilot project, due to be installed in May, will spark a green revolution in the Bronx.

"To have this live example right here that we can actually show to building owners and developers - I think will create a lot of interest," she said.

The main benefits of green-roofing to building owners is energy savings, because the vegetation reduces the heat generated by the sun beating down on a black rooftop in the summer, and acts as an insulating blanket to retain rising heat in the winter. The coverage also helps rooftops last up to 50% longer than conventional roofing, offsetting the installation costs.

While a meadow on top of a building might sound too heavy, turf-based green rooftops range in weight from 5 to 30 pounds per square foot, depending on the design. Traditional rooftop gardens typically range from 40 to 100 pounds per square foot.

But in addition to increasing energy efficiency and extending the life of a building's roof, green rooftops help with larger, citywide problems like reducing the urban "heat island" effect, which cranks up summer temperatures as the sun's heat builds up in black rooftops and asphalt.

All that urban asphalt also can create stormwater runoff problems, with torrents of rain cascading off roofs and across watertight pavement to flood storm drains.

Green-roof systems have been shown to retain 60% to 100% of the stormwater they receive, according to the Green Roof Research Program at Michigan State University.

There also is an esthetic case for green-roofing. Wildflowers can flourish on an expansive rooftop, and the islands of green attract migratory birds and butterflies.

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