



*Fig 1. Meadow Lake in 1937 during construction on exhibits for the 1939-1940 New York World's Fair*

HIGHWAY HIGHWAY



*Fig 2. The habitat underpass of the Van Wyck Expressway*

## EXPLORING THE MARGINAL ECOLOGIES OF FLUSHING MEADOWS-CORONA PARK



*Fig 3. A pair of mallards entering the Flushing Creek with Tree of Heaven and Phragmites along the banks of the waterway*



*Fig 4. A treehouse thicket bordering the Long Island Expressway on-ramp*



# HIWAY HIWAY

A CHANCE ECOLOGIES FIELD REPORT BY CHRISTOPHER KENNEDY

## INTRODUCTION

*hiway/hiway* is a site-specific investigation of the Flushing Creek at the intersection of the Long Island and Van Wyck Expressway in Flushing Meadows-Corona Park. The project explores the value of unmediated weedy landscapes that surround highway interchanges and on-ramps, and considers how transit systems act as habitat, repository, and conveyance for seeds, pollutants, water and multi-species interaction.

As amauteer ecologist and artist, I conducted 5 field studies in July and August 2016. I was drawn particularly to a site under the tangle of highway infrastructure at the southeast corner of the park, noting a diversity of native, introduced, and so called “invasive” organisms, which seemed to thrive despite unfavorable conditions (eg. salt from snow plows, car exhaust, stormwater runoff etc). As a stark contrast to the maintained spaces in nearby parklands, these “hiway” ecologies unfold as open borders and hybridized ecotones that mirror a trans-global urban commons emblematic of the surrounding neighborhoods of Flushing and Corona, Queens, New York. This broadsheet shares research and documentation of this unique site, while speculating on new conceptions of urban wilderness or ‘marginal nature’.

## THE FLUSHING CREEK: A RECONSTRUCTED WATERWAY

The story of Flushing Meadows-Corona Park is a tale of transportation and movement. For centuries the Flushing Creek was a low lying salt marsh and riverbed at one time connected to the mouth of the Hudson River. Over time the Creek’s future was altered by transportation systems that continue to divide the waterway and its surrounding environs. Steamboats and ferries once transported people to the burgeoning city of Brooklyn, and later a series of bridges, Northern Boulevard to the north and Strong’s Causeway to the south, would connect Corona to Flushing. A railroad terminal emerged in the 1850s, bringing the Long Island Rail Road to the east side of the creek, along with the construction of the Long Island Expressway and the Brooklyn Ash Removal Company.

In 1936, Robert Moses proposed the city close the Ash Removal Company and use the factories waste to fill in the surrounding salt marshes. Moses’ vision was to transform the area in anticipation of the 1939 World’s Fair. The creek was straightened and southernmost areas excavated creating what is now Willow Lake to the south and Meadow Lake to the north.

The creek was soon only accessible up to Roosevelt Avenue, damned in 1938, by an unnamed bridge (known today as Porpoise Bridge) to control storm surges. The 1964 World’s Fair resulted in even further alterations, pushing the flow of the creek into an underground canal that once fed the Fountain of the Planets near the current site of the Queens Museum. Over the proceeding decades, industrial pollution, largely from the Willet’s Point area, would degrade the ecology of the creek; exacerbated by a sewer treatment plant completed in 2002 along College Point Boulevard.

Today it is nearly impossible to walk the creek’s original route, spliced several times by highways, bridges and fencing. However, the creek still emerges below the LIE and Van Wyck Expressway, the roadways acting as a kind of cement and steel canopy, with large pillars piercing the tributary as it feeds into Meadow Lake. Phragmites and other spontaneous urban plants surround the eroding banks, as thousands of cars pass overhead daily.

Yet despite a host of modernist urban planning

efforts, parts of the Flushing Creek continues to flood and reclaim the salt marsh that once defined its borders. In fact the headwaters of the creek still flow. If you follow an unmarked path along trails near the nature preserve surrounding Willow Lake you can find an opening where water escapes on its way into the Flushing Bay. The tangle of highways, rail tracks and human-made infrastructure merely a diversion to a vast estuarial system still in flux.

## STORMWATER SPONGES AND HIGHWAY AQUEDUCTS

If you look closely, a complex network of drainage pipes cling to the highway interchange as it hangs above and cuts through the Park. As incidental aqueduct, the highway’s impervious surface acts as collection and distribution system for what the DOT classifies as floatables, silt and sediment, nitrogen, phosphorous and in some cases pathogens like coliform. The entirety of the Flushing Creek Watershed (~500 acres) is impacted in some way by these roadways, which comprise over a quarter of the watershed’s land use. According to the NYC DEP1, the remaining areas are approximately 37% residential, 20% open space and the remaining a mix of commercial and public facilities.

As you walk under the highway interchange you’ll notice two rectangular structures buried into the earth. The low lying walls are made of small gray stones surrounded by a metal mesh, called gabions. They appear almost as land art, something Smithsonian may present as a sculpture or monument. If you look closer, you’ll notice a large pipe connected to the highway feeds into the structure, with a mix of wild plants growing at the base. These collection areas are what the NYC DEP1 call “Sponge Parks™” or bioretention basins used to mediate stormwater runoff; the first has the capacity to store 34,000 gallons from a 2 inch rainstorm, and the second has the capacity to store 170,000 gallons.

Although I was not able to see rain flowing into the basins, I did observe a diverse array of plants and other organisms including hay scented ferns, mugwort, wild grasses, mint and dandelion growing happily within its borders. The majority of the surrounding landscape is mowed, but a few traces of wild terrain emerge, notably near the on-ramps and roundabouts. As the hum of the highway sings above, you can sometimes hear crickets and other insects.

## THE HABITAT UNDERPASS

The convergence of highway underpasses and connecting roads has also created a unique habitat for a range of animals, plants and other organisms. Feral pigeons (*columba livia domestica*) make use of the crevices and overhangs. Common Reeds or phragmites border the banks of the exposed Creek bed, with newly planted Gingko surrounding an asphalt thruway for humans.

Evidence of eastern gray squirrels, raccoons, mallards and Norway rats dot the landscape, while the surrounding waterways are home to a number of aquatic organisms like plankton, pondweed, fish, and other critters living in the silt. During my field visits, I observed a number of white perch, some alive and others floating; perhaps from decreased oxygen levels or other toxins from the nearby highway system. In a recent study in the

journal *Northeastern Naturalist*, the NYC DEC2 notes an ongoing outbreak of Northern Snakeheads, a top predator native to Asia that is an obligate air breather able to survive temperatures as low as 0 C. I talked to one parks department employee who said they had been a real “pest” in nearby Meadow Lake.

And humans find a home here too. Several individuals had crafted a makeshift shower using a series of buckets filled up with water from a nearby fountain. A sleeping area had been erected in a wild thicket near the base of the Van Wyck; with the trappings of a highway ‘treehouse’ hidden in plain sight.

A winding path unfolds through the site, a conduit to parking lots under the highway and east of Meadow Lake; a human-nonhuman continuum in the middle of one of the most diverse urban areas in the entire world. If you follow the Van Wyck north, the neighborhood of Flushing emerges just a few blocks away. As a neighborhood of predominantly Chinese and Korean communities, Main Street is a bustling thoroughfare with one of busiest subway stops in all of NYC. If you take the LIE to the West, the neighborhood of Corona extends just north of the highway; a multiethnic neighborhood of predominantly Latino and African American communities.

Walking to and from the subway I observed an impressive array of tent structures and BBQ setups, gathering spaces, music and dancing -- a ‘park ballet’ that Jane Jacobs and Richard Denby would certainly appreciate. And unlike overly manicured spaces like Central Park, there is a kind of freedom that emerges in the ruins of the once utopic World’s Fair site, creating a mix of hiding places, liminal spaces and marginal ecologies where humans and non-humans thrive.

VAN WYCK EXPRESSWAY

## SELECTED WILD PLANTS & ANIMALS



Linden



Lady's Thumb



Mint



Mallard Duck



Chicory



Mugwort



Astor



Gingko



Hay scented Fern



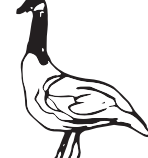
White Clover



Pigeon



Wild Carrot



Canadian Goose



Norway Rat



Purple Loose-strife

## SOURCES & NOTES:

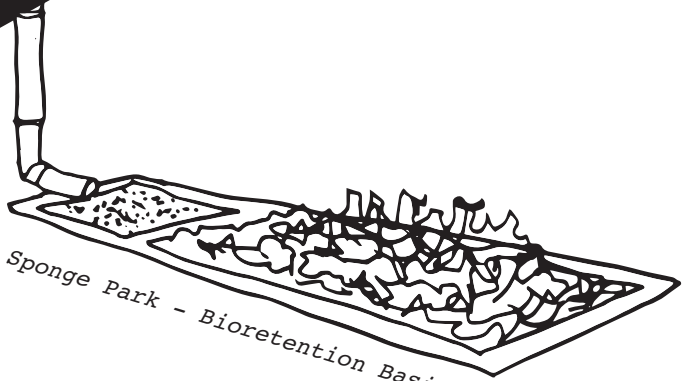
1. NYC Department of Environmental Protection. (2014). Flushing Bay CSO Long Term Control Plan.

2. Cohen, M. K. & MacDonald, J. A. (2016). Northern Snakeheads in New York City. *Northeastern Naturalist*, 23(1):11-24.

*\*Marginal Nature/Ecologies*: accidental habitat; the unintended product of human activity and nature’s unflagging opportunism; a weedy cosmopolitan community in the wastelands and margins of a (sub)urban landscape. (From Kevin Michael Anderson, *Marginal Nature: Urban Wastelands and the Geography of Nature*, 2009)

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## MEADOW LAKE



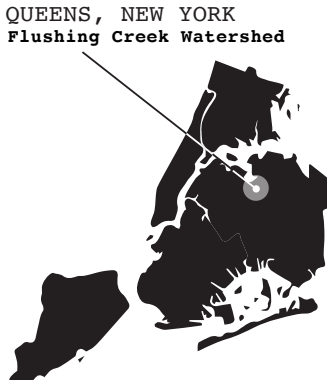
Sponge Park - Bioretention Basin



White Perch



Northern Snakehead



QUEENS, NEW YORK  
Flushing Creek Watershed