

## Urban Nature: Perspectives on Nature and the City



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Austin Water – Center for Environmental Research

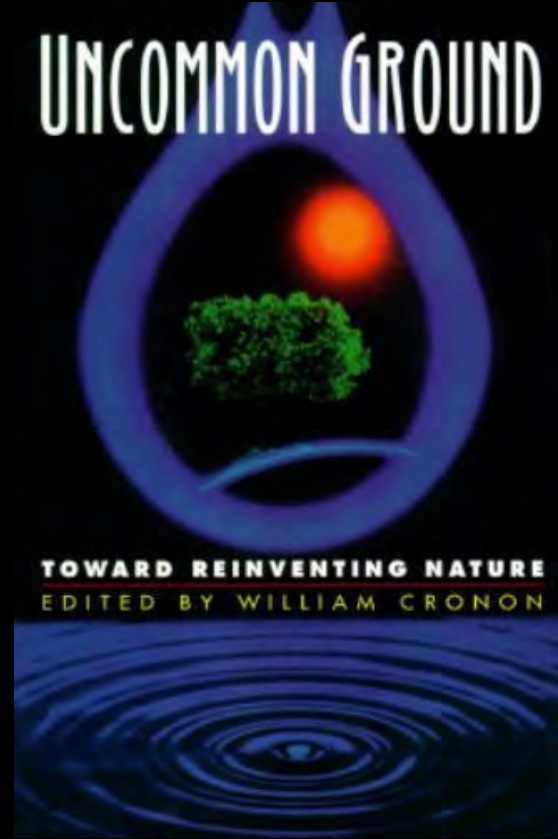
# The Proper Place of Nature

“We need to embrace the full continuum of a natural landscape that is also cultural, in which *the city, the suburb, the pastoral, and the wild each has its proper place*, which we permit ourselves to celebrate without needlessly denigrating the others.”

“The Trouble with Wilderness or, Getting Back to the Wrong Nature”  
William Cronon

*Uncommon Ground: Rethinking the Human Place in Nature*  
(1995)

# UNCOMMON GROUND



# The Proper Place of Urban Nature

## Urban Nature and Culture

- What it is
- Where it is
- What it means
- What it does

## Narratives of Urban Nature

- Redemptive
- Restorative
- Functional

Is it really Nature at all?

The Proper Place of Humans?



# “Established Notions of Nature” and Urban Nature

“Urban nature is not sublime...There’s too much sterility in the form of roofs and pavement, and, oddly enough, there’s also too much wildness, too many weeds and wooded borders and tangled banks, not to mention vacant lots going to brush.

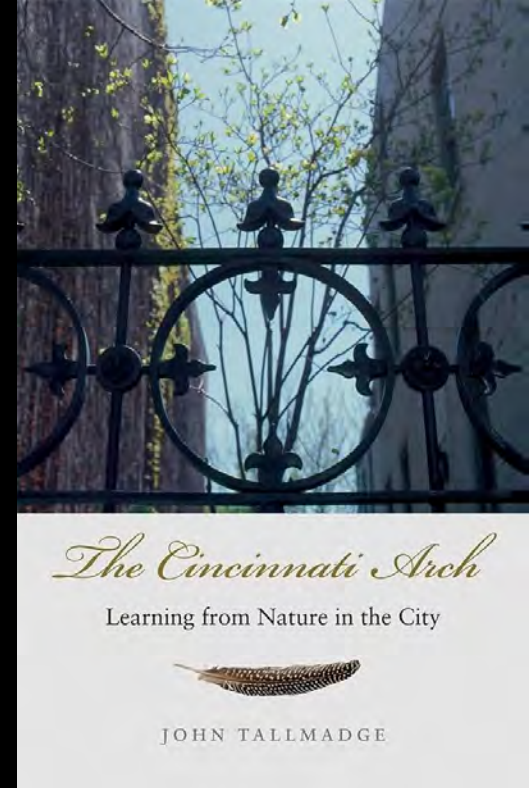
Of course, “wilderness” won’t do to describe such landscapes either. Despite the degree of wildness, there’s too much human impact, too many alien species, too few large animals to meet the legal and cultural criteria.

**The fact is that urban landscapes are just too mixed up, chaotic, and confused to fit our established notions of beauty and value in nature.**

***Maybe it’s not really nature at all, not a real ecosystem, just a bunch of weeds and exotics mixed up with human junk.”***

John Tallmadge

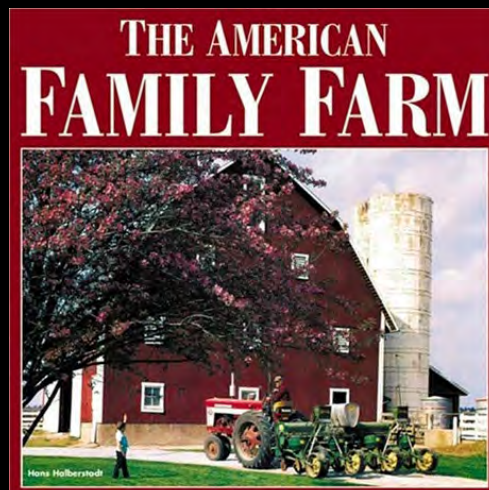
*The Cincinnati Arch: Learning from Nature in the City* (2004)



# Established Notions of Nature

## American Concept(s) of Nature

In the United States, the kinds of nature that we celebrate are *wilderness and pastoral nature*.



# The American Concepts of Nature and Urbanized America

In American cities and towns, we perceive nature filtered through a conceptual framework that prejudices its ecological and cultural value.

Wilderness



Pastoral Nature



Urban (Suburban) Nature?



**Established Notions of Nature**  
**Classical Western Ideas of Nature**  
**Iterative Natures**

**First nature** - wilderness or pristine (untrammelled by humans) the realm of the gods or “primitive” humans

**Second nature** – pastoral arcadia – farms, gardens

**Third nature** – Renaissance geometrical gardens

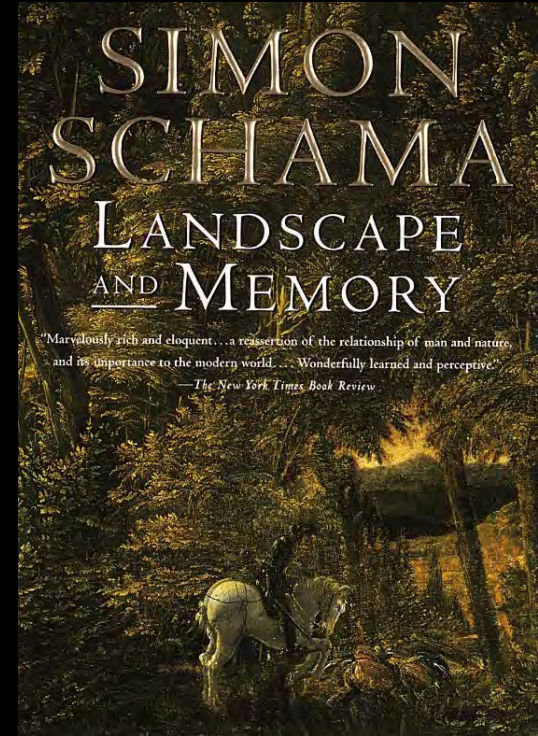


The illustration shows a distant mountain (first nature) giving way to cultivated agricultural land (second nature) and then a formal garden (third nature).

Frontispiece to l'Abbé de Vallemont's *Curiositez de la nature et de l'art* (1705)

# First Nature – Howling Waste of the Wilderness

- The word derives from the notion of "wildness"—in other words, that which is not controlled by humans.
- Samuel Johnson Dictionary of the English Language 1755  
***“a desert; a tract of solitude and savageness”*** (wasteland)
- The Pilgrim leader William Bradford’s well-known description of the forbidding Cape Cod shoreline as seen from the deck of the Mayflower in 1620 - ***“a hideous and desolate wilderness, full of wild beasts and wild men.”***
- Old Testament – ***He findeth him in a desert land, in the howling waste of the wilderness.*** Deuteronomy 32:10
- New Testament - Jesus in the Wilderness – Temptation and finding your true self

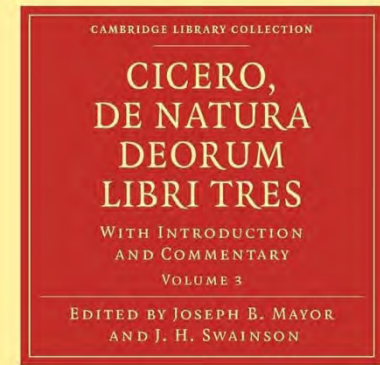




# Second Nature – The Pastoral – Humanizing Nature

Cicero *De natura deorum* (45BC)

“We enjoy the fruits of the plains and of the mountains, the rivers and the lakes are ours, we sow corn, we plant trees, we fertilize the soil by irrigation, we confine the rivers and straighten or divert their courses. In fine, by means of our hands we essay to create as it were a *second world within the world of nature.*”



CAMBRIDGE



SECOND  
NATURE  
A GARDENER'S EDUCATION



MICHAEL POLLAN  
AUTHOR OF THE BESTSELLING *THE BOTANY OF DESIRE*

"Second Nature is... an brilliant and accessible introduction to the world of plants and the world as they of you will not likely to come again!"  
—The New York Times Book Review

# Myth/Narrative - The Pastoral and The Garden

## Harmony and Innocence within the Garden Wall



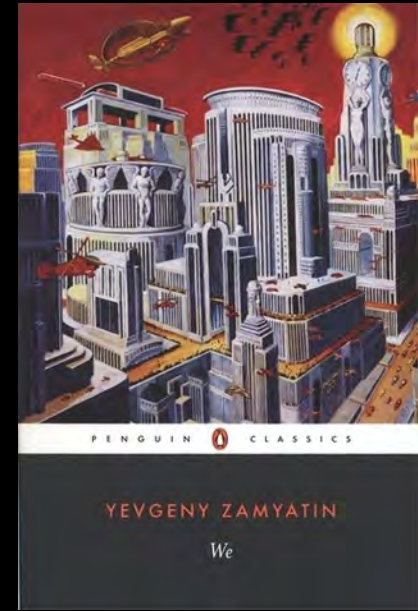
# What Nature Means - Wild Nature and The City

## Irrational, Ugly Nature vs. Rationalism and Modernity

“Oh, how great and divinely limiting is the wisdom of walls. This Green Wall is, I think, the greatest invention ever conceived.

Man ceased to be a wild animal the day he built the first wall; Man ceased to be a wild man only on the day when the Green Wall was completed, when, ***by this wall we isolated our machine-like, perfect world from the irrational, ugly world of trees, birds, and beasts.***”

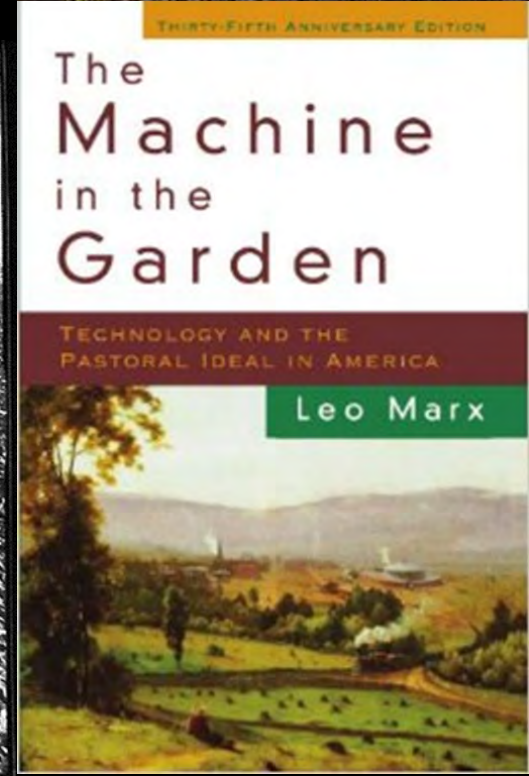
- Eugene Zamyatin, *We* (1921)



# What Nature Means - Pastoral Nature and The City

## The American Pastoral Impulse – Agrarianism

- Tension between the pastoral impulse (sentimental pastoral arcadia) and the realities of rural agrarian life (slavery, poverty)
- Tension between the politics/power of rural vs. urban
- Tension between the Industrial Revolution and rural life



# Negative Second Nature – The Death of Nature and The Urban

“Nature, destroyed as such, has already had to be reconstructed at another level, the level of ‘second nature’ i.e. the town and the urban.

The town, anti-nature or non-nature and yet second nature, heralds the future world, the world of the generalized urban.

***Nature...dies. It gives way to produced space, to the urban.”***

Sets the Stage for the 19<sup>th</sup> Century Narrative of Redemptive Urban Nature



THE PRODUCTION OF  
**SPACE**

*Henri Lefebvre*



TRANSLATED BY  
DONALD NICHOLSON-SMITH

# Narrative of Redemptive Urban Nature

## 19<sup>th</sup> Century American Nature and Culture

- What it is
- Where it is
- What it means
- What it does



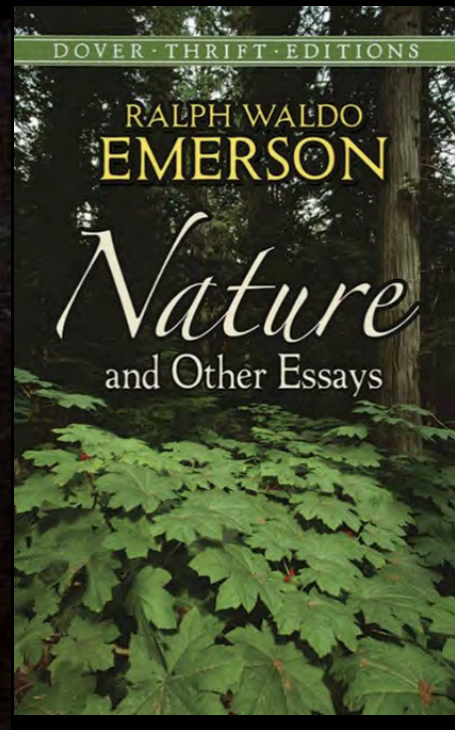
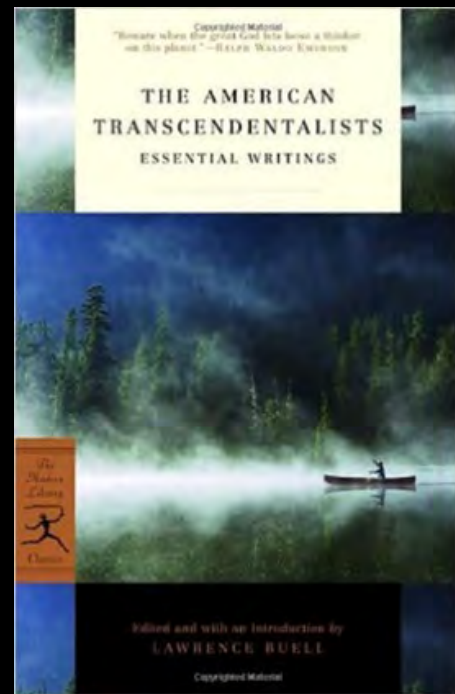
# What Nature Is and Does - Transcendentalism

The Romantic idea of Nature transformed into the American Transcendentalist idea of Nature in Ralph Waldo Emerson's essay, "Nature" (1844).

Nature contact as therapy for a diseased, over-civilized heart.

- Nature is a source of sensations--healthy feelings.
- Humans can discover emotional health in nature.
- Such health leads to moral and spiritual clarity.

The Urban Disease – the City/Town makes you sick



## Where it is - Thoreau, the City, and the Tonic of Nature

“The West of which I speak is but another name for the Wild; and what I have been preparing to say is, that in Wildness is the preservation of the world.

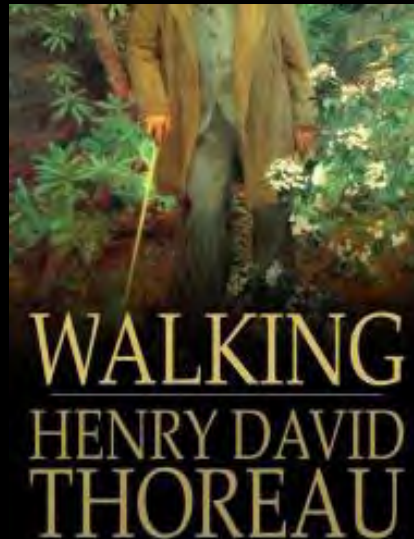
Every tree sends its fibers forth in search of the Wild. **The cities import it at any price.** Men plow and sail for it. From the forest and wilderness come the tonics and barks which brace mankind.

**Hope and the future for me are not in lawns and cultivated fields, not in towns and cities...”**

*The Transcendentalist concept of nature as a tonic for the urban dis-ease*



1817-1862



(1862)





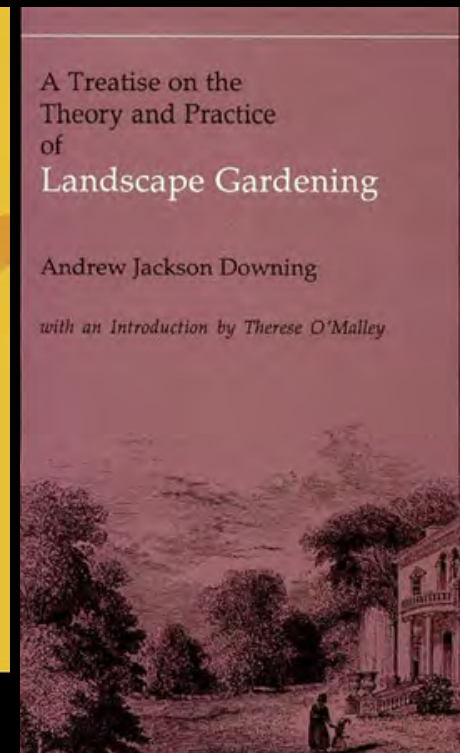
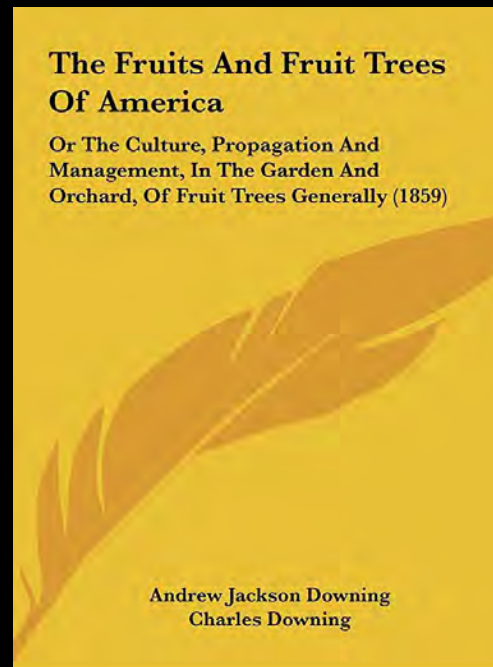
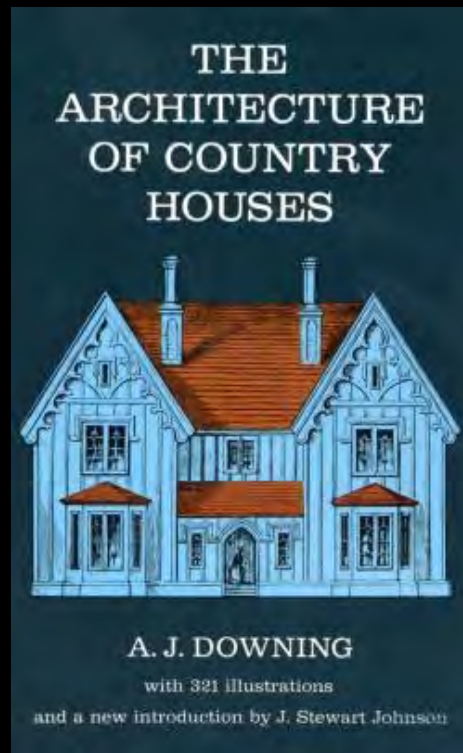
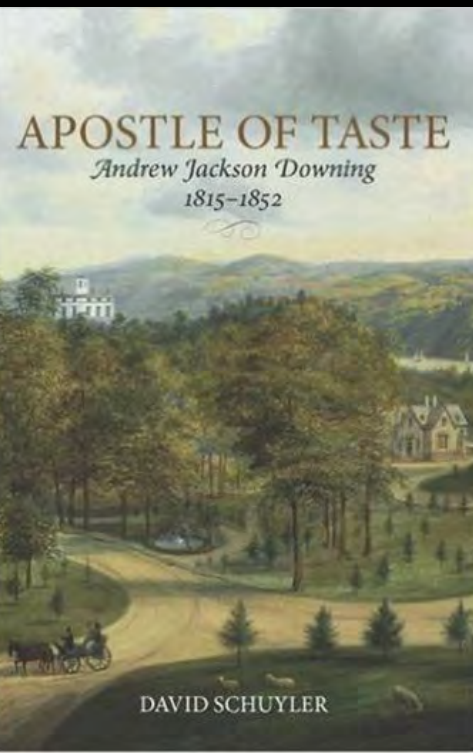
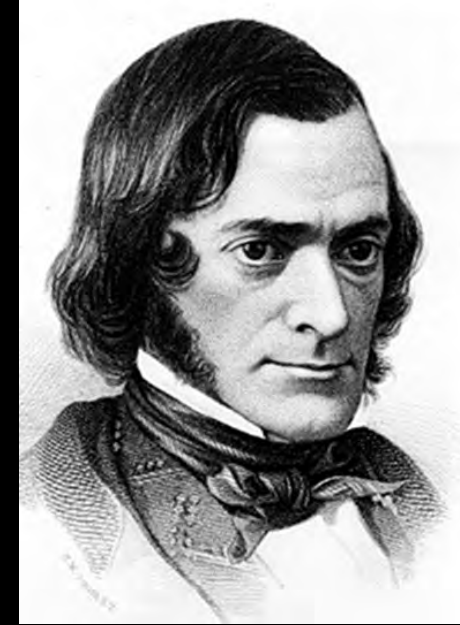
# What it is and Where it is

## The Cure – Import Nature at Any Price

Andrew Jackson Downing 1815-1852

*A Treatise on the Theory and Practice of Landscape Gardening, Adapted to North America* (1841) it was the first book of its kind published in the United States.

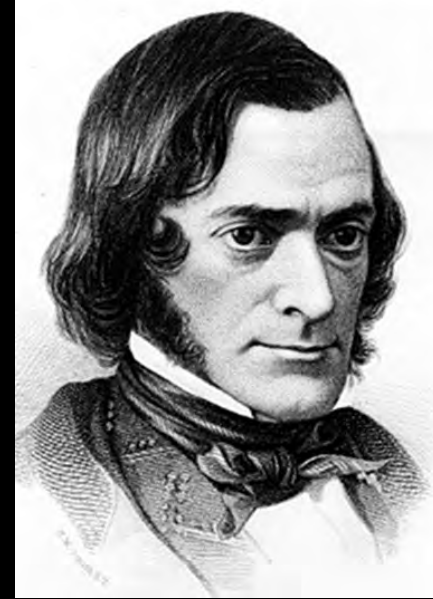
Editor of *The Horticulturist* magazine (1846–52)



# What Nature Does – The Transcendentalist Cure

## Democracy of Taste – American Landscape Garden

- **Moral Improvement** – “Regardless of one’s wealth or social standing, *American republicanism offers equal and unlimited access to intellectual and artistic growth and the development of good taste*, all of which accompany moral improvement.”
- **Citizenship and Nature** – “The love of country is inseparably connected with the love of home. Whatever, therefore, leads man to assemble the comforts and elegancies of life around his habitation, tends to increase local attachments, and render domestic life more delightful; thus not only augmenting his own enjoyment, but *strengthening his patriotism and making him a better citizen.*”
- **Mental Health** - “There is no employment or recreation which affords the mind greater or more permanent satisfaction, than that of *cultivating the earth and adorning our property.*”



A Treatise on the  
Theory and Practice  
of  
Landscape Gardening

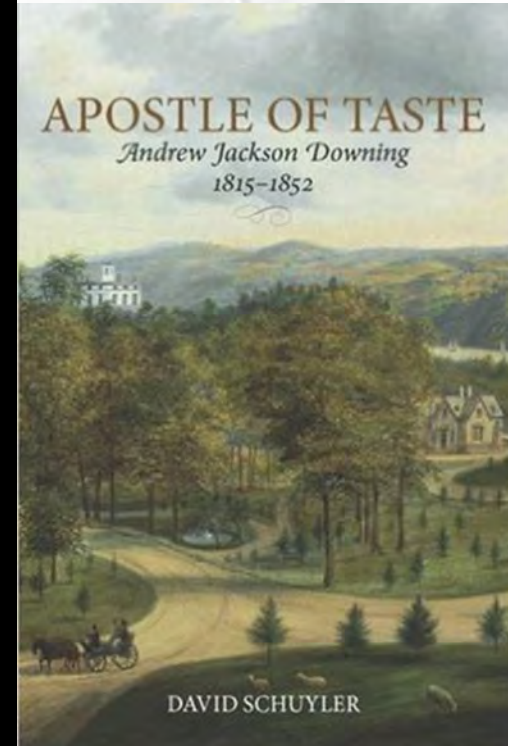
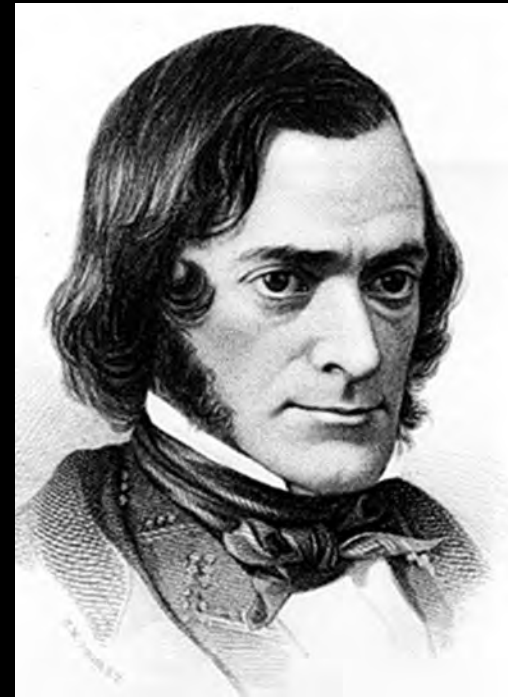
Andrew Jackson Downing

with an Introduction by Therese O'Malley



## What Nature Is - “A More Refined Kind of Nature”

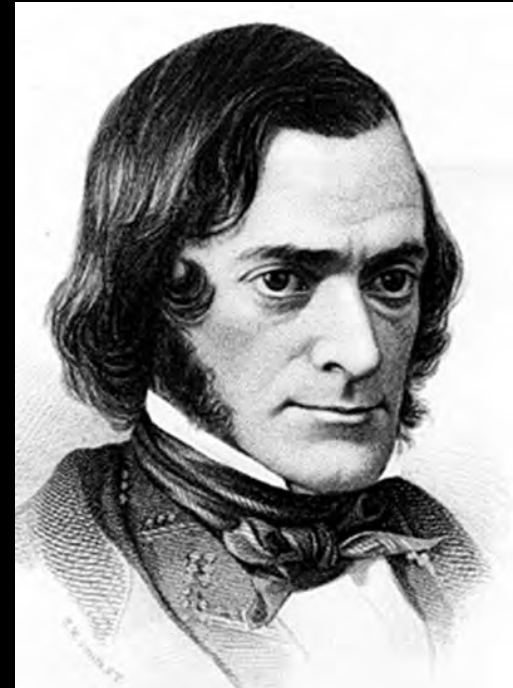
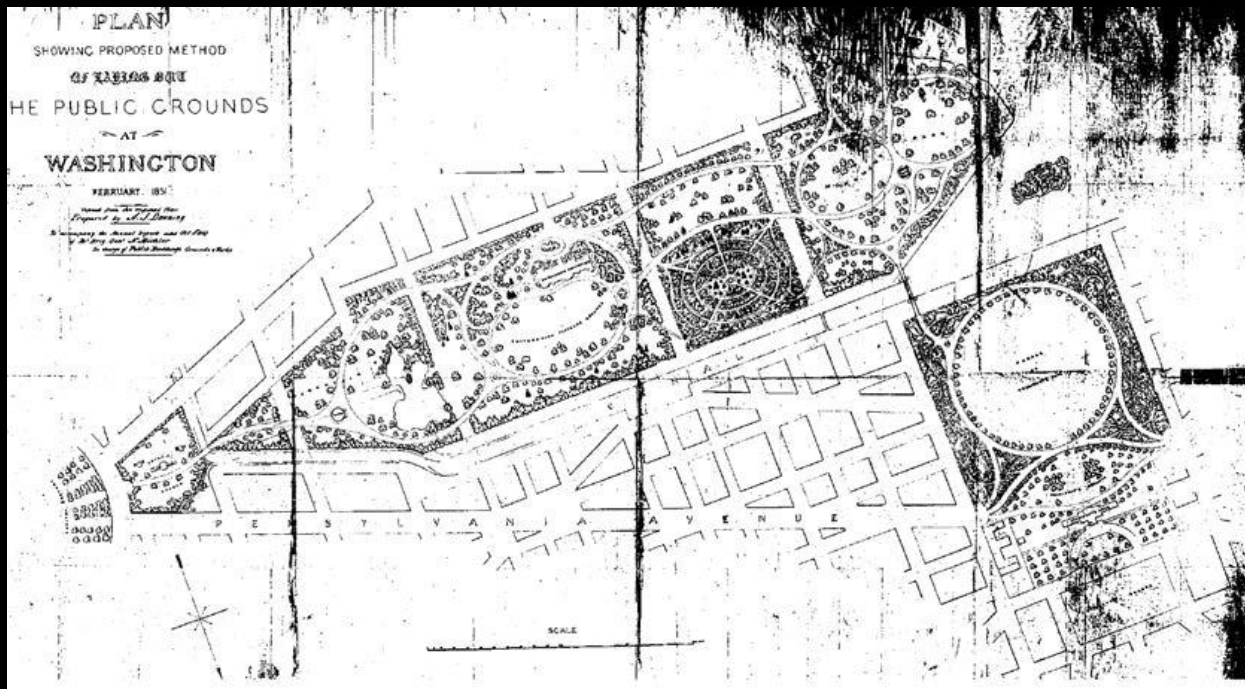
- **Town vs. Country** - “In the United States, nature and domestic life are better than society and the manners of towns. Hence all sensible men gladly escape, earlier or later, and partially or wholly, from the turmoil of the cities. Hence the dignity and value of country life is every day augmenting. And hence the enjoyment of landscape or ornamental gardening – which, when in pure taste, may properly be called *a more refined kind of nature*, - is every day becoming more and more widely diffused.”
- **Second Nature** - “*A facsimile imitation of nature in gardening*, that is, a scene like wild nature, in which only wild trees, shrubs, and plants, are employed, and which is precisely like wild nature, produces pleasure only as it deceives us, and appears to be nature itself.”
- David Schuyler, “Downing interpreted this progression from classic to romantic not simply as a change in stylistic preference but as *a reflection of the nation’s evolution from a pioneer condition to a more advanced state of civilization.*”



# Redemptive Urban Nature

## Proper Nature, Proper Place – the Role of Parks

- Downing wrote that public parks would play an important role *“in elevating the national character.”*
- “Let our people see for themselves *the influence for good* which [the founding of a public park] would effect, no less than the healthful enjoyment it will afford”
- President Millard Fillmore commissioned Downing to create a plan that would redeem the Mall from its physical neglect.



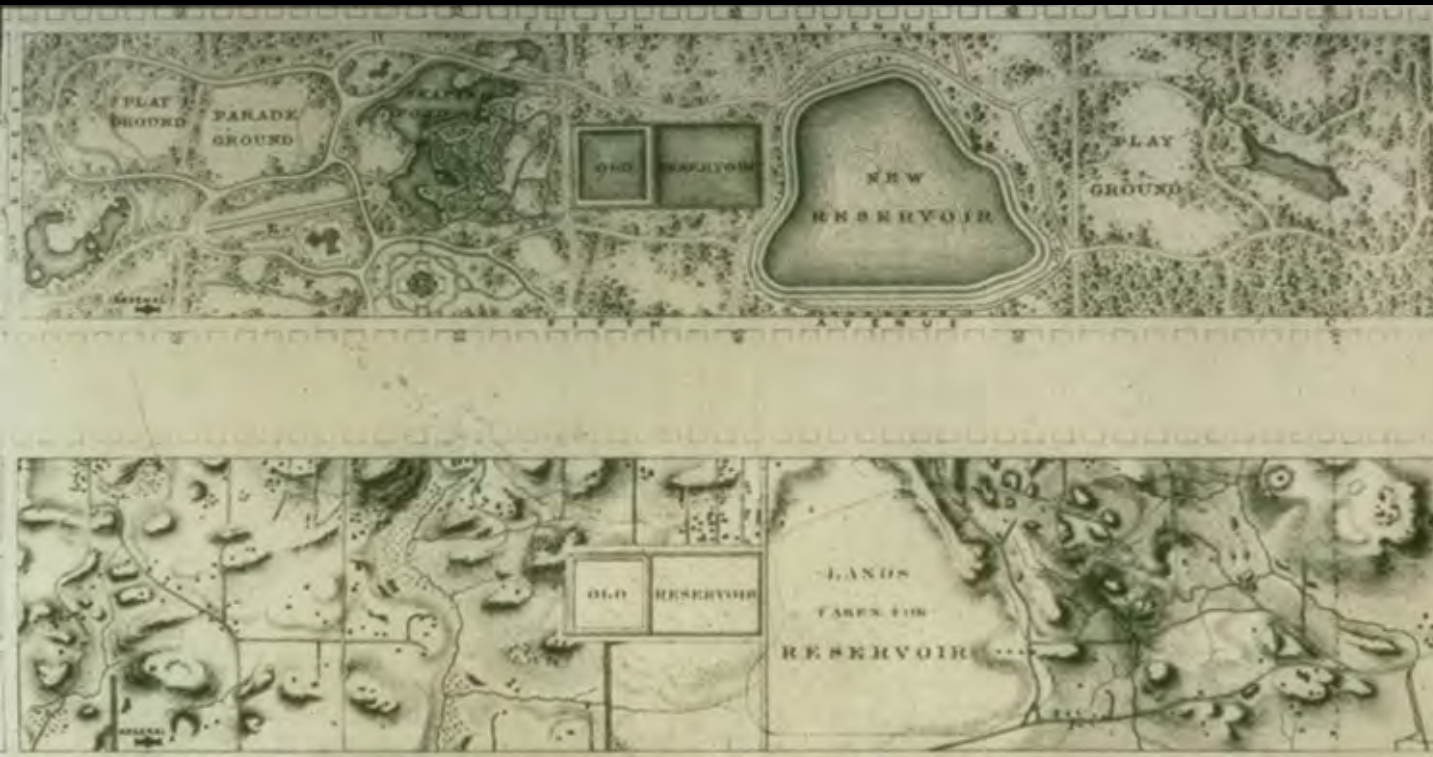
# Redemptive Urban Nature “banish the plague-spots of democracy”

## The Social and Political Role of Urban Nature

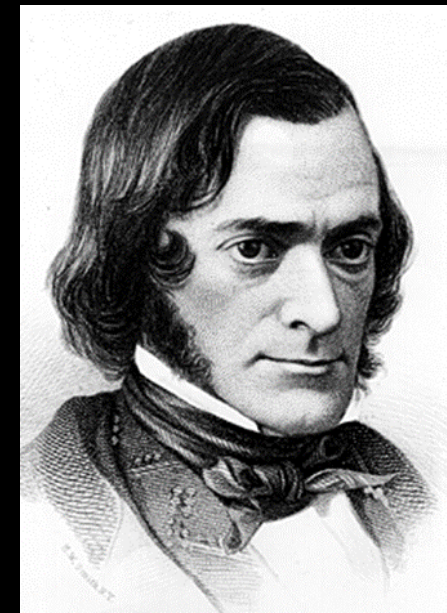
“Plant spacious parks in your cities, and unloose their gates as wide as the gates of morning to the whole people...

As there are no dark places at noonday, so education and culture – the true sunshine of the soul – ***will banish the plague-spots of democracy.***”

### The New York Park 1851

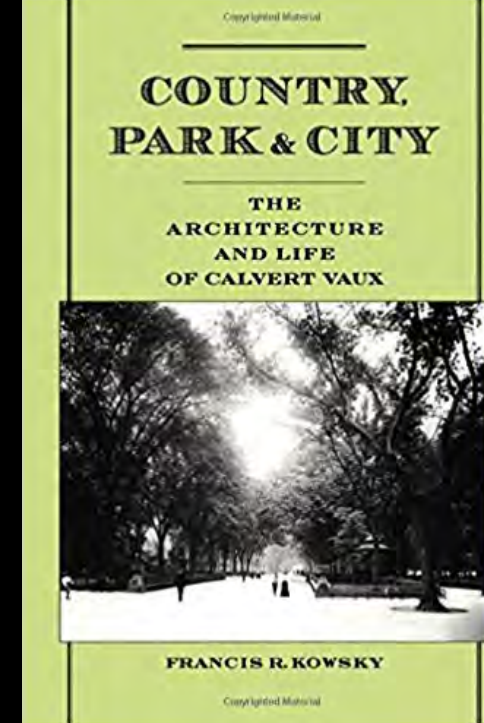
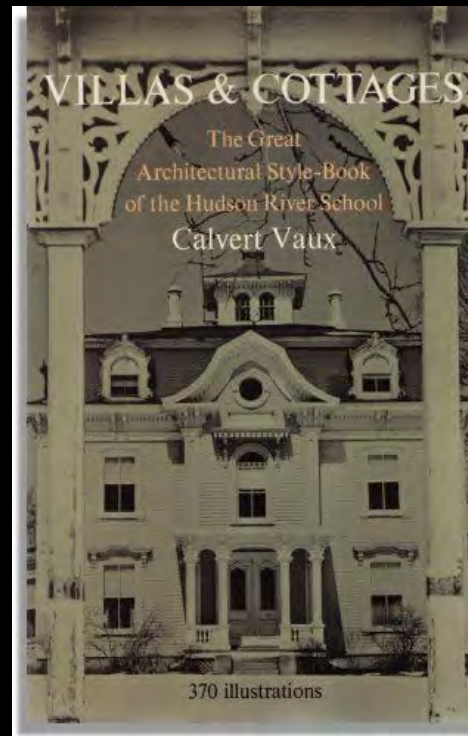


Dies 1852 – at 37



Calvert Vaux 1824 – 1895

Hired by A.J. Downing 1850



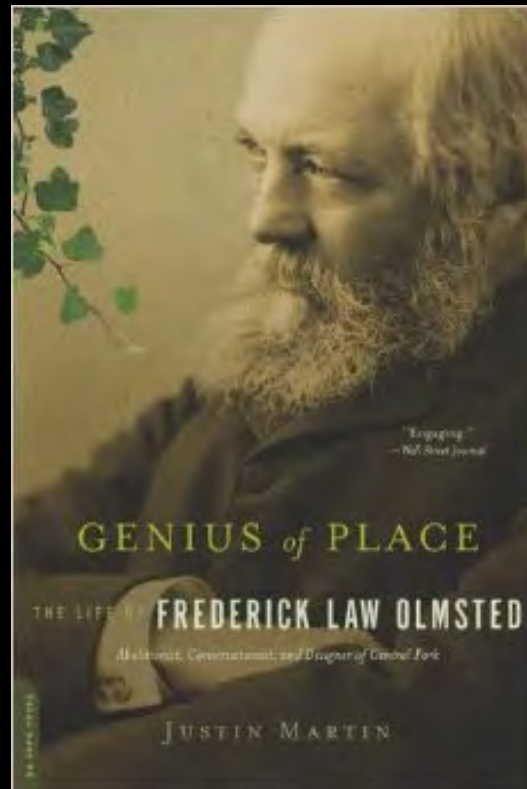
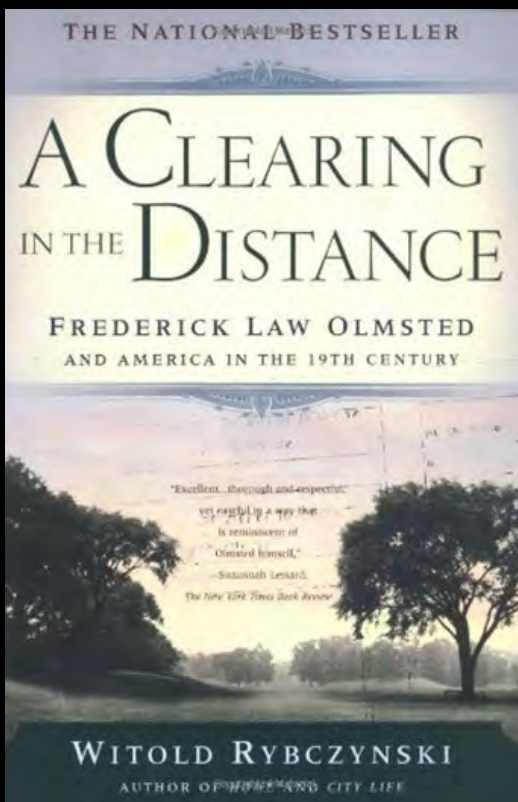
Warren House - Newburgh, NY



# America's First "Landscape Architect"

Frederick Law Olmsted 1822 – 1903

Downing - a mentor to Olmsted



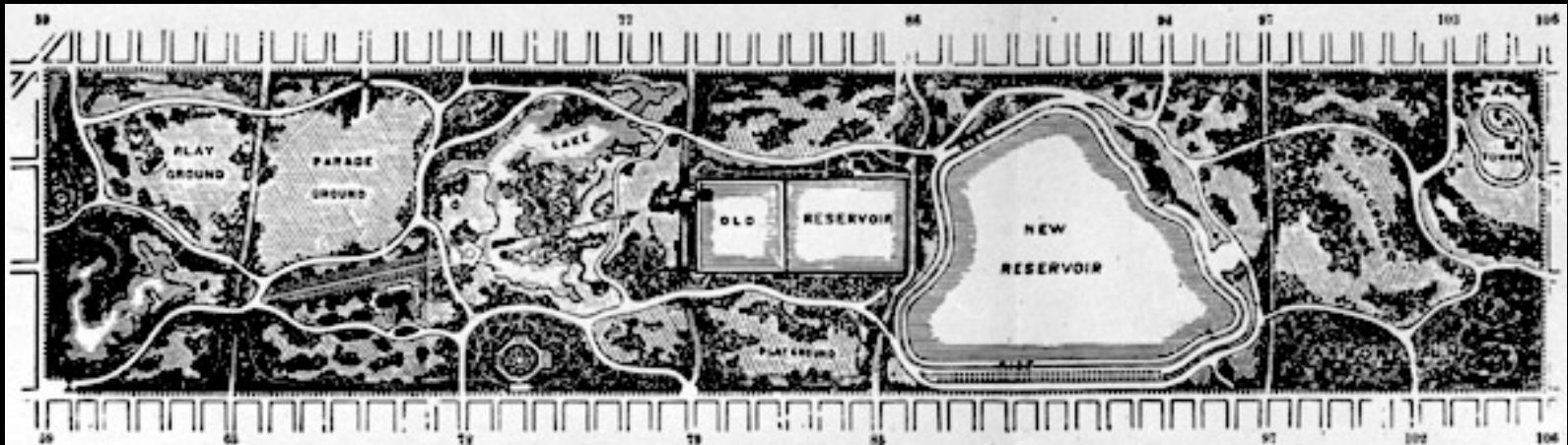
1852



Frederick Law Olmsted

Calvert Vaux

New York City Central Park 1858-1873 (843 acres)

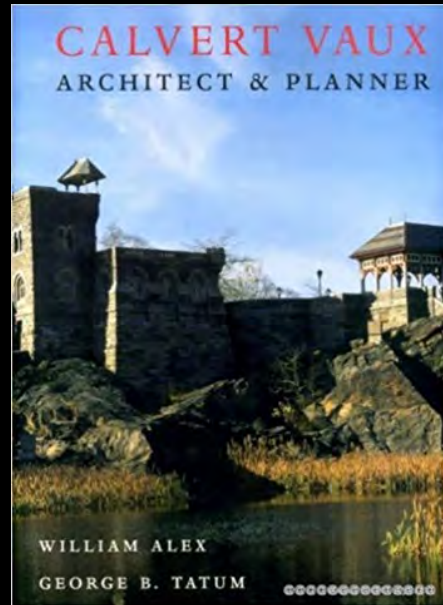


FIRST STUDY OF DESIGN FOR THE CENTRAL PARK.

From a Wood-cut made in 1858.



# The Architect of Central Park



# The Gothic Bridge



Bethesda Terrace and the Belvedere Castle



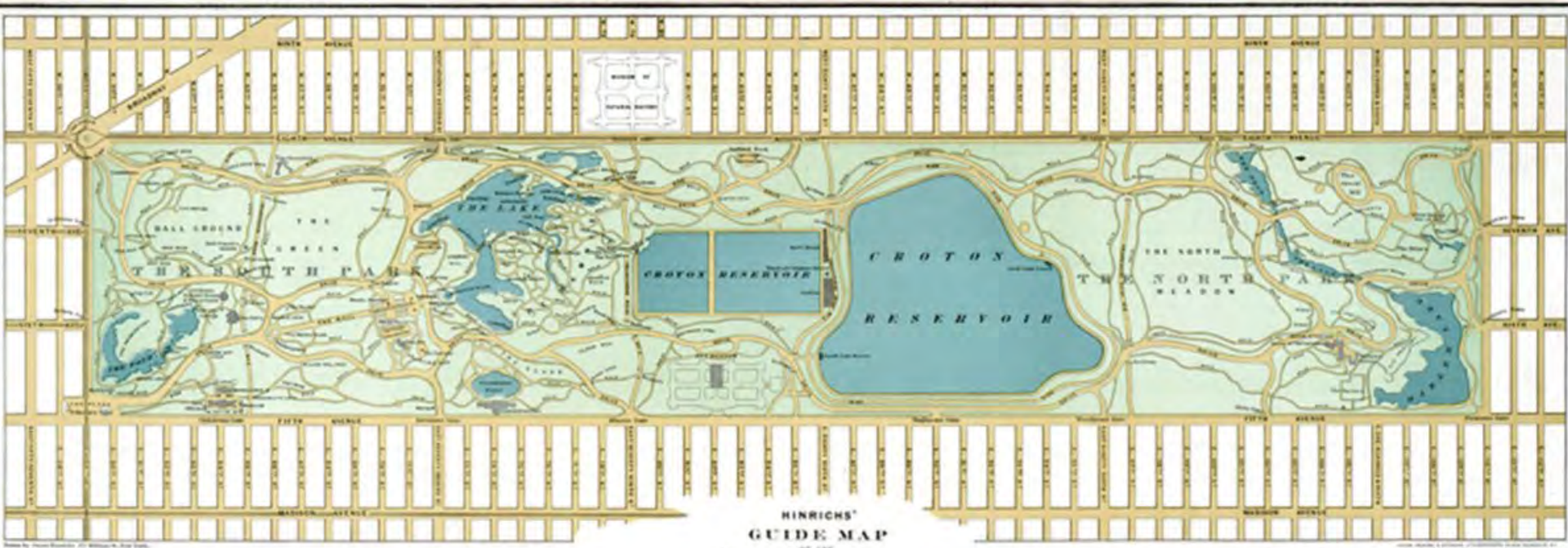
Bow Bridge

# The Landscape Architect of Central Park Olmsted's "Pastoral" Style

## The Greensward Plan – What it does

The setting for "unconscious or indirect recreation."

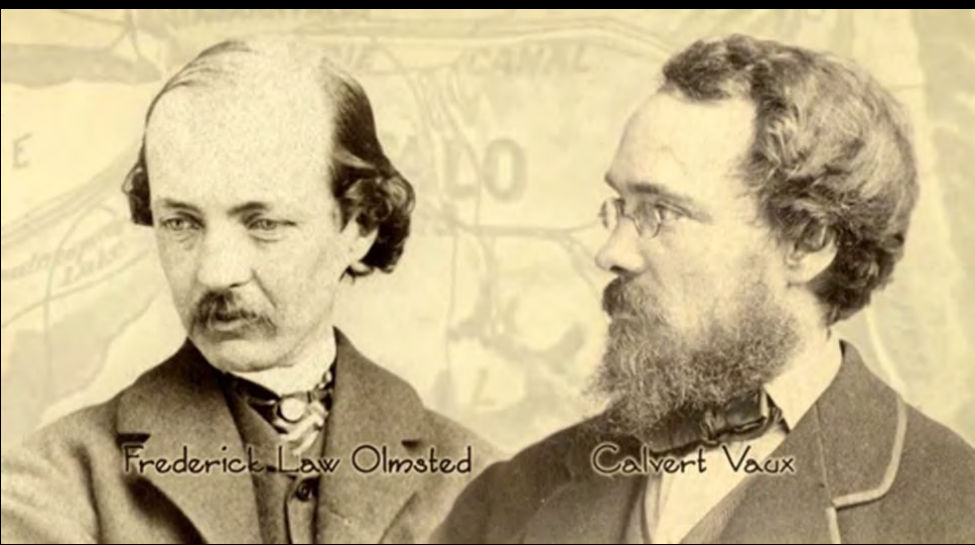
Olmsted - The chief purpose of a park was "an effect on the human organism by an action of what it presents to view, which action, like that of music, is of a kind that goes back of thought, and cannot be fully given the form of words."



HINRICHS' GUIDE MAP OF THE CENTRAL PARK OF THE GREAT BUCKINGHAM SQUARES.

# The "Pastoral" Style – Pastoral Place – Urban Arcadia





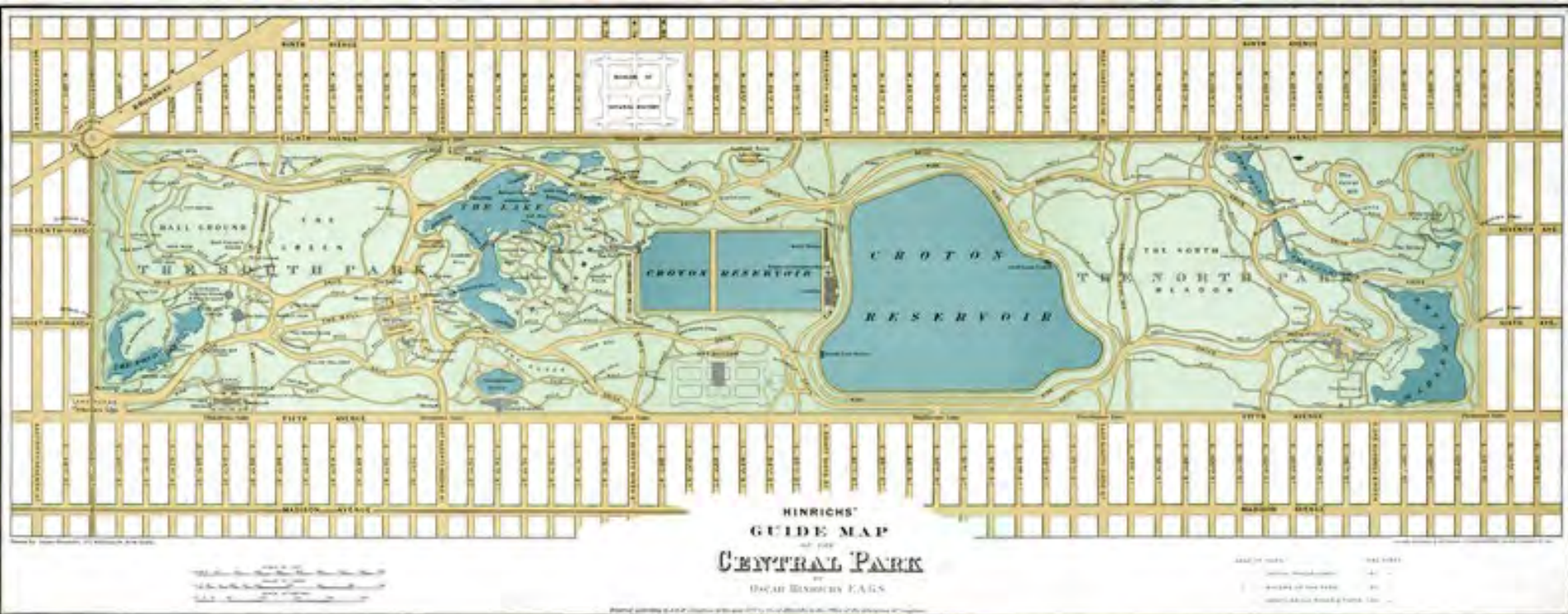
Frederick Law Olmsted

Calvert Vaux

## What it does – Redemptive Urban Nature

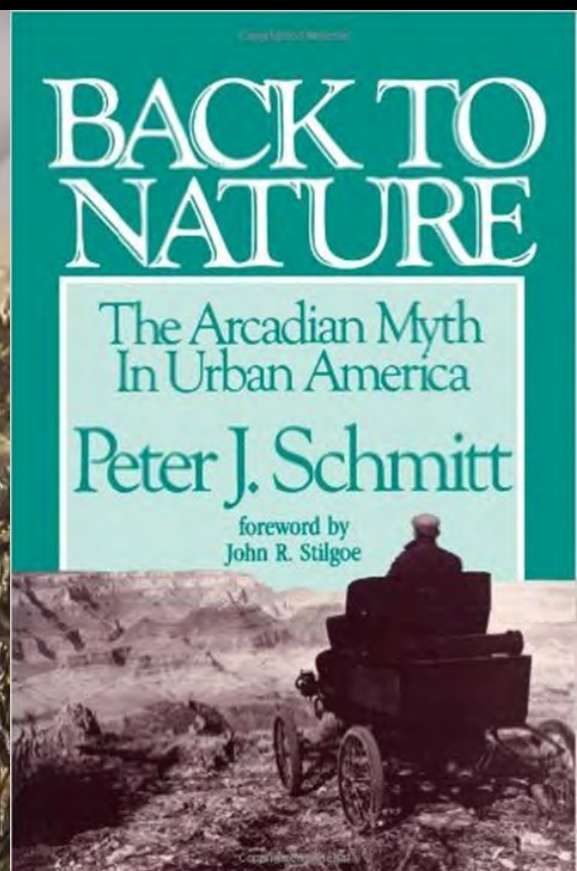
Banish the Plague-spots of Democracy

Olmsted observed that New York's Central Park had a "harmonizing and refining influence upon the most unfortunate and most lawless classes of the city - an influence favorable to **courtesy, self-control, and temperance.**"



# Urban Pastoral Democracy – Banish the Plague-spots of Democracy

“Like Downing, Olmsted believed that the rural, picturesque landscape contrasted with and counteracted the confining and unhealthy conditions of the crowded urban environment and served to strengthen society by providing a **place where all classes could mingle** in contemplation and enjoyment of the pastoral experience.” Schmitt



# Downing and Olmsted's Legacy

Andrew Jackson Downing 1815-1852

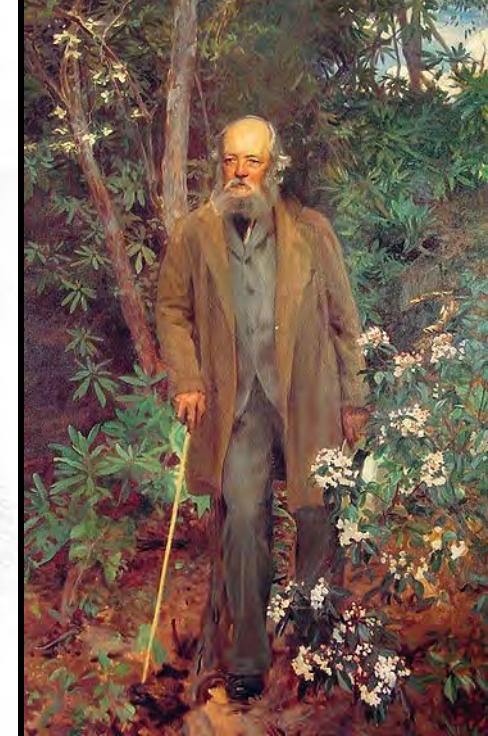
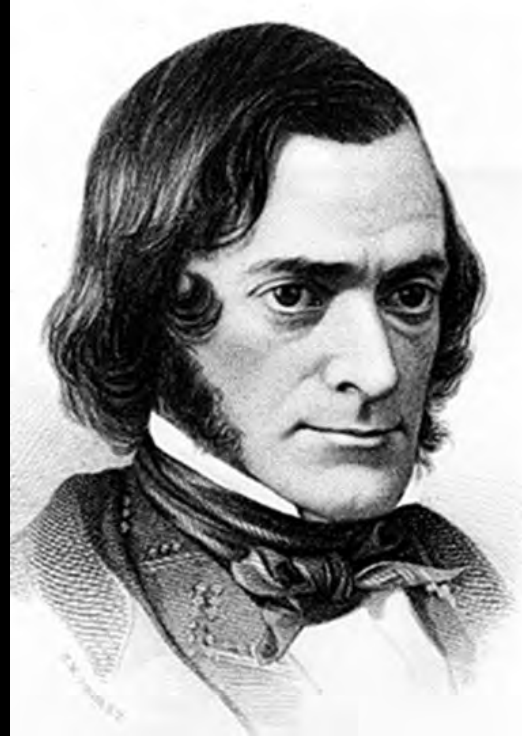
Frederick Law Olmsted 1822 – 1903

John Charles Olmsted 1852–1920

Frederick Law Olmsted Jr. 1870–1957

Charles Eliot Jr. 1859-1897

- Central Park
- Prospect Park, Brooklyn
- Mount Royal Park, Montreal
- U.S. Capitol Grounds, Washington
- Back Bay Fens, Boston
- Arnold Arboretum, Boston
- National Zoological Park, Washington
- Park and parkway system in Buffalo
- The first Yosemite Park Commission
- Niagara Falls Park
- Biltmore Estate, Ashville, North Carolina
- Colleges and Universities – Stanford, Yale, Smith, Mount Holyoke, Vassar, Bryn Mawr, Brown, Chicago, Williams, Johns Hopkins, Duke, Notre Dame



# Narrative of Redemptive Urban Nature

## The Urban Pastoral Landscapes

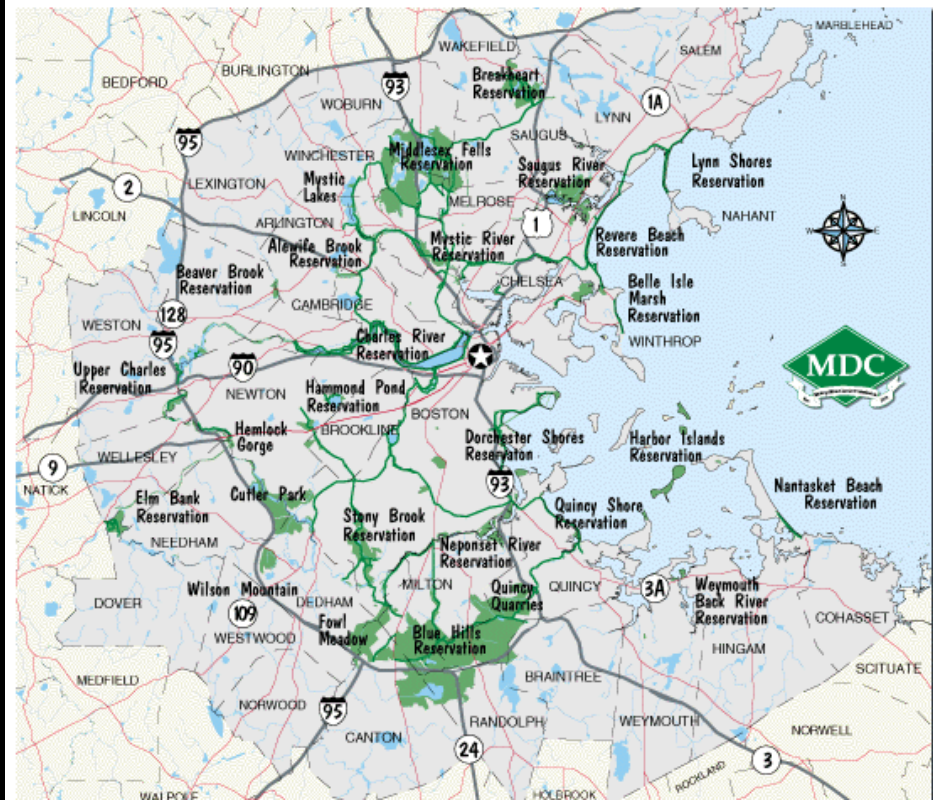
“Should the forces which push men into the arms of ignorance, sin, and death, be allowed a free field in our cities or should there be parks and open spaces *to redeem the city* with all that mingling of the natural and the human which we call landscape?”



Charles Eliot Jr.  
1859-1897

## Metropolitan Park System of Greater Boston

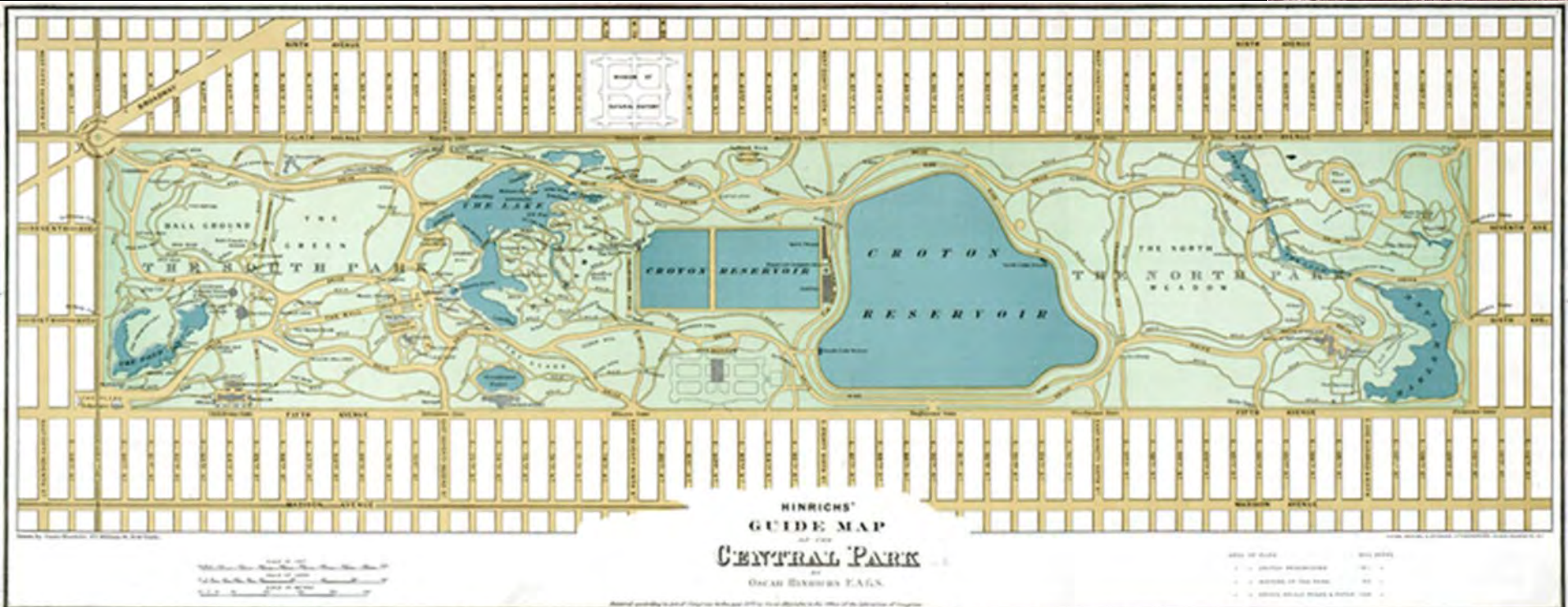
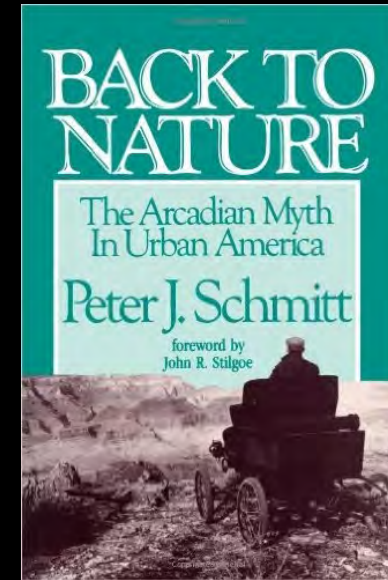
## First Regional Park System – First Land Trust



# The Arcadian Myth in Urban America and Political Nature (Middle) Class Consciousness

“...modern landscape designers were less concerned with refining the taste of the rich than with reintroducing nature to the middle class. In doing so they faced a double task – interpreting the beauty of nature and educating the public to appreciate their skill.

...the Romantic aesthetic gained wider acceptance as more and more people came to share something of the Arcadian dream.”





Redeeming the City with Nature continues today...

## 21<sup>st</sup> Century Officially Sanctioned Urban Nature “Imported at Any Price”

In America, we celebrate urban nature that is either deliberately cultivated pastoral “greenspace” like parks, gardens, and urban farms or formally protected as remnants of the “wild” native landscapes obliterated by the creation of the city in preserves, sanctuaries, refuges, and other “wildlands”.

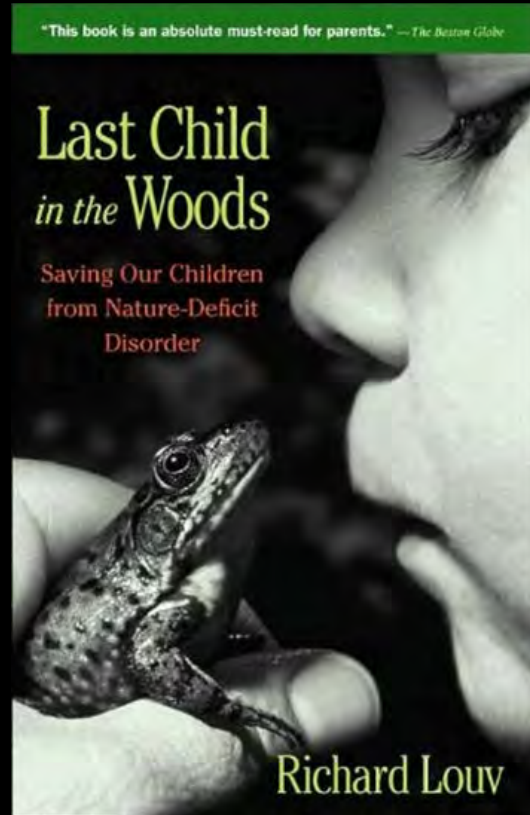


# 21<sup>st</sup> Century Narrative of Redemptive Urban Nature

## What it means and does

### The Wild and The Pastoral Imported - Presuppositions

- **The framework of iterative natures** - wildlands, preserves, parks, and gardens established for imaginative urban landscapes of wild first nature and pastoral second nature.
- **Degradation and Redemption** - Urban industrial second nature is degradation in need of redemption.
- **Transcendentalist concept of nature** - a tonic for body and spirit which is deliberately incorporated into urban design.
- **Nature Deficit Disorder** - Space for nature is essential - to provide recreation for physical health and for mental health – children must know proper nature to be proper humans (Urban/Technological Disease)



# Narrative of Restorative Urban Nature

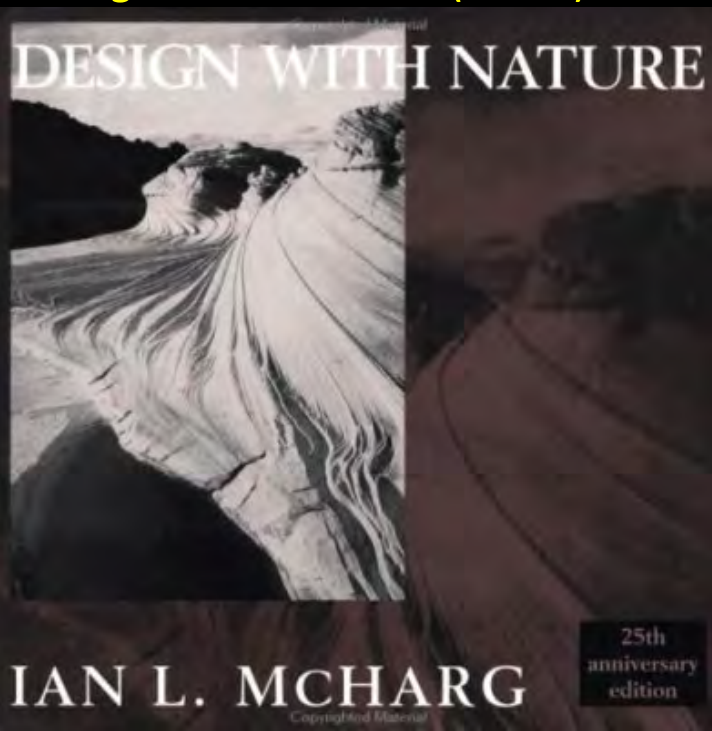
## Versions 1 and 2



# Version 1 - Architecture and Urban Design

- Presuppositions - a positive view of cooperation with nature and pastoral ideals of improvement of nature.
- Presupposition - urban industrial second nature is degradation which can be ***restored to ecological sustainability through design and planning.***
- Presupposition – “ecological planning” can make development “sustainable”
- Ian McHarg (1920-2001) – Science is the principal authority for landscape design

## *Design with Nature* (1969)



## A 'Design with Nature' approach to community design means...

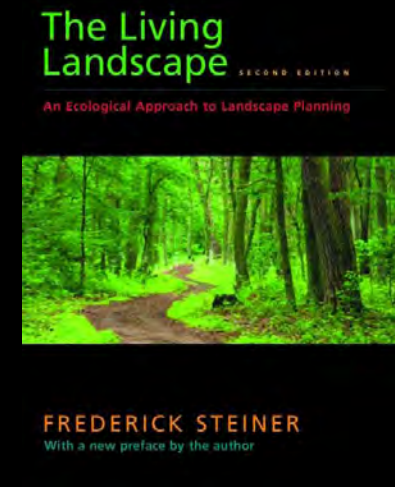
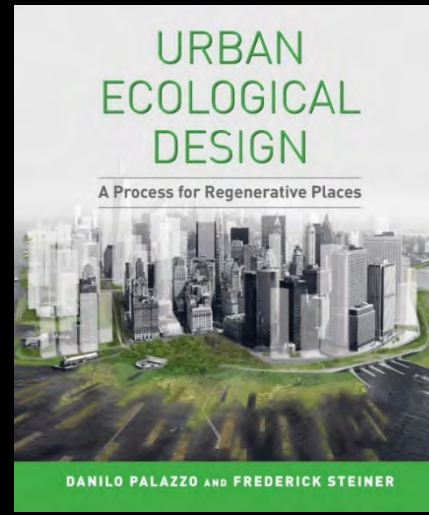
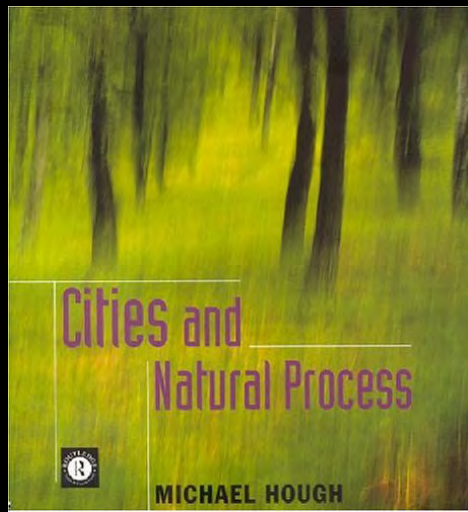
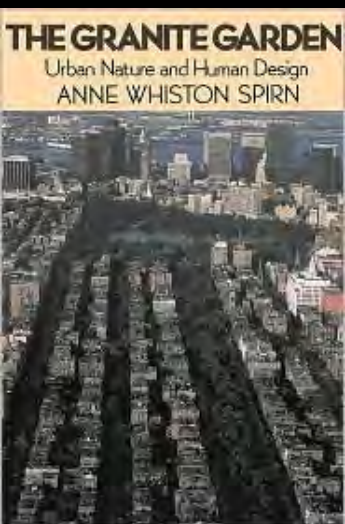


- Develop compact, complete communities
- Increase transportation options
- Reduce the loads on water, waste and energy systems
- Protect and restore urban 'green' space
- Strive for a lighter 'hydrologic footprint'
- Achieve higher levels of stream, wetland and lake protection

## Urban Nature - What it does and means

“As we begin to understand the true complexity and holistic nature of the earth system, and begin to appreciate humanity’s impact within it, we can build a new identity for society as a constructive part of nature. This is ethical. This is optimistic. This is a necessity.

This is what it means to “design with nature.”



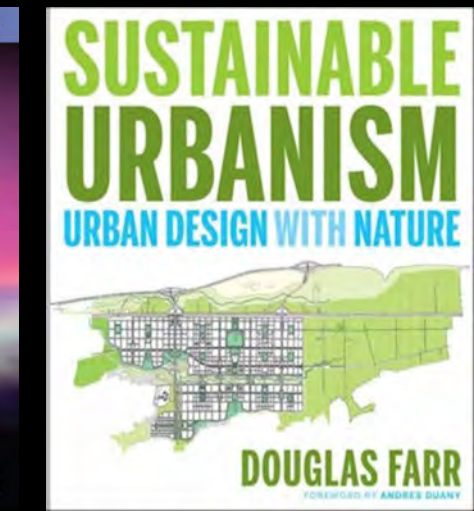
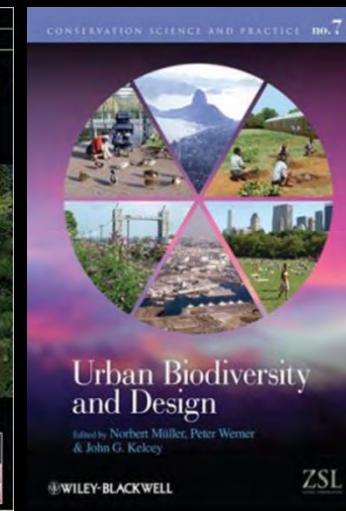
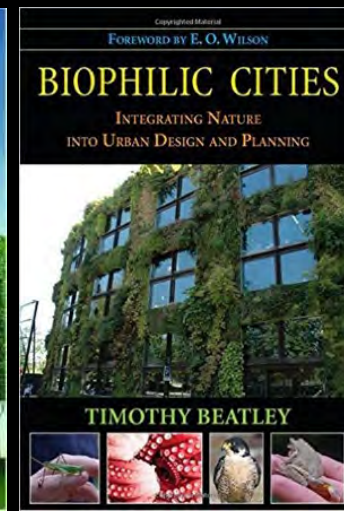
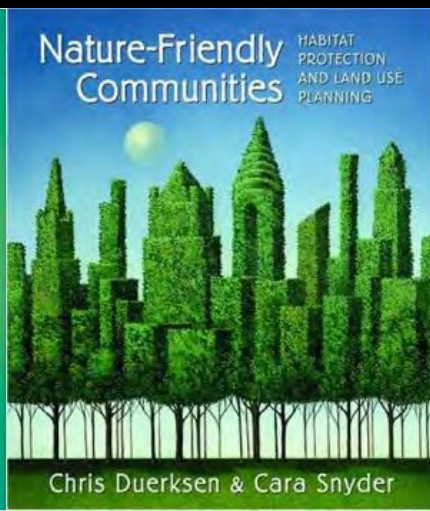
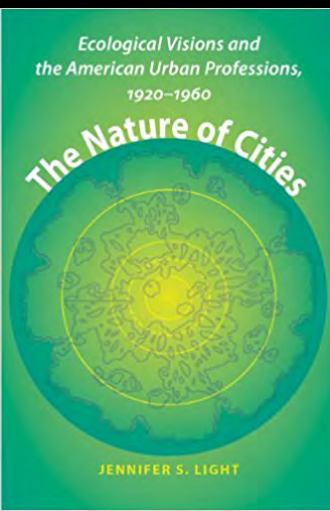
# New 21<sup>st</sup> Century Narrative of Restorative Urban Nature

Restorative? Regenerative? Other?

Urban Design and Planning

“The Nature of Cities is a “boundary organization” interested in ideas at the frontiers of science, design, policy, and the arts — an idea hive that puts different approaches and points of view together, to discover what novel perspectives might emerge.”

<https://www.thenatureofcities.com/>



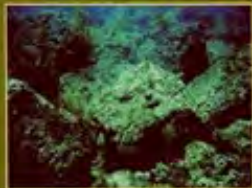
# Narrative of Restorative Urban Nature

## Version 2 – Restoration Ecology and Conservation Biology

- Restoration ecology developed alongside conservation biology with the goal of **not just to conserve remnant historical habitats and species but to actively restore “native” ecosystems.**
- **Urban Restoration Ecology** - Emerged in the 1980s focused on the recovery of “native historical habitats” through the restoration of these habitats in urban landscapes.
- Presupposition - ***Good (Urban) Nature = Native Nature***

Restoration  
Ecology

THE JOURNAL OF THE  
SOCIETY FOR ECOLOGICAL RESTORATION INTERNATIONAL



Blackwell  
Publishing

SOCIETY FOR ECOLOGICAL RESTORATION

*Foundations  
of Restoration Ecology*

SECOND EDITION



Edited by  
MARGARET A. PALMER, JOY B. ZEDLER,  
AND DONALD A. FALK



The Nature  
Conservancy



Protecting nature. Preserving life.™

# Retrospective Ecology

Perceptions of American Urban Biologists, Ecologists, and Environmentalists

Ecology “in” cities – *A weedland community of inappropriate nature* needing restoration back to historical naturalness before the city destroyed nature

“(Urban growth) replaces the native species that are lost with widespread “weedy” nonnative species. This replacement constitutes the process of biotic homogenization that threatens to reduce the biological uniqueness of local ecosystems.”

Michael L. McKinney, “Urbanization, biodiversity, and conservation”. *Bioscience* 52(10), (2002), 883–890.

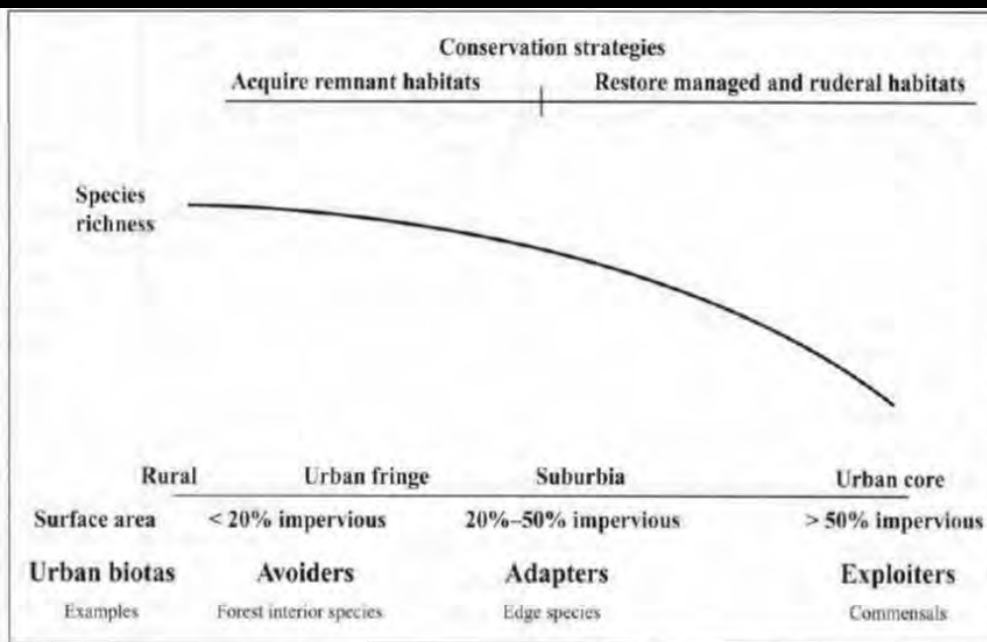
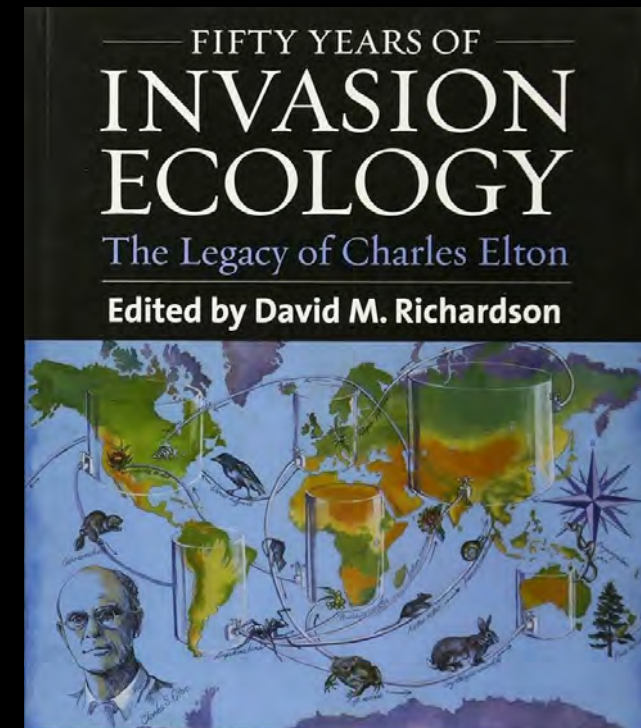


Figure 2. Urban-rural gradient. This is a very generalized and simplified depiction of changes in surface area, species richness, and composition, as compiled from a number of sources discussed in the text. Two basic conservation strategies with respect to urban sprawl are shown at the top.





# Narrative of War – Invasive Species

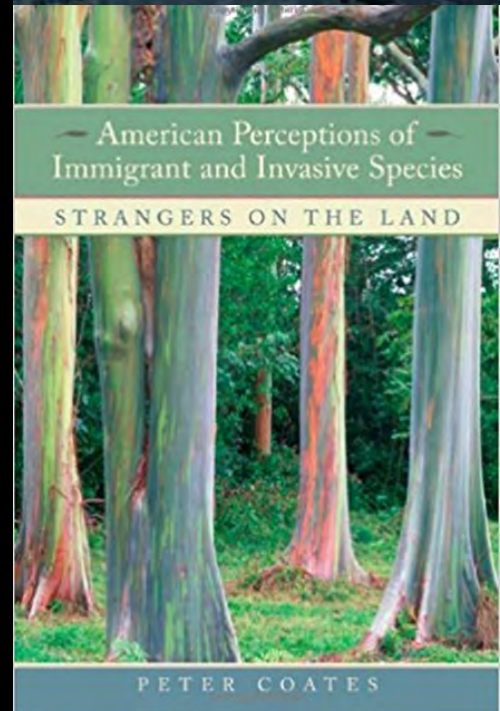
Transgressive weeds - non-native species - must be eradicated because they are disruptive aliens. The most controversial of these aliens are called “invasive species”.

*Trash Animals: How We Live with Nature’s Filthy, Feral, Invasive, and Unwanted Species (2013)*

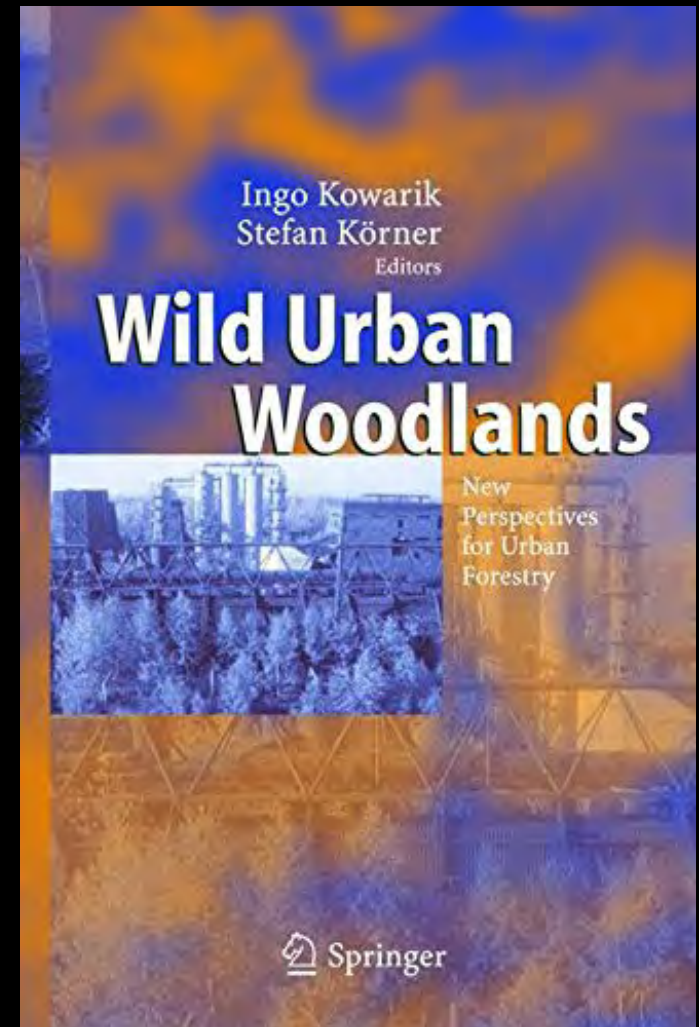
## Invaders

of Texas  
a Citizen Science Program  
to Detect and Report Invasive Species

### Restorative Urban Nature = Native Species



21<sup>st</sup> Century Ecology and the City  
The Problem of Scientific Knowledge and Urban Nature  
Retrospective Ecology vs. Prospective Ecology



# Retrospective Ecology, Historical Naturalness and American Urban Ecology

## Good Nature vs. Bad Nature

“The Mannahatta Project began in 1999, when landscape ecologist Dr. Eric Sanderson moved to New York City to work for the Wildlife Conservation Society.... to fully appreciate the concrete landscape of streets and buildings that was his new home, he would have to ‘go back in time’ to recreate the its ecology from the ‘ground up.’

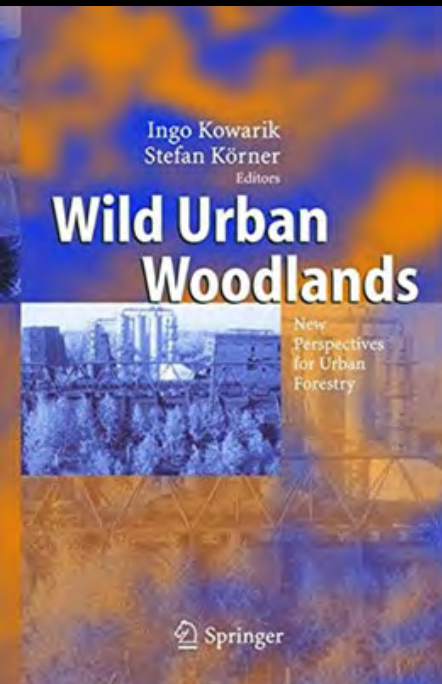
Going back to 1609 allows us to see what New York City was before it was a city and *to reimagine the city’s development in a way that would incorporate more of the natural cycles and processes (such as the hydrological cycle) that made the island the ecological gem that it was.*”



# Urban Ecology – The European Perspective

## Retrospective naturalness vs. Prospective naturalness

*Wild Urban Woodlands* Ingo Kowarik (2005)

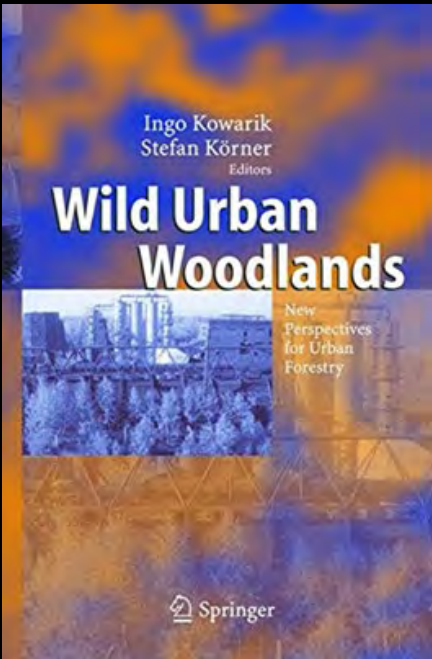


### Retrospective Naturalness

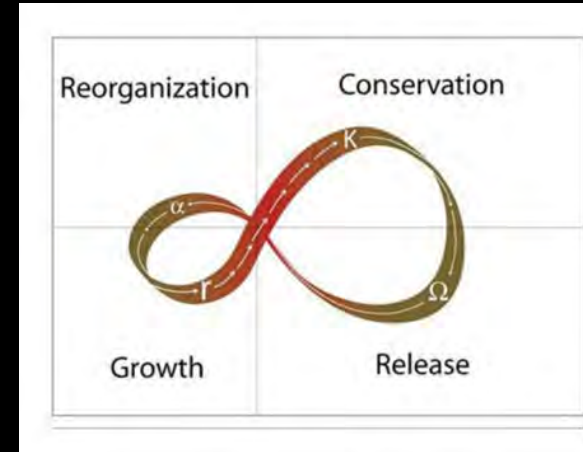
- “The point of reference is therefore, **pristine vegetation uninfluenced by humans**. Based on the cultural history of the relevant area, **the reference period may lie decades or a few millennia in the past.**”
- “remnants of pristine woodlands are **most natural** and woodlands used for forestry are at least semi-natural.”
- “the development back to nearly natural or **natural woodlands composed of historical native species can be analyzed well.**”

**The Problem of Wild Urban Woodlands** – “With the evaluation of **new development of ‘wild’ urban woodlands**, however, the traditional concept of naturalness oriented toward historical comparisons runs aground.”

# Wild Urban Woodlands – Waller Creek 7<sup>th</sup> Steet Bridge



2023



2005



2009



2012



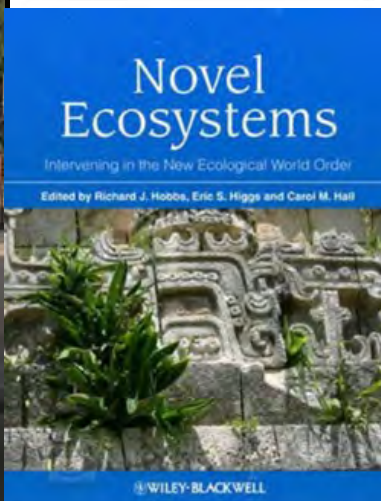
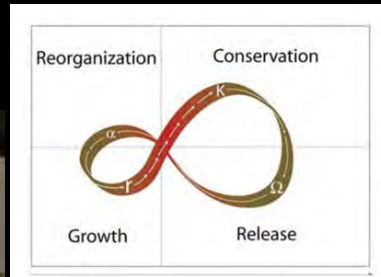
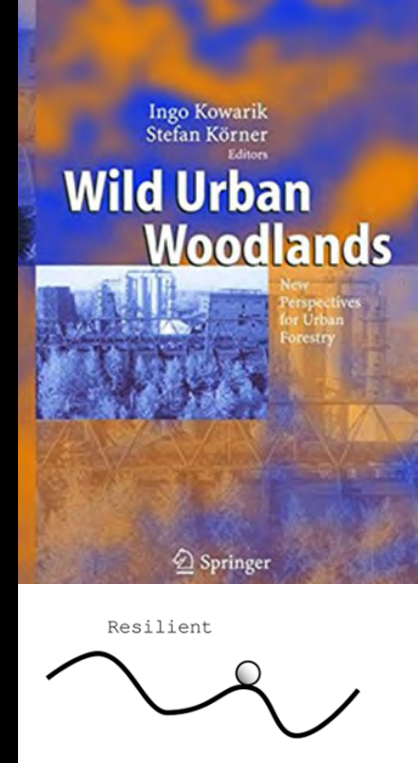
2017

# Prospective Naturalness and Resilience

## Permanence and Change = Process

“the reference point is not an original condition of a natural landscape, but rather a condition defined based on the current site potential and the greatest possible degree of self-regulation.

From this perspective, therefore, **the natural capacity for *process* is the central point, not a particular, retrospectively determined and often idealized, *picture of nature.*”**



# Narrative of Functional Urban Nature

## Prospective Naturalness and Resilience

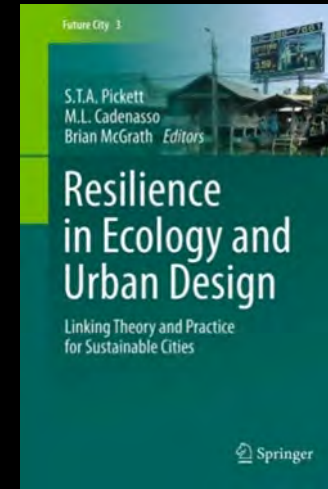


# 21<sup>st</sup> Century Narrative of Functional Nature - Urban Ecology

What it does – Ecosystem Processes

Science and Environmental Management

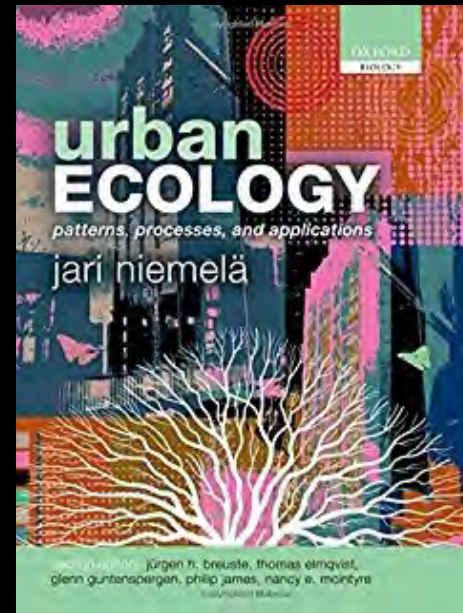
- The study of urban ecosystem functionality
- The restoration of urban ecosystem functionality not only historical “native” nature
- Ecological Process and Resilience “**the natural capacity for process** is the central point”



Marina Alberti  
**Advances in  
Urban Ecology**  
Integrating Humans and Ecological  
Processes in Urban Ecosystems



Richard T. T. Forman  
**Urban Ecology**  
Science of Cities



**Urban Ecology**  
An International Perspective on the  
Interaction Between Humans and Nature

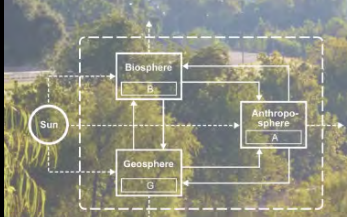
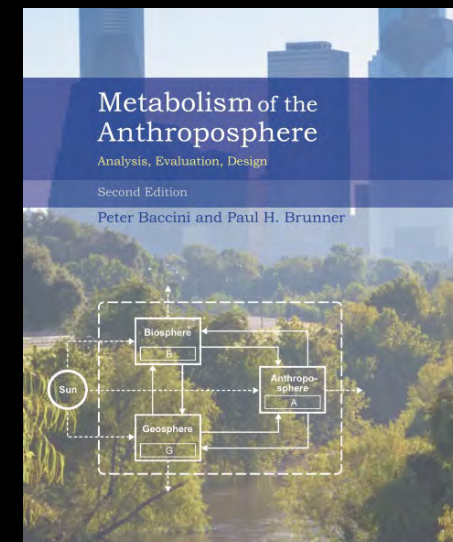
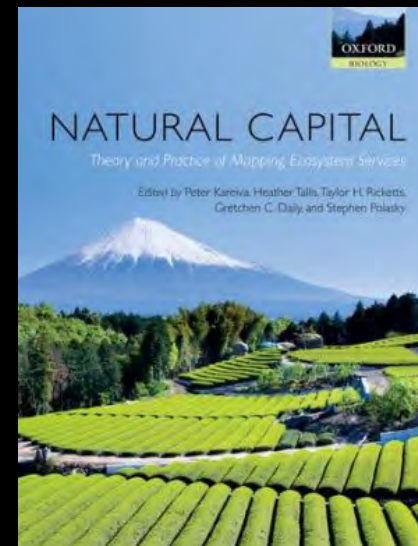
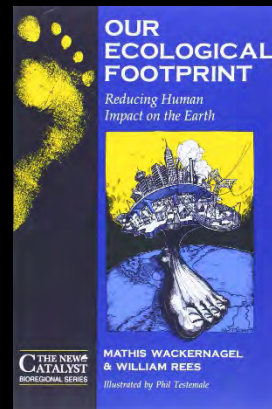
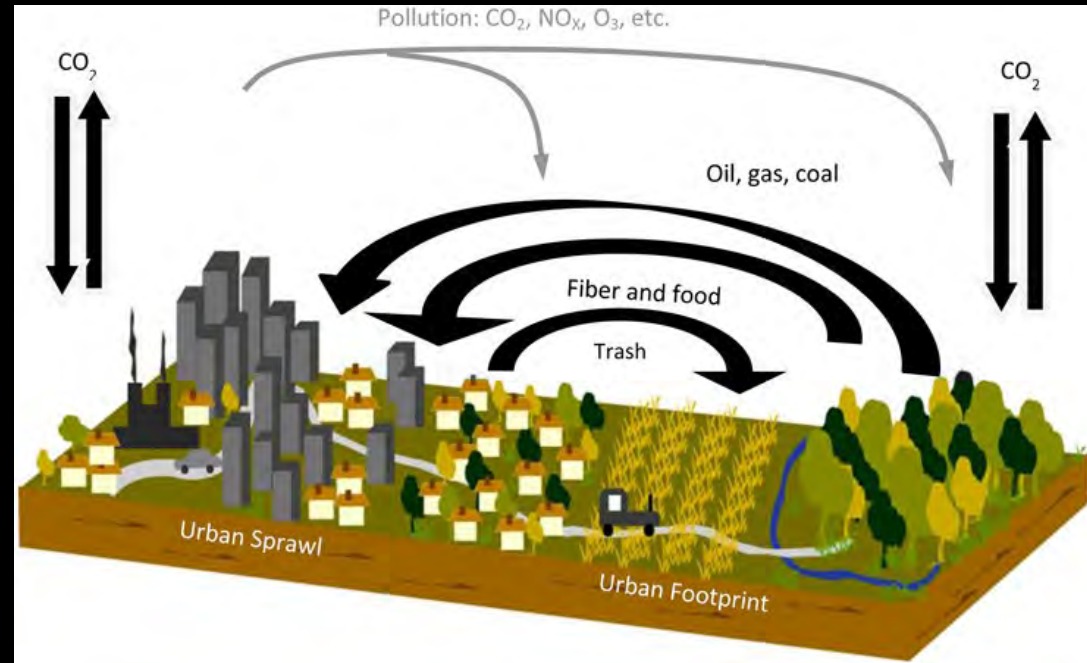
Editors:  
John M. Marshall      Gordon Bradley  
Eric Shalensberger      Clare Ryan  
Wilfried Endlicher      Ute Simon  
Marina Alberti      Craig Zambonini



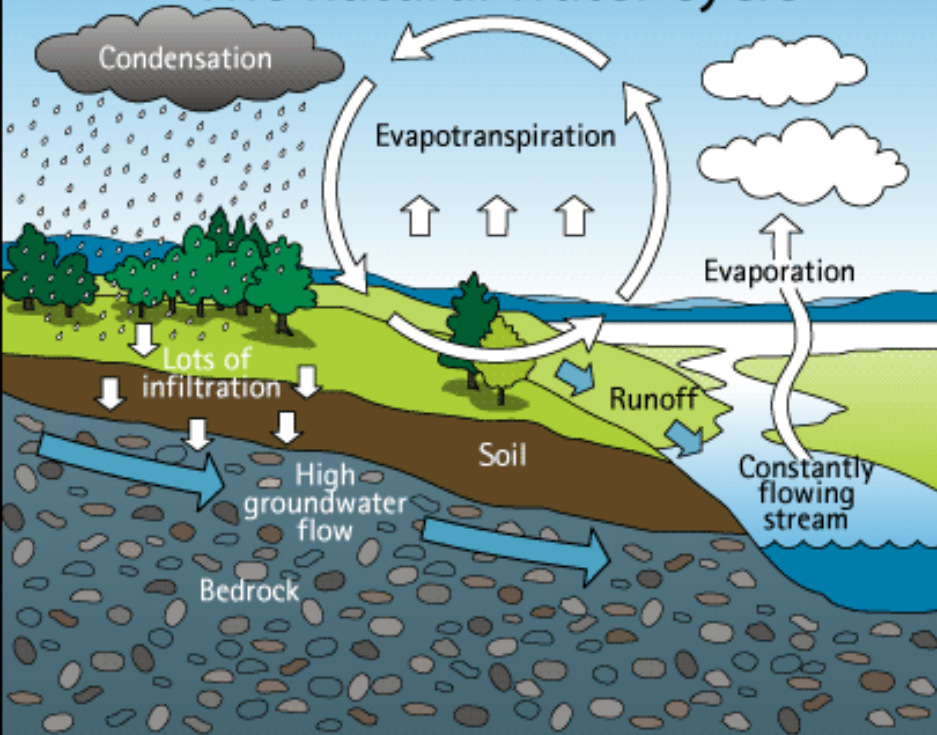


# What Nature Does - Ecosystem Cycles and Services

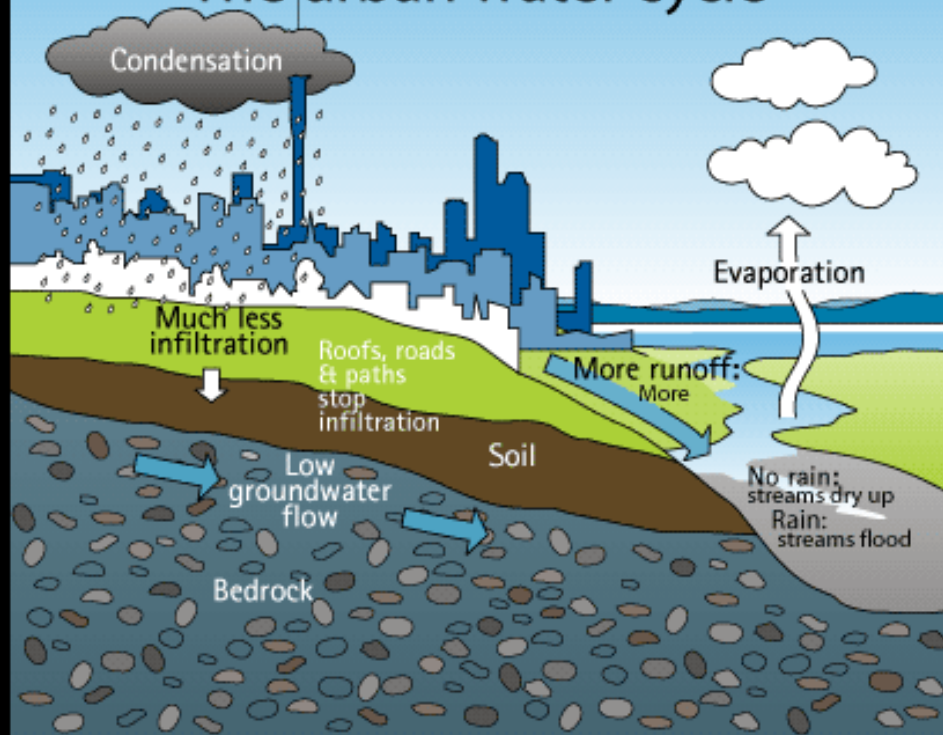
- ✓ Maintenance of atmosphere
- ✓ Protection from ultraviolet rays
- ✓ Regulation of climate
- ✓ Maintenance of genetic diversity
- ✓ Purification of air and water
- ✓ Detoxification and decomposition of wastes
- ✓ Generation of soil and renewal of soil fertility
- ✓ Pollination of vegetation
- ✓ Control of agricultural pests
- ✓ Dispersal of seeds
- ✓ Translocation of nutrients



# The natural water cycle



# The urban water cycle



Thomas Elmqvist  
 Michail Fragkias  
 Julie Goodness  
 Burak Güneralp  
 Peter J. Marcotullio  
 Robert I. McDonald  
 Susan Parnell  
 Maria Schwenius  
 Marte Sendstad  
 Karen C. Seto  
 Cathy Wilkinson  
 Editors

## Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities

A Global Assessment  
Foreword by Pavan Sukhdev

Springer Open

Richard T. T. Forman

## Urban Ecology

Science of Cities

CAMBRIDGE

Wlfried Endlicher et al. Editor

## Perspectives in Urban Ecology

Studies of ecosystems and interactions between humans and nature in the metropolis of Berlin

Springer

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## urban ECOLOGY

patterns, processes, and applications

jari niemelä

section editors: Jürgen H. Breuste, Thomas Elmqvist, Glenn Guntenspergen, Philip James, Nancy A. McIntyre

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## Wild Urban Woodlands

New Perspectives for Urban Forestry

Springer

# Embracing the Full Continuum

## The Proper Place of Urban Nature

### “Established Notions of Nature” and Urban Nature

“The fact is that urban landscapes are just too mixed up, chaotic, and confused to fit our established notions of beauty and value in nature.

*Maybe it's not really nature at all, not a real ecosystem, just a bunch of weeds and exotics mixed up with human junk.”*

John Tallmadge

*The Cincinnati Arch: Learning from Nature in the City (2004)*

**Is it really Nature at all?**

**The Proper Place of Humans?**

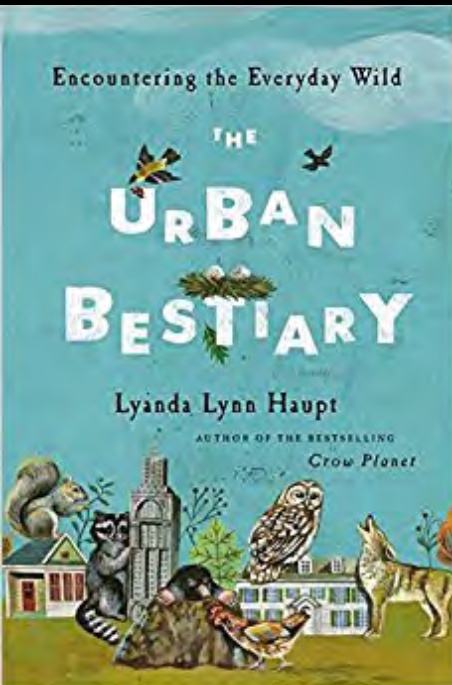


# Is it really Nature at all?

## Improper Urban Nature

### The Non-Human Urbanites

- Who are they?
- Where are they?
- What do they do?
- What do they mean?



# Urban Wildness and the Agency of Nature

Non-humans do unexpected things and defy our expectations of how non-humans should behave and where they should live (their proper place)...their habitat.

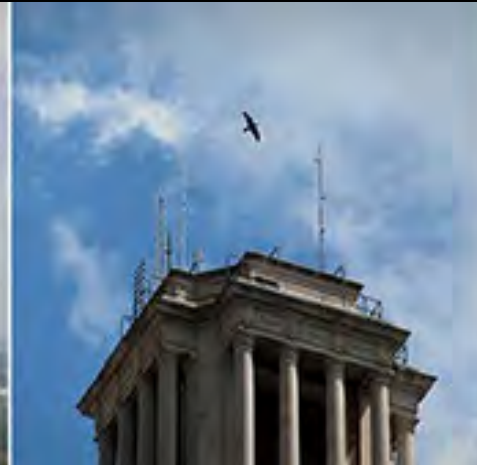


# Urban Fauna - The Challenge of Urban Wildlife

Urban fauna is judged **favorably** when it in some way fulfills our expectations of wild or pastoral nature. And so, nesting red-tailed hawks and peregrine falcons are redemptive wild additions to the city.



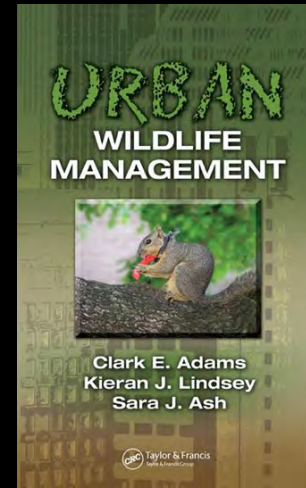
Welcome to the Live Falcon Cam! The University of Texas Tower is home to a female Peregrine Falcon, nicknamed "Tower Girl."



# Urban Fauna - The Challenge of Urban Wildlife

However, urban fauna is **condemned as pestilent** when it fails to follow the narrative for good fauna in the city or **stay in the proper places for nature in the city**.

This narrative of urban wildlife declares that transgressive coyotes, rats, grackles, and pigeons are urban pests that further degrade the city...



# Proper Place for Urban Wildlife? **All of the City is Habitat**

The mobility of urban wildlife allows them to exploit the entire city as habitat and ignore human boundaries for proper urban nature.





# What does the City mean to Pale Male?

Pale Male the famous red-tailed hawk  
Performs wing stands high above midtown Manhattan  
Circles around for one last pass over the park  
Got his eye on a fat squirrel down there and a couple of pigeons  
They got no place to run they got no place to hide  
But Pale Male he's cool, see 'cause his breakfast ain't goin' nowhere  
So he does a loop the loop for the tourists and the six o'clock news  
Got him a penthouse view from the tip-top of the food chain, boys  
He looks up and down on Fifth Avenue and says "God I love this town"

But life goes on down here below  
And all us mortals struggle so  
We laugh and cry  
And live and die  
That's how it goes  
For all we know  
Down here below

Down Here Below  
Steve Earle  
Washington Square Serenade  
2007



# Urban Nature Out of Place - Improper Urban Nature

Nature flourishes through its own agency in neglected urban spaces and margins like overgrown urban creeks, vacant lots, garbage dumps, sewage ponds, unmaintained roadway and railway verges, derelict industrial tracts, abandoned buildings, crumbling walls, and other urban waste spaces.



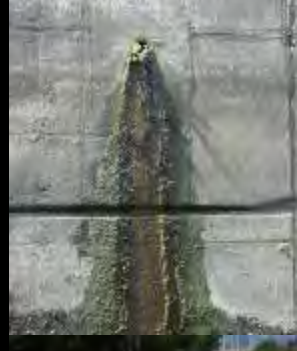
# The Geography of Urban Waste Spaces

## Wastelands - whole patches

- Vacant lots
- Dumpsites
- Industrial Wasteland
  - Brownfields
  - Greenfields
  - Quarries and Gravel Pits
- Urban Infrastructure Land
  - Power plants
  - Water treatment plants
  - Reservoirs
  - Wastewater treatment plants
    - Sewage ponds
    - Constructed wetlands
  - Stormwater retention structures
- Unusable Land - bits and pieces
  - Slopes, gullies, corners, fragments

## Margins – edges and ledges

- Urban waterways
- Canals, drainage channels
- Utility corridors
- Waysides
  - road waysides
  - railway verges
- Alleys – paved, unpaved, grass
- Walkways and pathways
- Fencelines
- Walls and ledges
- Pillars and bridge abutments





# The Narrative of Marginal Nature

“Maybe it’s not really nature at all, not a real ecosystem, just a bunch of weeds and exotics mixed up with human junk.”

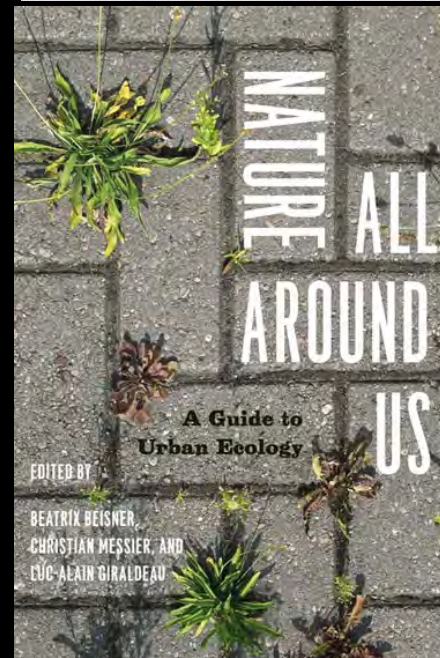
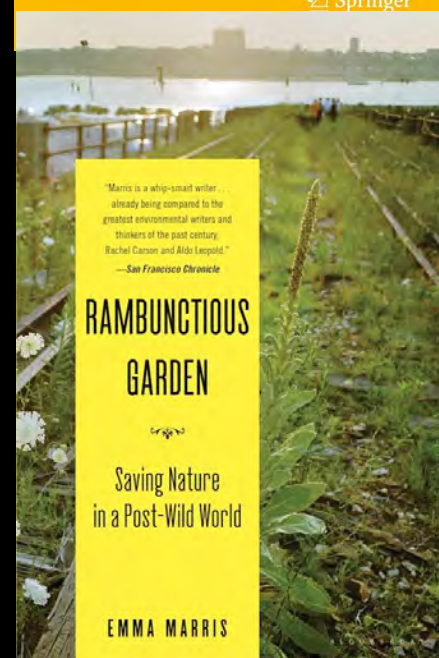
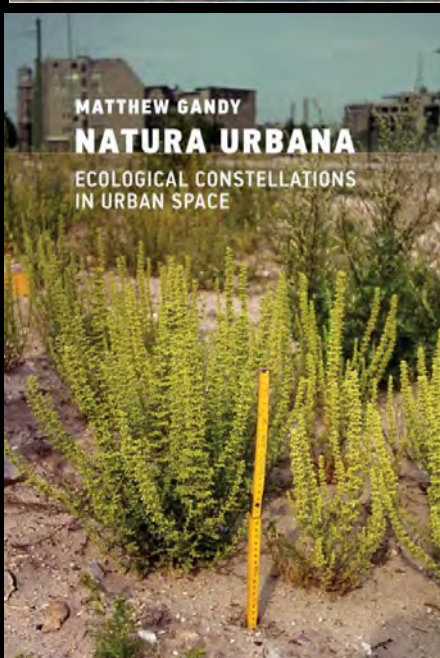
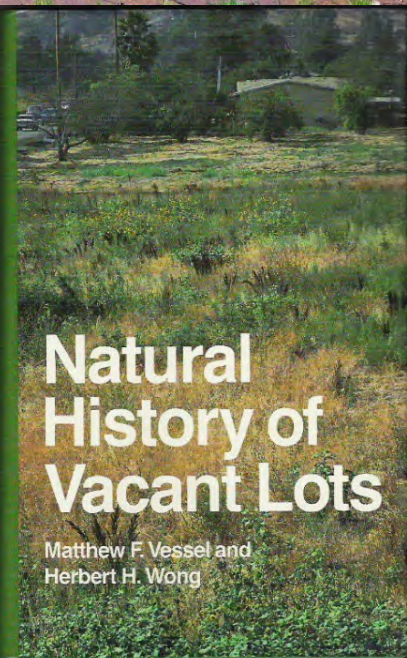
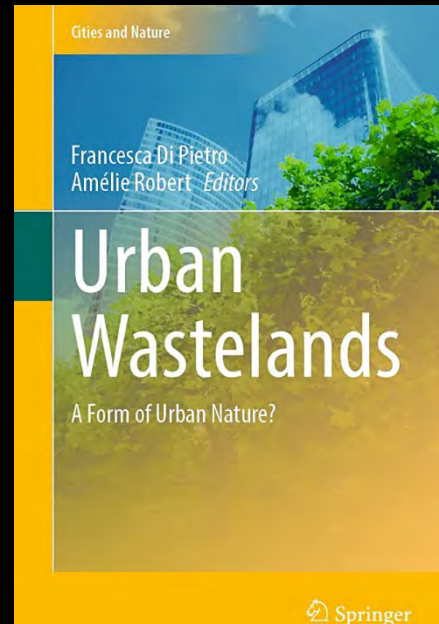
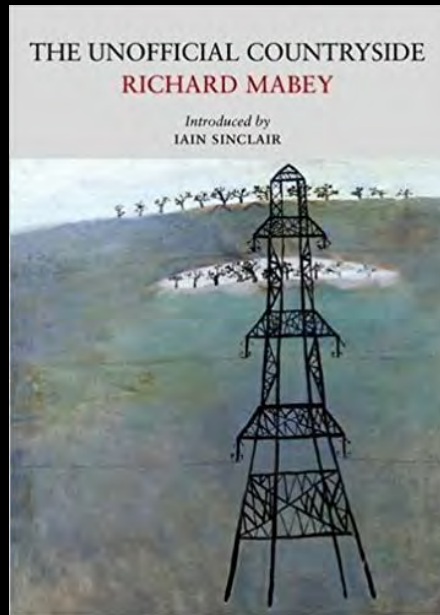
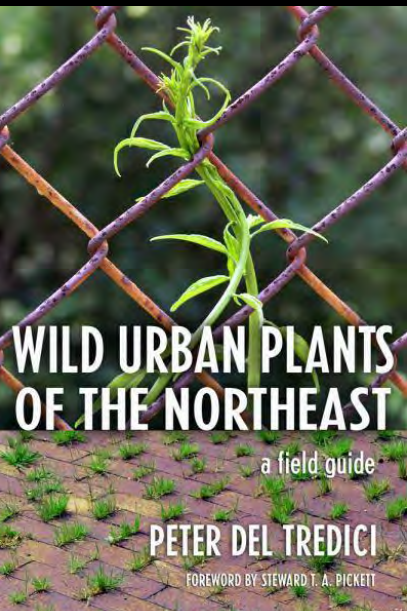
What emerges in these urban wastelands is a hybrid type of nature both weedy and wild - the unintended product of human activity and Nature's unflinching opportunism, which I call **Marginal Nature**

*Marginal Nature: Urban Wastelands and the Geography of Nature*

Anderson 2009 UT Geography

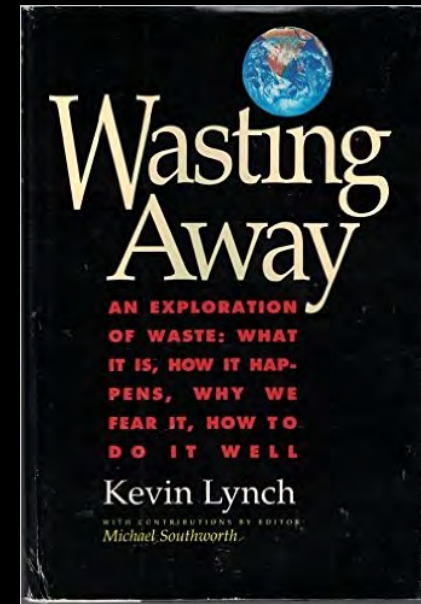


**Marginal nature in the urban landscape is neither pristine nor pastoral, but rather it is a new kind of nature whose ecological and cultural meaning is an open question.**



# The Proper Place of Humans? Ruinous Attractions

“Many waste places have these ruinous attractions: release from control, free play for action and fantasy, rich and varied sensations. Thus children are attracted to vacant lots, scrub woods, back alleys, and unused hillsides...those screened, marginal, uncontrolled places where people can indulge in behavior that is proscribed and yet not harmful to others – are regularly threatened by clean-ups and yet are a **necessity for supple society.**” Kevin Lynch



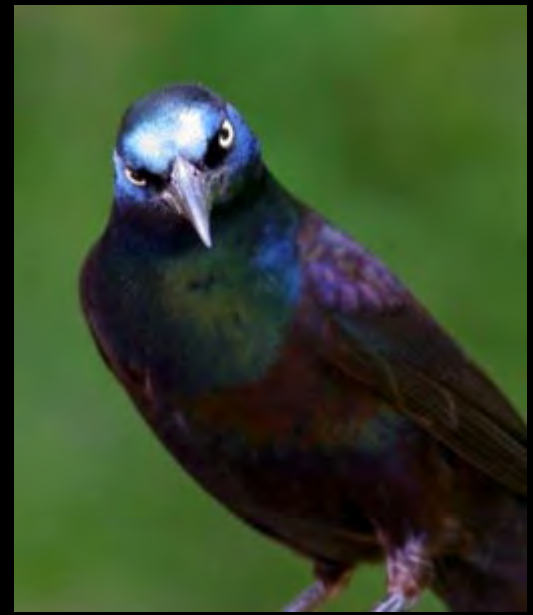


## The Socioecological City

A coproduction of humans and nonhumans



# Natural What?



# The Proper Place of Urban Nature

