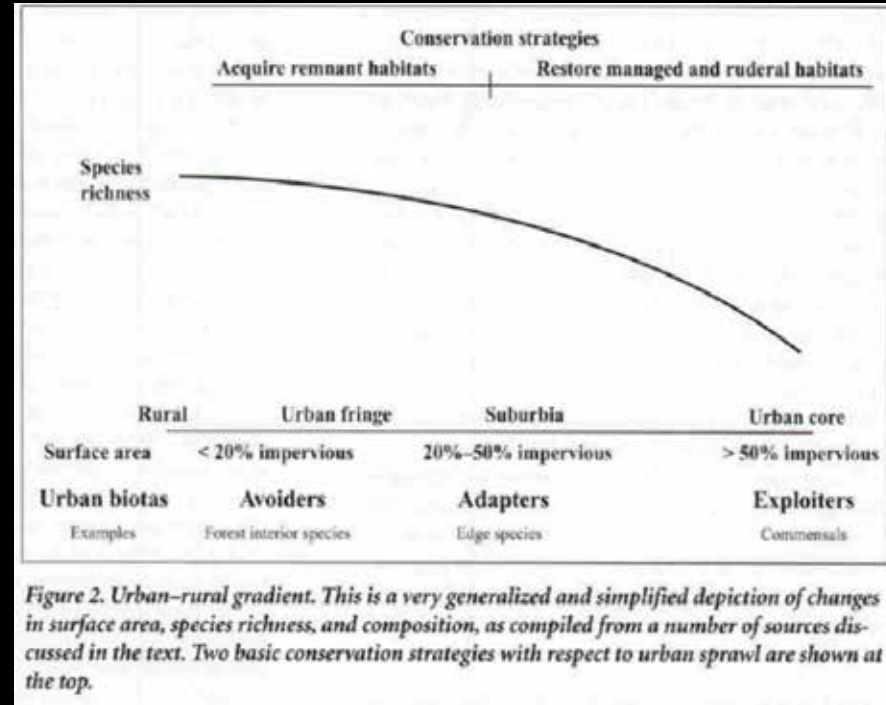


Urban Nature: The American City and Degraded Nature

Kevin M. Anderson Ph.D.

Austin Water Center for Environmental Research

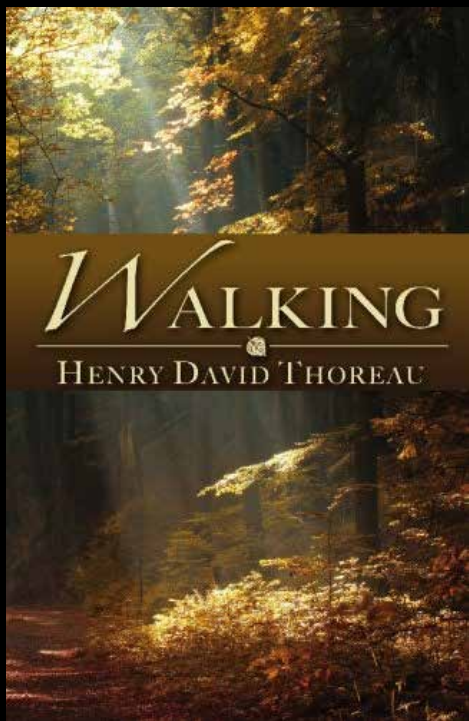


American Urban Nature

"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."

-Henry David Thoreau, "Walking"



In the United States, the foundational narratives of Nature that we celebrate are wilderness and pastoral arcadia.

They are the foundational metaphors of American nature from which we assess the value of nature in America.



However, we are now predominately a country of urbanites who have only occasional contact with wilderness or pastoral nature.



Our understanding of what constitutes "sanctioned" urban nature in cities is shaped by culturally dominant metaphors of nature.

These metaphors valorize urban nature that is either deliberately cultivated in parks and gardens or formally protected as remnants of native landscapes obliterated by the creation of the city in preserves, sanctuaries, and refuges.





In American cities, we perceive nature in the urban landscape filtered through concepts that prejudge its ecological and cultural value.

Perceptions of Urban Nature

Urban Wildlife – Sanctioned and Unsanctioned

Urban fauna is judged favorably when it in some way fulfills our expectations of wild or pastoral nature or condemned as pestilent when it fails to follow the narrative for good fauna in the city.

This narrative of urban wildlife declares that everyday non-charismatic house sparrows, grackles, and pigeons are urban pests that further degrade the city...



but nesting red-tailed hawks and peregrine falcons are redemptive wild additions to the urban scene.





© 2010 Bakoby Releasing

Pale Male the famous red-tail hawk
Performs wingstands 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 t 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



www.washingtonsquarequiltade.com

Pale male swimmin' in the air
Looks like he's in heaven up there
People sufferin' everywhere
But he don't care
But life goes on down here below
And all us mortals, struggle so
We laugh and cry

- Steve Earle, "Down Here Below", song on Washington Street Serenade (2007)

Perceptions of Urban Nature

Narrative of Redemptive Urban Nature

This narrative presupposes the framework of iterative natures with preserves, parks, and gardens established for imaginative urban landscapes of wild first nature and pastoral second nature. The further presupposition is that the urban industrial second nature is degradation in need of redemption.

The narrative of redemptive urban nature is the story of nature which is deliberately “imported at any price” into urban design as a tonic for body and spirit. Space for nature is created to provide recreation for physical health and to allow contact with officially sanctioned nature for mental health.



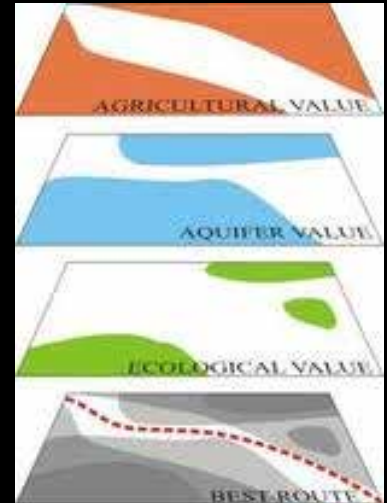
Narrative of Redemptive Nature

Perceptions of American

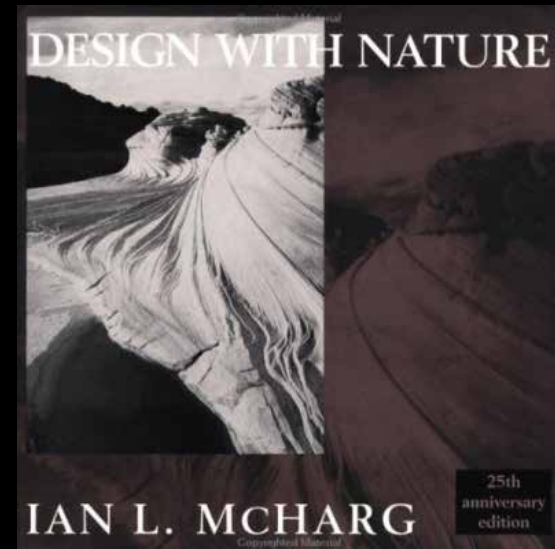
Design with Nature - One version of this narrative focuses on urban design, planning, and landscape architecture, and Ian McHarg is the key historical proponent.

This urban design version of the redemptive narrative emerges from a positive view of cooperation with nature and pastoral ideals of improvement of nature.

It is based on a scientific, mechanistic manipulation of nature for our own ends to produce "green space".



Central Market Wet Pond 38th Street - Austin



The High Line – New York



Putting Vacant Lots into Perspective



The City of Pittsburgh has no easy way of categorizing its vacant land. In fact, there is no one unifying definition used throughout the city. In some databases, vacant land means any land without a structure. Other databases classify it as any structure or parcel with no residents. There is no database that easily defines vacant land (no structure) that is un-maintained and not part of a right of way or park. Most of this variety of vacant land, (estimated between 6,000 and 12,000 lots), is symptomatic of communities with high levels of disinvestment, absentee landlords, and underserved low income residents. Vacant land can also be a cause, however, of many negative characteristics associated with urban blight. Thus, un-maintained spaces in the midst of urban communities create a vicious circle that many communities do not have resources to address.

Negative Influences, Positive Opportunities

A growing body of statistical research revolving around vacant lot issues in urban areas point toward direct, empirical correlations between vacancy and a variety of negative economic, environmental, and social influences. Thankfully, there is a flip side - equally strong evidence that reversing vacancy leads to stronger, healthier neighborhoods.

Negative Influences of Vacant Lots

The impact of vacant lots reaches beyond visual blight and decay, negatively affecting communities across economic, environmental, and social bounds.

Economic Influences

A study of vacant lots in Philadelphia estimated that the city and closely related public agencies spent \$1.8 million annually on cleaning vacant lots.

Neighborhood blocks with higher concentration of unmanaged vacant lots decreased property values by close to 18% (Wachter, The Wharton School)

Environmental Influences

Vacant Lots are targets for litter, illegal dumping, and criminal activity.

Security Influences

The City of Richmond, Virginia found that of all the economic and demographic variables tested, vacant properties had the highest correlation to the incidence of crime. (The National Vacant Properties Campaign)

Positive Influences through Greening Strategies

Strategies that address vacant land through green means are proven to have positive effects on communities in economically feasible ways.

Economic Influences

Cleaning and greening of vacant lots can increase adjacent property values by as much as 30% (Wachter, The Wharton School)

Planting a tree within 50 feet of a house can increase its value by about 9% (Wachter, The Wharton School)

Location of a house within ¼ mile from a park increased property values by 10% (Wachter, The Wharton School)

Vacant properties located near newly constructed parks were the first to sell during a revitalization project in North Philadelphia. (Philadelphia Green - Urban Impact)

Health & Recreation Influences

When people have access to parks, they exercise more. Access to places for physical activity leads to a 25.6% increase in the percentage of people exercising on three or more days a week (Trust for Public Land)

**NATURE AND CITIES
URBAN ECOLOGICAL DESIGN
AND PLANNING
AUSTIN, TEXAS**

28 FEBRUARY – 1 MARCH 2014

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With half the world's population now
living in urban regions, the future of
cities is arguably the most important
issue of our time.

The design and planning of great cities
is a field that has inspired writers,
philosophers and artists from the beginning of
civilization.

During the twentieth century, the field
has changed rapidly. New tools for
analysis and for design have emerged,
along with a growing awareness of the
impact of cities on the world.

Making the best use of the tools,
insights and ideas of the past, and
developing new ones, is the challenge
of the future.

This year's conference has been
designed to bring together leading
international scholars and practitioners
to discuss the future of cities.

Registration
and more information on the conference
is available at www.designwithnature.org

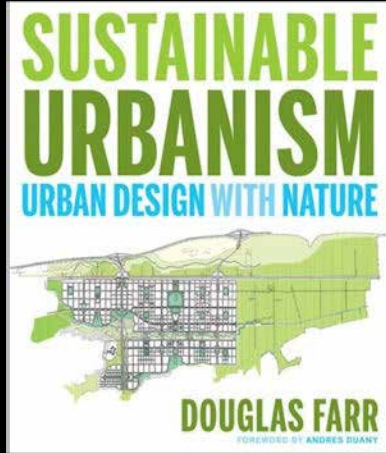
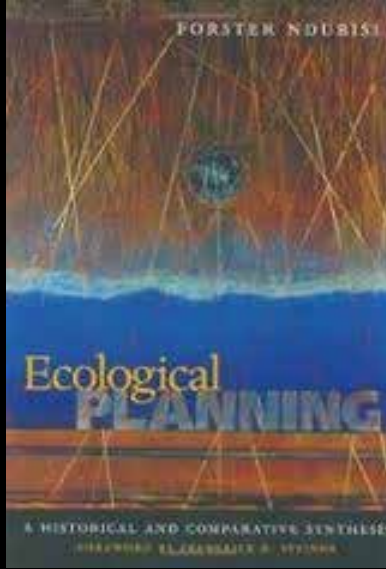
Conference location
The conference will be held at the
University of Texas at Austin,
Campus Center, 200 East
Red Avenue,
Austin, Texas 78712.



ORGANIC ARCHITECTURE: environment + landscape architecture + design



THE GRANITE GARDEN
Urban Nature and Human Design
ANNE WHISTON SPIRN



November 12 at Dougherty Arts Center – Design with Nature: Ecological Cities and the Myth of Sustainability
 November 13 at Waller Center – Design with Nature: Ecological Cities and the Myth of Sustainability
 November 20 at City Hall – Design with Nature: Ecological Cities and the Myth of Sustainability

Perceptions of Urban Nature Narrative of Degraded Nature

Perceptions of American Biologists, Ecologists, and Environmentalists

A weedland community of inappropriate 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.

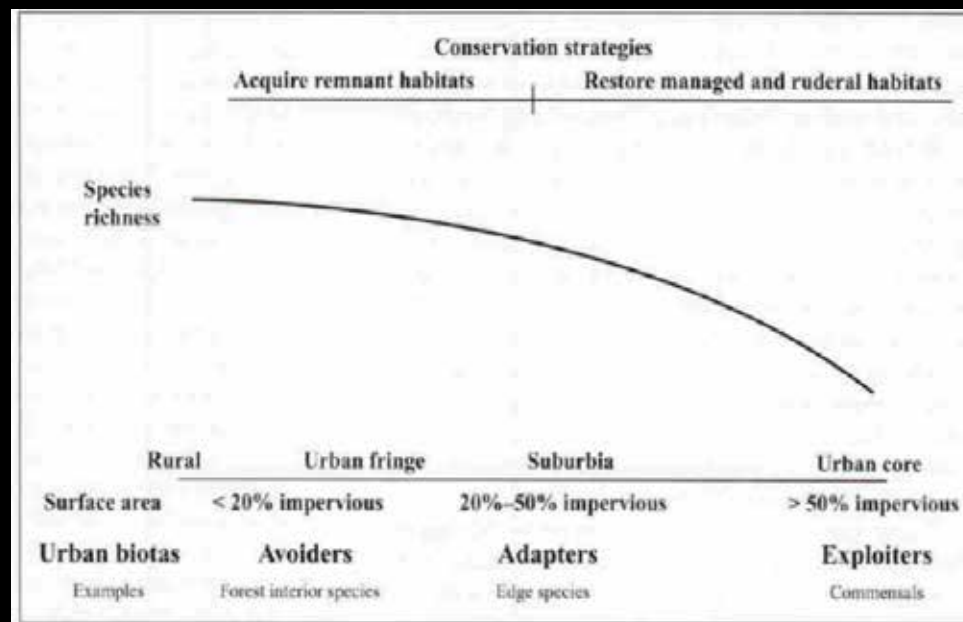


Figure 2. Urban-rural gradient. This is a very generalized and simplified depiction of changes in surface area, species richness, and composition, as compiled from a number of sources discussed in the text. Two basic conservation strategies with respect to urban sprawl are shown at the top.

Narrative of Restorative Nature

Restoration ecology developed out of conservation biology as a proactive technique not to just conserve remnant habitats and species but to actively restore degraded ecosystems.

In the retrospective version of the narrative of restorative urban nature, cities must be restored to former landscapes degraded by the city.

The most controversial of these aliens are “invasive species” identified as non-native species introduced by humans. These transgressive weeds must be eradicated in order to bring back lost native landscapes.

Chicago Wilderness

A regional alliance dedicated to protecting nature and enriching life



Invaders

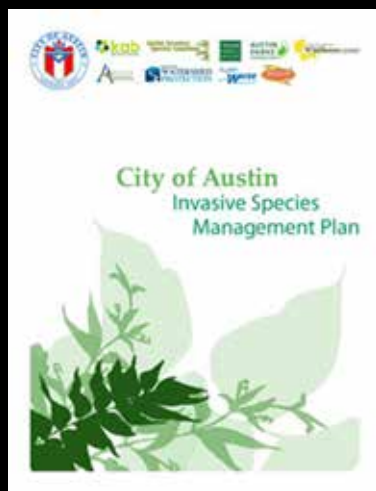
Of Texas - a Citizen Science Program to Detect and Report Invasive Species

"Invaders of Texas" website was created by the Lady Bird Johnson Wildflower Center as a tool for mobilizing the public against non-native invaders and the website employs the rhetoric of war and a resistance composed of "citizen scientists" defending the homeland –

"The Invaders of Texas Program is an innovative campaign whereby volunteer "citizen scientists" are trained to detect the arrival and dispersal of invasive species in their own local areas.

The Invaders of Texas program provides training and materials to volunteers who find, track, describe and photograph invasive species and report occurrences to a centralized database on the texasinvasives.org website. The anticipated outcomes of this citizen scientist program include a statewide network of volunteers contributing to our knowledge of the distribution of invasive species in Texas and increased public awareness of the dangers imposed by invasive species and what steps citizens can take when they encounter them; and reduced spread of invasive species through more timely control and eradication."

- www.texasinvasives.org



Chinaberry



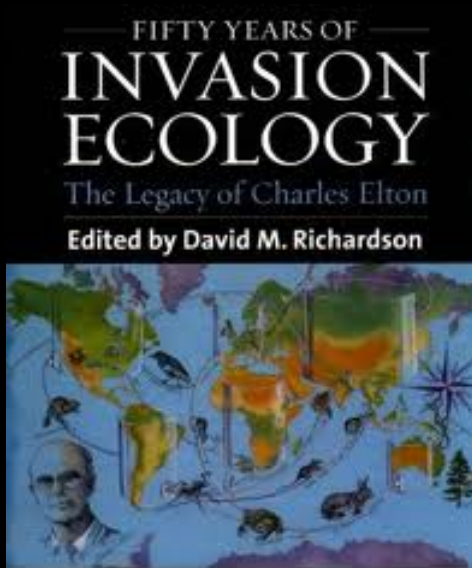
But not Monk Parakeets



These narratives of current American urban nature are preoccupied by a retrospective longing for lost pristine nature and native habitats.

The rhetoric of warfare with invasive non-native species combines with a vision of urban landscapes as weedlands resulting in a bleak picture of urban ecosystems in America.

Austin Invasive Species Coalition



WILEY-BLACKWELL

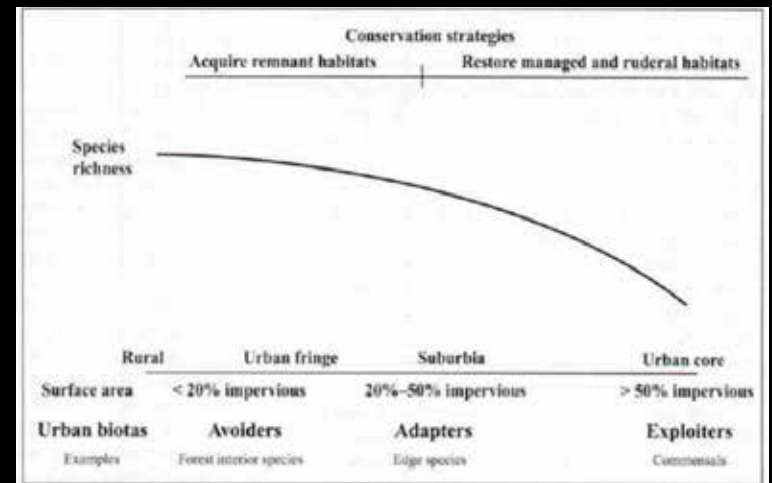


Figure 2. Urban-rural gradient. This is a very generalized and simplified depiction of changes in surface area, species richness, and composition, as compiled from a number of sources discussed in the text. Two basic conservation strategies with respect to urban sprawl are shown at the top.

Profound Ecological Changes



Environmental Perception of Nature and the City

The Sacred and the Mundane

Wilderness and the City

Natural vs. Artificial

Pristine vs. Degraded

Native vs. Non-native

Invasive
Non-native
Species



Once a rock
dove, now
the winged
rat of the city

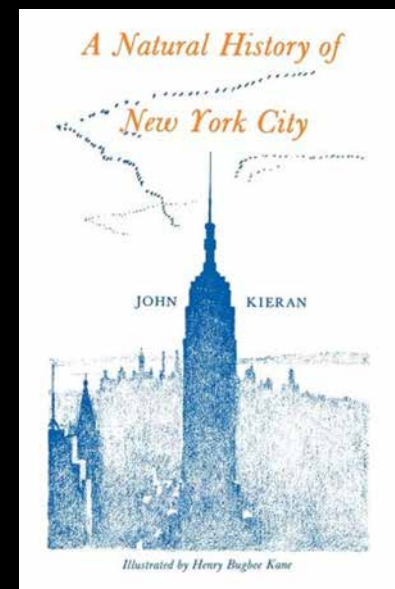
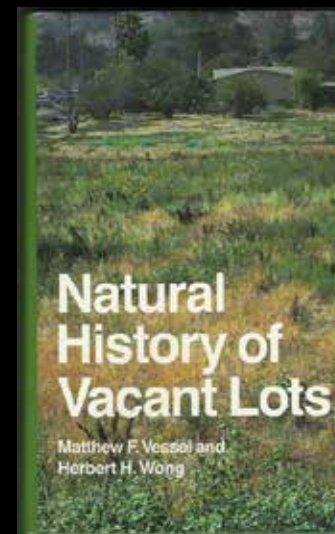
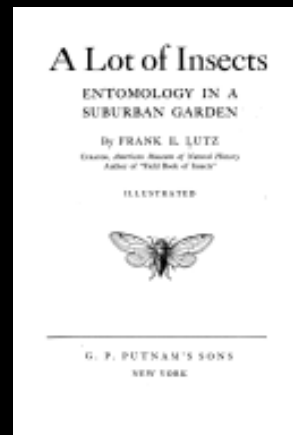
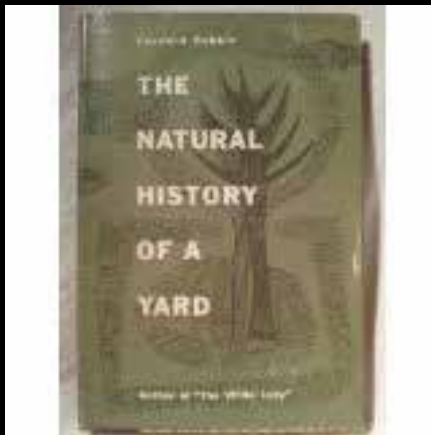
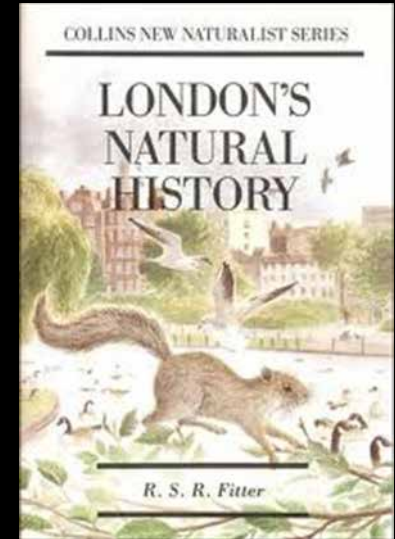
Perceptions of Urban Nature

Urban Natural History

A naturalist's perspective of the city and discover a richness of flora and fauna usually overlooked in the everyday landscape of the city.

These books are survey accounts of native and non-native flora and fauna combined with environmental history.

Popular natural history accounts of particular suburban backyards, like Lutz *Lot of Insects: Entomology of a Suburban Yard* (1941) and Dubkin *The Natural History of a Yard* (1953) were published in the 1940's and 1950's, and they focused on all the insects and wildlife found there and not just native species.



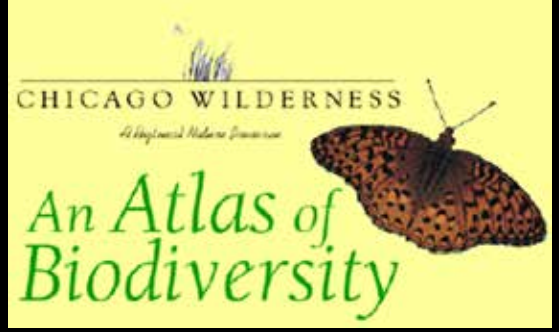
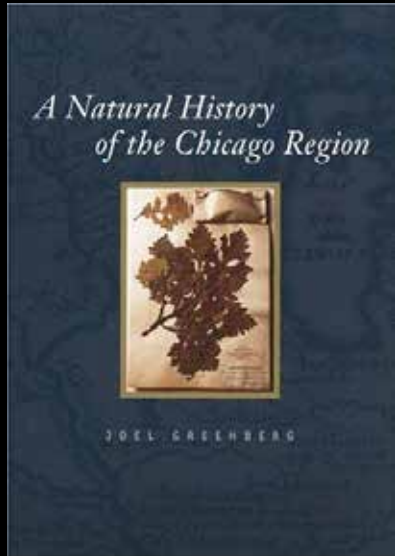
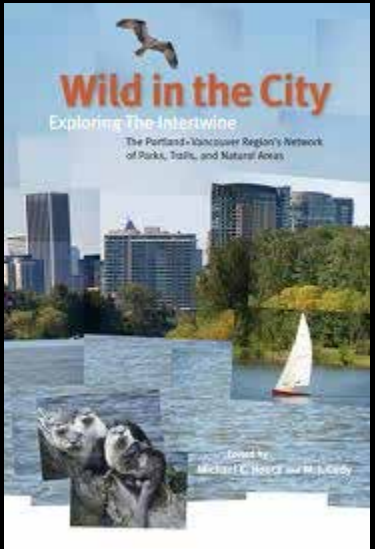
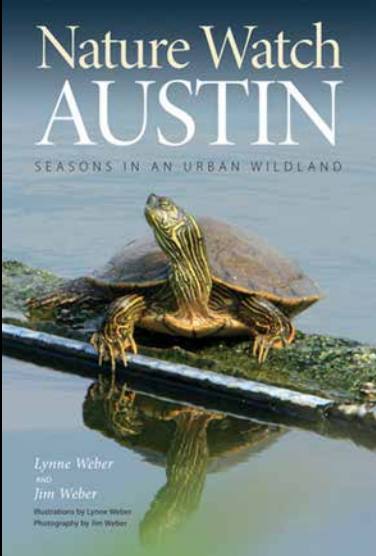
Perceptions of Urban Nature

Contemporary American Urban Natural History

More recent natural histories of cities focus on native biodiversity as positive urbanites and non-native as negative intruders.

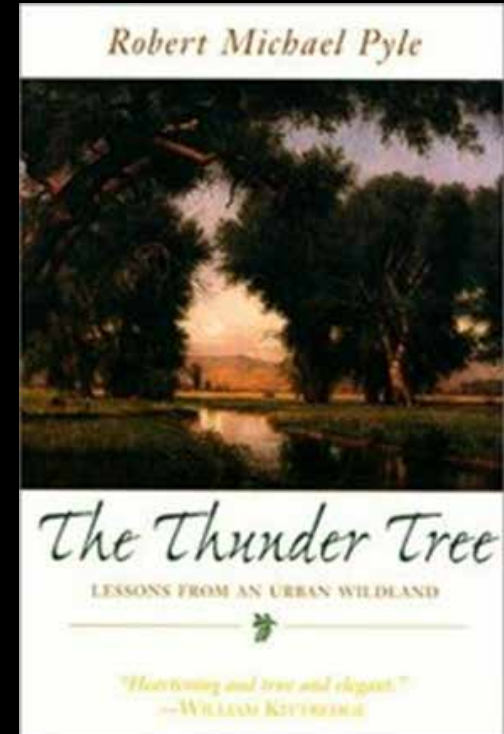
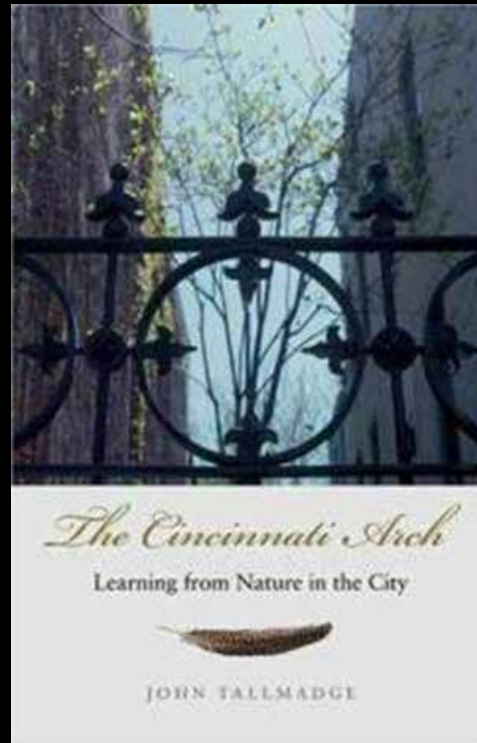
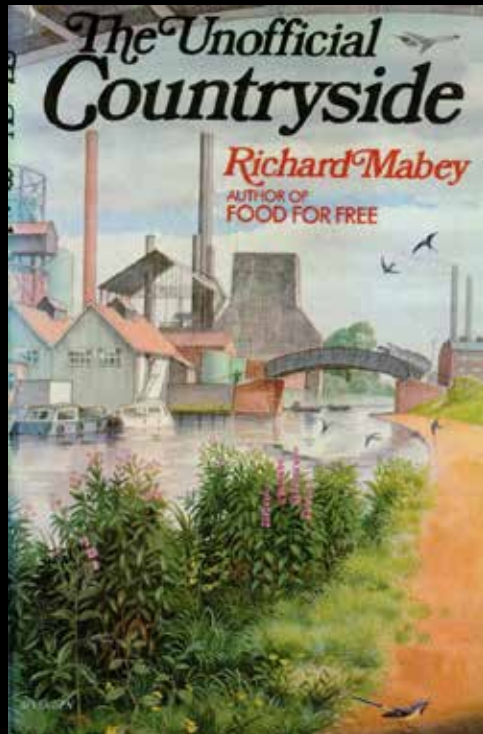
They are written by native species advocates who exclude or demonize non-native species in their account of appropriate nature in the city.

The habitats that they celebrate tend to be remnant habitats within the city, rather than the whole of the urban landscape.



Perceptions of Urban Nature

Urban Nature Writing



Degraded Nature

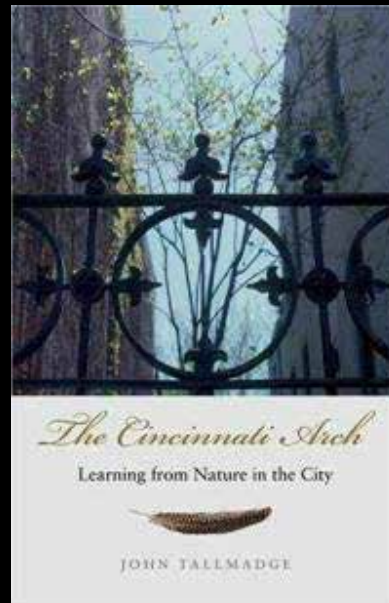
Urban Nature - Not a Real Ecosystem

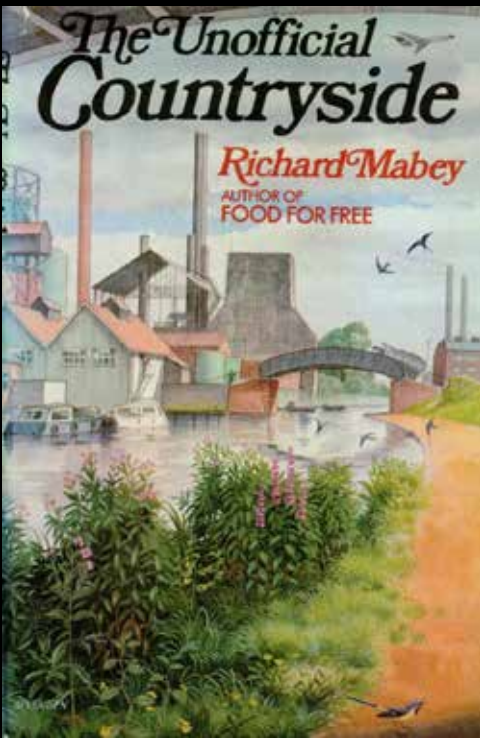
John Tallmadge *The Cincinnati Arch: Learning from Nature in the City* (2004)

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.*





Alternative Perceptions British Urban Nature

Richard Mabey *The Unofficial Countryside* (1973)

"I have called it the unofficial countryside because none of these places is in the countryside proper, nor were they ever intended to provide bed and board for wildlife.

Yet I think all these places do have one quality in common, and that is that, in them, the labels 'urban' and 'rural' by which we normally find our bearings in a landscape, just do not apply.

It is not the parks but the railway sidings that are thick with wild flowers."



Urban Nature and Biological Slumming

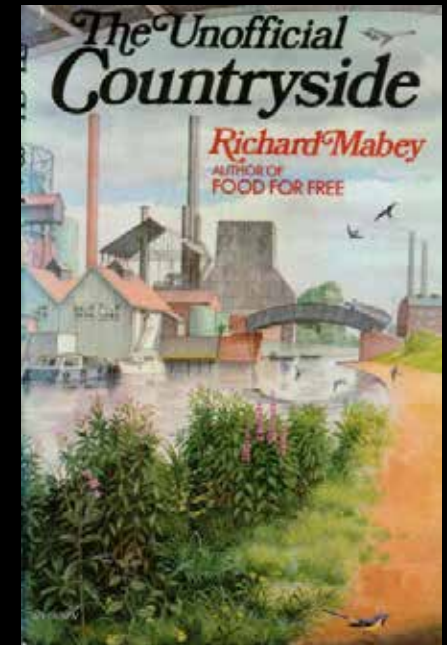
"The medium is an account of a year in the unofficial countryside, based chiefly around my personal observations and experiences.

...the danger in this approach is being tempted into some biological slumming. The habitats I've described in this book are in no way a substitute for the official countryside.

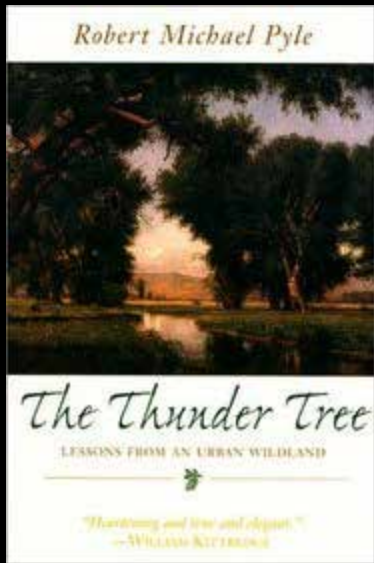
Nor are they something to be cherished in their own right, necessarily.

The last thing I want to do is to excuse the dereliction, the shoddiness and the sheer wastefulness of much of our urban landscape."

"It is amazing how romantic these pockets of ragamuffin greenery can begin to seem, nestling, like Frances Burnett's *Secret Garden*, behind the factory walls."



Alternative Perceptions American Urban Nature



Robert Michael Pyle, *The Thunder Tree* (1993)

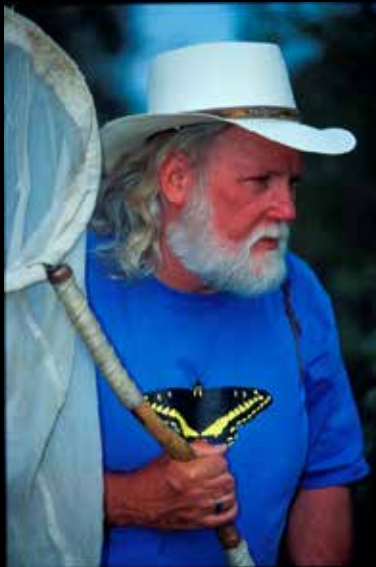
“What do shreds and scraps of the natural scene mean, after all, in the shadow of the citified whole? What can one patch of leftover land mean to one person’s life, or to the lives of all who dwell in the postindustrial wasteland?”

“More and more, we are discovering that the authentic wilderness of the mountains and deserts, though essential, is not enough to provide for a largely urban and overbloated population of humans. We need to keep some vacant lots, some big old hollow trees, some brush.

We need the Country in the City, the balm of the “accidental wild.”

Pyle acknowledges Mabey’s precedence in writing about these places, and deliberately juxtaposes Mabey’s metaphor of country in the city with his own rhetorical inventions based on American metaphors of nature.

He utilizes a strategy that mirrors Mabey’s contrast between official and unofficial countryside. From the start he acknowledges that the authenticity of wilderness is central to American sensibilities about what counts as nature but then he celebrates the “accidental wilds”



Alternative Perceptions American Urban Nature

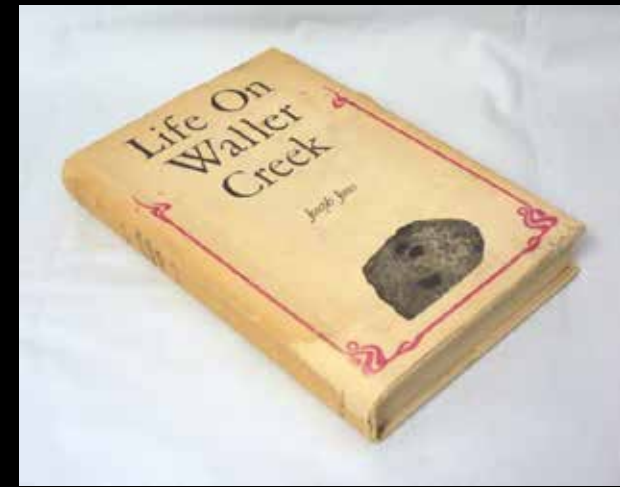
Joseph Jones *Life on Waller Creek* (1982)

"Forty years and more I have packed my lunch to Waller Creek. Only since retirement, though, have I felt I had time to spend undertaking small improvements along its rugged banks: ephemeral gestures to be sure, but good for body and spirit alike – an hour or so, three or four days a week, before lunch. Instead of going up the wall I go down to the Creek."

The stretch of creek adopted by Jones runs through the campus of the University of Texas.

At one level, this book is a standard natural and cultural history of a stream with its limestone bed speckled with fossils anchoring the geological timescale of the history and framing the timeline of biological occupancy.

Two aspects of this book set it apart from the previous texts.



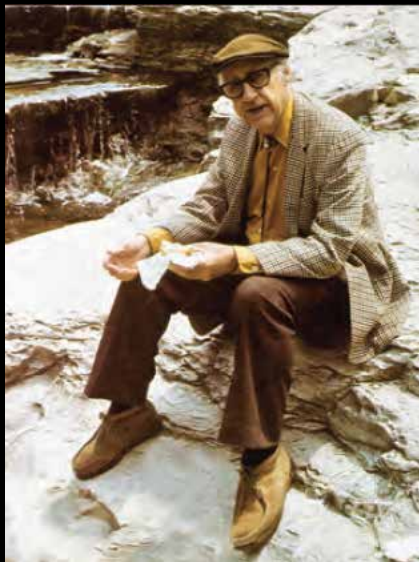
Constructive Meddling

First, Jones does not just go to the creek in search of redemptive encounters with wild nature like Mabey, Pyle, or Tallmadge.

Unlike Tallmadge, he does not ask the creek to redeem the degradation of the urban nature.

Like Pyle, he writes about a place that he knows intimately and, although he makes an argument for its conservation, he presents himself as an engaged observer and unapologetic meddler in this place. Everyday Jones putters around in the creek bed maintaining informal trails and collecting various bits of interesting natural and manmade detritus.

Unlike Mabey, Pyle, and Tallmadge, Jones engages this place not as just a site for the observation of nature but as an encounter through constructive meddling.



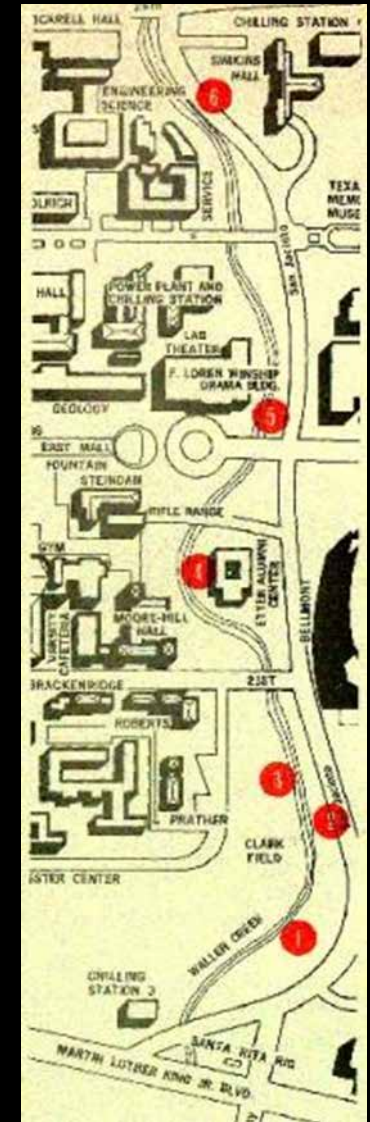
Walking the Forty Acres : Waller Creek Wilderness Trails and Adjuncts



By: S.P. Ellison, Jr., Joseph Jones, and Keith Young

Prepared for Members of the University of Texas at Austin Retired Faculty-Staff Association

May 10, 1983 / General Meeting of the Association



Inventories

The second aspect of this book which sets it apart is, perhaps, a more radical departure from the conventions of narratives of nature than anything envisioned by the new geographers of nature.

In his journals, Jones kept a record of each day's visit to the creek with detailed observations of what he saw there.

Where the conventional expectation is that these catalogues would be a naturalist's observations of nature, Jones was not a naturalist, but rather an engaged literate observer encountering a marginal urban place.

He carefully records what he sees and experiences without censuring the detritus of the urban landscape in favor of redemptive moments of nature.

He calls these lists of prosaic observations "Inventories," and they are interspersed throughout the text like phenomenological snapshots of the place.



I would hope also that the reader, if he should tire of being reminded overmuch of what an efficient trash-receiver (up to a point) the Creek has become in our day, will exercise the reader's privilege of imagining what counterparts to an inventory of the 1970s-80s were almost certainly to be found in Waller Creek pretty steadily after 1839 and indeed even before.

But let him first accept himself as part of the continuum and become his own short-term archeologist: such fugitive creek-things as I will be cataloguing here, when carried and buried, might be thought of as archeology going somewhere to happen.

Thus, for example:

Plastic beer cups (Brand X with blue map of Texas) in addition to the ever-ongoing deposit of beer cans...

A grackle's reflection as he flies low over a still pool...

After a flood, young willows keep reminding us, for many days, "It went that-a-way,"...

High-visibility translucent bluish plastic bags – like Portuguese-men-of-war on a Gulf beach, but not biodegradable...

scars of the sewer builders, still evident after twenty, twenty-five years...

A much-twisted-and-battered yellow umbrella.



Inventory

The name "Billy" neatly scratched with a stick through the algae onto the Creek bottom...

Roots projecting straight out from between strata at the base of a cliff, groping for water: what trunk do they feed, at what distance?...

A rusty bucket-bottom caught through one of its holes on a ragweed stub, two feet up...

Dandelions and some other yellow flowers are out on sunny days in early January...

I'm almost as glad to see readers on the Creek bank as I am to see longear sunfish in the pools...

A pink plastic spoon.



Inventory – Literary Traction for Alternative Perceptions

A yellow candy-wrapper...

Plastic bottle for duplicator ink...

Half a cement block...

and from masses of radiant leaves the grackles, no longer wheezing out half-whistles, would carol hymns of glory to God...

A largish sheet-metal cylinder, very rusty...

Cypress needles help traction, too, on a slippery bank.



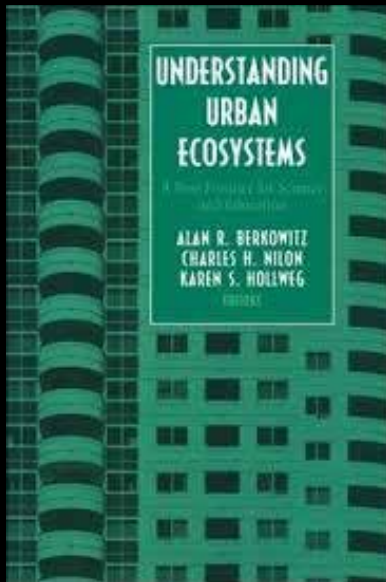
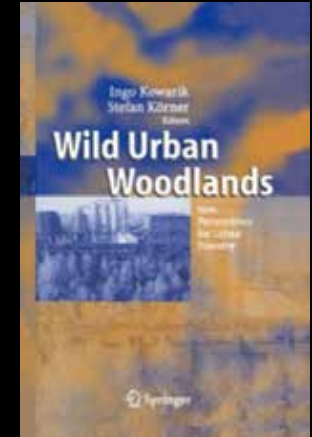
Scientific Traction for Alternative Perceptions European Urban Ecology –Prospective vs. Retrospective

... 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.

Ingo Kowarik *Urban Wild Woodlands* (2005)

...although wild and rather specialist species may be missing, cities are great havens for biodiversity, in terms of both ecology and species, even in industrial areas.

Anthony Bradshaw in Berkowitz, *Understanding Urban Ecosystems: A New Frontier for Science and Education*. (2003)



Perceptions of European Urban Ecologists – Cosmopolitan Community

German botanist, Herbert Sukopp has studied plant succession in Berlin's wastelands since the 1950s.

urban ecosystems are:

- A cosmopolitan community of uniquely adapted ruderal organisms
- the field laboratories where possibly new and well-adapted ecotypes of our native or naturalized wild plants will originate in the changed environmental conditions.
- Ecosystems which have developed in urban conditions may be the prevailing ecosystems of the future.

Herbert Sukopp *The soil, flora, and vegetation of Berlin's waste lands*. In *Nature in Cities*, Ian Laurie, ed. (1979)

