Collaborative Urban Forest Management: Rounding Up More than the Usual Suspects

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Traditional Collaborators in Urban Forest/Urban Greening Management?
Beautification Groups

Urban Transformations for Sustainability
the Chenoggye freeway in Seoul
~ 1970-2005

Chenoggyeon – 8.4 km, $900 M
initial public criticism!
typical retail street in urban Japan
Namba Parks, Osaka
view from nearby hotel
interior
retail space
ground level

small plazas, retail entry
Namba Parks: retail success & nature experience benefits

High Line Railway - W Manhattan
Friends of the High Line
New Collaboration Opportunities?

Public Health
county, state, federal agencies
Urban Forests and Newborns

the natural environment may affect pregnancy outcomes . . .

10% increase in tree-canopy cover within 50m of a house
= lower number of low weight births (1.42 per 1000 births)

*Donovan et al., Health & Place, 2011*

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Trees & Crime Reduction

- trees in the public right of way are associated with lower crime rates
  - smaller, view-obstructing trees are associated with increased crime
  - larger trees are associated with reduced crime

*Donovan & Prestemon. 2012. Environment and Behavior*
Green & Crime Reduction

- vacant lot greening in Philadelphia (4 sections)
  - consistent reductions in gun assaults across 4 sections
  - consistent reductions in vandalism in 1 section


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EAB Tree Loss & Public Health

1990 to 2007, 1,296 counties in 15 states infected areas vs. no bugs
15,000 more deaths from cardiovascular disease
6,000 more deaths from lower respiratory disease
controlled for demographic, human mortality, and forest health data at the county level

Toledo, Ohio in 2006, pre EAB

2009, EAB in neighborhood

photos: Dan Herms, Ohio State University
**Shinrin-yoku**  Forest Bathing

- extended forest walks
- reduced ‘fight or flight’ nervous system activity
- lower cortisol – a stress indicator
- increased immune function
- lower pulse rate & blood pressure

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**What is the Evidence?**

Urban Greening & Nearby Nature
Human Health, Welfare & Function
Finding that study . . . . .

Research Reviews

Green Cities: Good Health

Metro nature—including trees, parks, gardens, and natural areas—enhance quality of life in cities and towns. The experience of nature improves human health and well-being in many ways. Nearly 40 years of scientific studies tell us how. Here’s the research...

on-line resource

summaries complete: soon!

www.greenhealth.washington.edu
Sponsors:
University of Washington
USDA Forest Service, U&CF Program
NGO partners

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Mary Ann Rozance

Local Economics
Trees in cities are not grown and managed for products that can be bought and sold on markets, but they do provide many intangible services and functions. The article serves two purposes. First, it introduces valuation methods that are used to convert intangible benefits to dollar sums.1,2 Then, it shows how nonmarket valuations can support local decision-making.

Fast Facts
- The presence of larger trees in yards and as street trees can add from 3% to 15% to home values throughout neighborhoods.
- Averaging the market effect of street trees on all house values across Portland, Oregon yields a total value of $1.93 billion, potentially increasing annual property tax revenues $15.3 million.3
- A study found 7% higher rental rates for commercial offices having high quality landscapes.4
- Shoppers claim that they will spend 9% to 12% more for goods and services in central business districts having high quality tree canopy.5
- Shoppers indicate that they will travel greater distance and a longer time to visit a district having high quality trees, and spend more time there once they arrive.6

REFERENCES

Urban Green :: Human Health & Well Being

> 2,400 articles

Urban Greening & Health Evidence Framework
Eco-Health Relational Browser
Environmental Protection Agency

www.epa.gov/research/healthscience/browser/

Click a topic bubble or choose a topic from the dropdown list above. Hover over links ($) to view relationship between elements.


Abraham Maslow
Hierarchy of Needs

- Physiological
- Safety
- Love/belonging
- Esteem
- Self-actualization

Elder Care & Services
agency & NGO collaborators
a walk in the park!

Nature, Human Health & Walkable Neighborhoods

- Environments: Neighborhood Streets (Tokyo)
  - tree-lined
  - parks

- Outcomes: Elderly People & Walking
  - less illness
  - lower mortality rate over 5 years

Physical Activity & Depression Reduction

- Review of 13 high quality studies
  - exercise recommended for mild to moderate depression
  - people who are willing & motivated
  - associated meditation and mindfulness are important

Physical Exercise Intervention in Depressive Disorders.
Scandinavian Journal of Medicine & Science in Sports
方法
実験1:
課題①: 2種の土を混ぜる
課題②: 土を鉢に入れる
課題③: 花を鉢に植える

Dr. Masahira Toyoda;
University of Hyogo, Kobe
フォルダ装着位置は、額の正中位で且つ眉から1cm上とした

Primary Medical Care & Treatment
hospitals & clinics as collaborating institutions
Effects of nature window view on recovery from surgery (Roger Ulrich, 1984)

- Shorter stays
- Less pain
- Fewer minor complications
- Better emotional well-being

PAIN CONTROL DURING BRONCHOSCOPY

80 patients undergoing bronchoscopy

40 viewed a pristine meadow scene, heard bubbling brook sounds

40 controls
PAIN CONTROL DURING BRONCHOSCOPY

80 patients undergoing bronchoscopy

40 viewed a pristine meadow scene, heard bubbling brook sounds

29.3% with “very good” or “excellent” pain control

40 controls

20.5% with “very good” or “excellent” pain control

hospital healing gardens:
patients; family and friends; professional staff

health care $$ savings

healing gardens
soothing
distracting
calm focus
Collaboration Opportunities?

Restorative Nature Beyond the City?
Evidence about the importance of ‘nearby nature’

Urban Green :: Public Health & Well Being

> 2,200 articles
Atlanta Regional Council
elder care and services summit

September 2013
record attendance
service agencies
care facilities
medical community

Policy and Programs . . . .

• what are the ‘hot button’ issues of other disciplines?
• bring the best available science to the dialog about urban forestry & urban greening
• events and publications that connect to ‘jargon’ of new target audiences
• connect relationships to research