# Does Nature Help Us To Be Better Human Beings?

#### Nature Makes Us More Generous!

"Those more immersed in natural settings were more generous, whereas those immerses in non-natural settings were less likely to give. Feelings of autonomy and nature relatedness were responsible for the willingness to give to others, indicating that these experiences facilitated a willingness to promote others' interests as well as one's own. In other words, autonomy and relatedness encouraged participants to focus on their intrinsic values for relationships and community rather than on personal gain." --Weinstein, Przybylski, and Ryan, 2009



# The Power of Nature to Help Us Think Longer Term

(To be Better Planners?)

"The results of three studies, two laboratory experiments and a field study reveal that individual discount rates are systematically lower after people have been exposed to scenes of natural environments as opposed to urban environments. Further, this effect is owing to people placing more value on the future after nature exposure. The finding that nature exposure reduces future discounting—as opposed to exposure to urban environments—conveys important implications for a range of personal and collective outcomes including healthy lifestyles, sustainable resource use and population growth."

Sources: "Do natural landscapes reduce future discounting in humans?" van der Wal, Schade, Krabbendam and van Vugt, Proc. R. Soc. B 2013 280, 20132295, published 6 November 2013





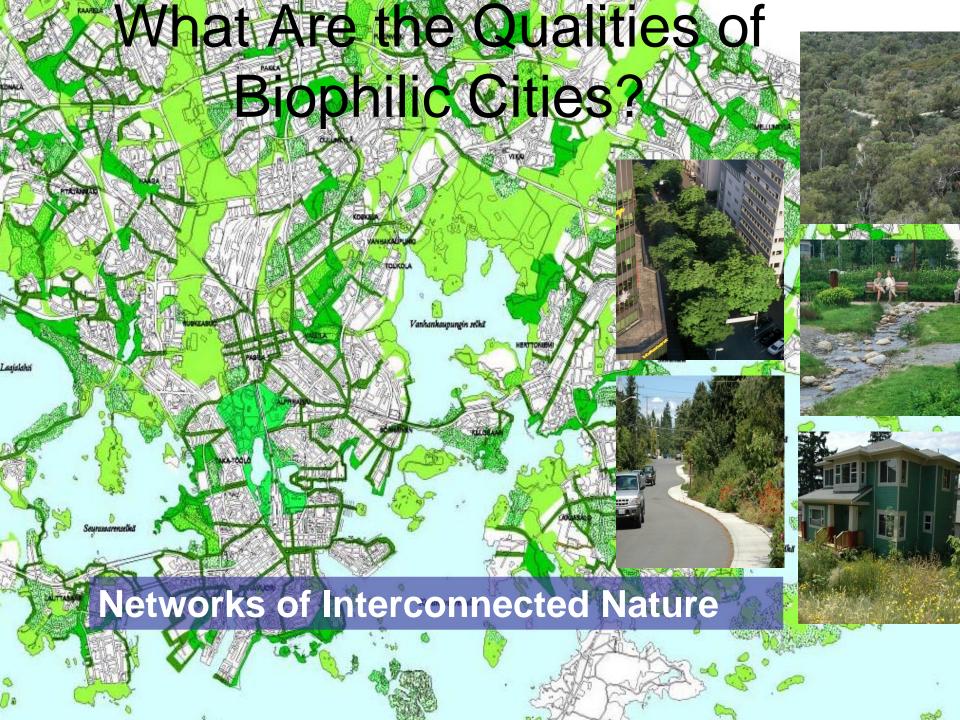
"Urgent Biophilia" --Keith Tidball



greening the rubble www.greeningtherubble.org.nz



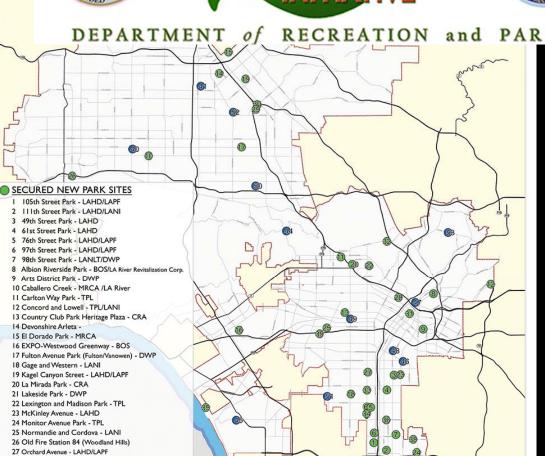














Biophilic Cities Seek an Equitable Distribution of Nature

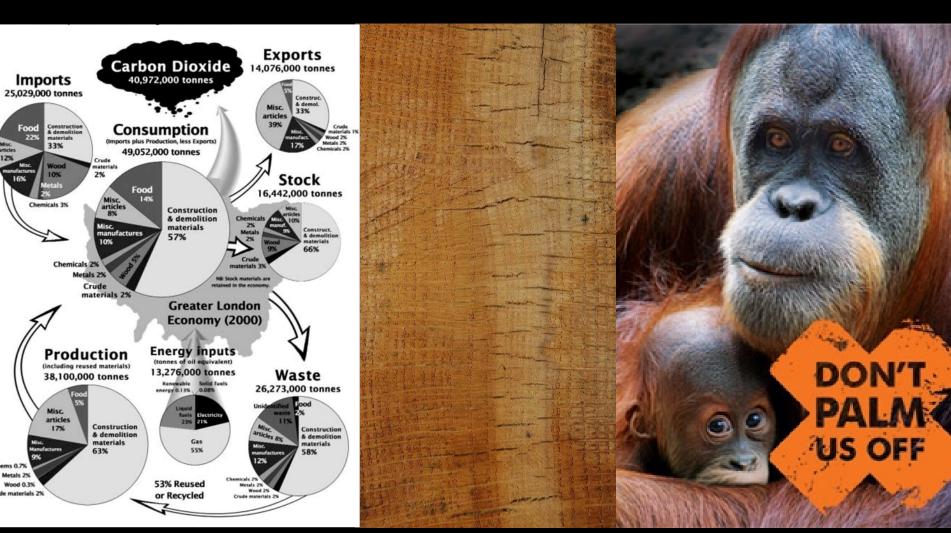
#### 39 West Boulevard - LANI ACTIVE PROPERTY ACQUISTIONS/LEASES

28 Patton Street Park (Echo Boys & Girls) - TPL 29 Sheldon-Arleta Park - BOS

30 South East Valley Skate Park 31 Spring Street Park 32 Sunnynook River Park 33 Vermont and Gage - LAHD 34 Vermont Miracle Park - LANLT

35 Via Dolce 36 Wall Street Park - LAPF 37 Warren Oil (Drum Barracks) 38 Watts Cultural Crescent - TPL

### Biophilic Cities Care About Nature Beyond Their Borders (A *Glocal* City)









Knowledge, Connections, Deep Caring

#### **Metrics of Biophilic Cities**

### Biophilic Conditions and Infrastructure

- --Proximity to parks and green spaces;
- --Percentage of land area covered by trees or other vegetation;
- --Number of green design features (e.g. green rooftops, green walls, rain gardens);
- --Fair distribution of nature;
- --Extent of natural images, shapes, forms employed in architecture, and seen in the city;
- --Extent flora and fauna (e.g. species) within the city;

# Biophilic Behaviors, Patterns, Practices, Lifestyles

- --Average portion of the day spent outside;
- --Visitation rates for city parks;
- -- Percent of trips made by walking;
- --Extent of membership and participation in local nature clubs and organizations;

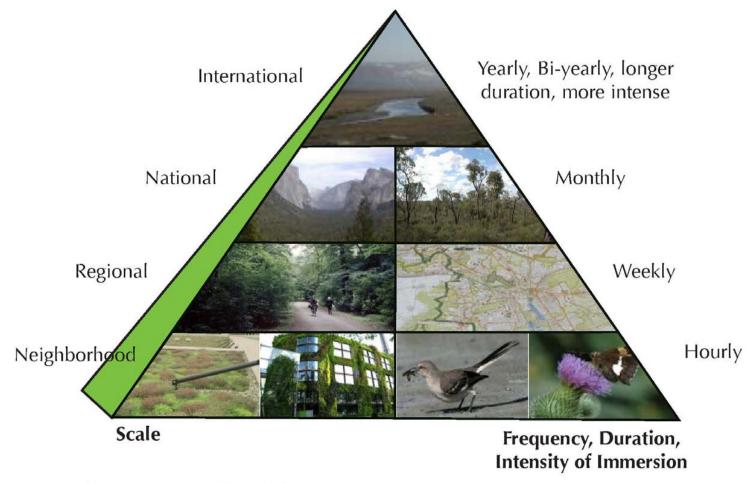
## Biophilic Attitudes and Knowledge

- --Percent of residents who express care and concern for nature;
- --Percent of residents who can identify common species of flora and fauna;

## Biophilic Institutions and Governance

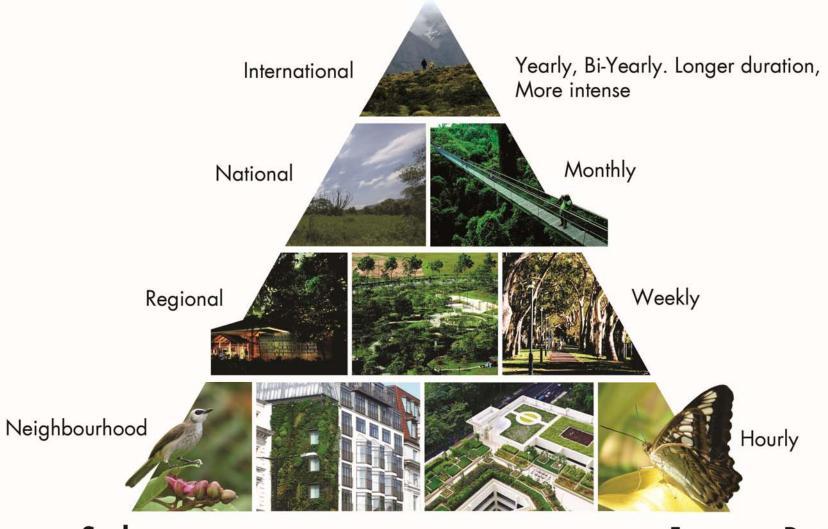
- --Percent of municipal budget dedicated to biophilic programs;
- --Design and planning regulations that promote biophilic urbanism;
- --Presence of institutions that promote education and awareness of nature;
- --Number/extent of educational programs in local schools aimed at teaching about nature;
- Nature organizations and clubs of various sorts in the city, from advocacy to social groups;

#### THE NATURE PYRAMID



Concept by: Tanya Denckla-Cobb

#### What is the Minimum Daily Requirement of Nature?



Scale

Frequency, Duration Intensity of Immersion



Ability to Name? 0% 0% 100%



### Sounds that Re-animate Cities...

"In re-animating, we become open to hearing sound as voice, seeing movement as action, adaptation and dialogue, coincidence and chaos as the creativity of matter." --Val Plumwood.

FORO URBANO DE F **ALLER INTERNACIONAL** VITORIA-GAS E, ARQUITECTURA Y URBANISMO: Infraestructura Verde en la Ciudad Luis Andrés Orive Vitoria-Gasteiz







