BlueZones & Biophilia
10.29.2018
Topics Outlined

• Impact of our environment on personal health
• Benefits of nature on wellness
• Community design with planning focus on resident health and wellbeing through Blue Zones research and biophilic design
• Creating spaces that focus on vital outdoor rooms and spaces that blur the line between interior and exterior uses
• Creating outdoors spaces that promote biophilic design- the need for humans to heal with nature
• Wellness programs that utilize outdoor spaces
What is a Blue Zone?

Rare hotspots of longevity around the world

- Research by Dan Buettner through National Geographic
- What is causing them to live +100?
- Design to make it easy for people to make the healthy choices
- We implement Dan’s Blue Zone concepts and biophilic principles into our designs
- Design for Life on Purpose...
- Resulting in happier residents and communities
THE ORIGINAL BLUEZONES

- Barbagia region of **Sardinia** – Mountainous highlands of inner Sardinia with the world’s highest concentration of male centenarians.
- Ikaria, **Greece** – Aegean Island with one of the world’s lowest rates of middle age mortality and the lowest rates of dementia.
- Nicoya Peninsula, **Costa Rica** – World’s lowest rates of middle age mortality, second highest concentration of male centenarians.
- Seventh Day Adventists – Highest concentration is around **Loma Linda, California**. They live 10 years longer than their North American counterparts.
- **Okinawa**, Japan – Females over 70 are the longest-lived population in the world.
POWER 9°
Nine healthy lifestyle habits shared by people who’ve lived the longest.

1. Move Naturally
2. Right Time
3. Belong
4. Family First
5. Wine at 5
6. Plant Plant
7. 80% Rule
8. Down Shift
9. Know Your Purpose

Blue Zones
MOVE NATURALLY

Constant movement
Environments that promote moving without thinking
How long do you sit during the day?
Healthcare, Fitbit and rewards
What is YOUR motivation?
What is your drive?
What makes you feel needed?
What is your purpose?
Knowing this may increase your life expectancy by 7 years.
DOWNSHIFT

Stress can lead to chronic disease
Routines to relieve stress
Meditation
Appreciation
In the moment
I feel “Thanksgiving full!”
20% could be difference between losing weight or gaining it
Smallest meal in late afternoon
Early consumption
WINE AT 5

Moderate drinking (minus Adventists)
1-2 a day
Enjoy with friends and or food
Faith-based community
Any denomination
Services 4 x month=4-14 yrs
FAMILY FIRST

Aging parents and grandparents
Commitment to life partners
Invest in their children
RIGHT TRIBE

Does who you associate with define you?
Healthy behavior
Positive reinforcement
Smoking, obesity, happiness and loneliness are contagious
BIOPHILIA

Love life

“Our passionate Love of life and all that is alive.”

Erich Fromm

“…the connections that human beings subconsciously seek with the rest of life.”

E.O. Wilson
WE SPEND ABOUT 90% OF OUR TIME INDOORS.
Research

- Stephen Kellert, 2008
- Terrapin Bright Green
Biophilic Design Benefits

Mental Benefits
- Increase in Test Scores
- Increase in HS Graduation Rates
- Decreased Anxiety
- Improved Concentration
- Increased Creativity
- Reduced Boredom
- Improved Attention
- 8.5% Shorter Hospital Stay
- Faster Heart Rate Recovery
- Decreased Stress Hormones
- Increased Feelings of Well-Being
- Increased Appreciation of Nature

Physical Benefits
- 6-15% Increase in Productivity
- 7-18% Increase in Test Scores
- Increase in HS Graduation Rates
- Lower Blood Pressure
- Increased Feelings of Patience
- Increased Feelings of Restoration
- Positive Emotional Responses

Emotional Benefits
- Increased Feelings of Restoration
- Increased Feelings of Patience
- Positive Emotional Responses

References:
Restorative views

Dr. Roger Ulrich, 1984
What does this mean?

Nature is powerful
Forest Bathing

- Shinrun yoku
- Taking in the forest atmosphere
- Japan
- Dr. Qing Li
- Prescribed nature as a medicine
- Forest therapy walks
Key Principals

- Repeated engagement
- Focus on human adaptations to nature world over evolution
- Encourage an emotional attachment to settings and places
- Promotes positive interaction between people and nature to encourage relationship and responsibility for human connection
- Encourage mutual reinforcing
REPEATED CONTACT

Depends upon repeated and sustained engagement with nature
EMOTIONAL ATTACHMENT

Fosters emotional attachments to settings and places
INTERDEPENDENCE

Fosters positive and sustained interactions and relationships among people and the natural environment.
INTEGRATED ARCHITECTURE

Reinforces and integrates design interventions that connect with the overall setting or space.
Strategies of Biophilic Design
DIRECT EXPERIENCE WITH NATURE

Visual or literal
- Light
- Air
- Water
- Plants
- Animals
- Weather

Nature in the Space
• Naturalistic Shapes and Forms
• Evoking Nature
• Information Richness
• Age, Change, and the Patina of Time
• Natural Geometries
• Biomimicry

INDIRECT EXPERIENCE OF NATURE
INDIRECT EXPERIENCE OF NATURE

- Images of Nature
- Natural Materials
- Natural Colors
- Mobility and Wayfinding
- Cultural and Ecological Attachment to Place
- Simulating Natural Light and Air
EXPERIENCE OF SPACE

- Prospect and refuge
- Eco attachment to space
- Organized Complexity
Patterns developed by Terrapin Bright Green provide flexibility for designers to meet individual program needs on a per project basis.

Every project is the same right?
The link between Blue Zones and Biophilic Design

• NATURE IS KEY
• The presence of biophilic design implementations enables spaces that humans can successfully and unintentionally or intentionally practice the Power of 9.
INCORPORATION

Of Biophilic Design and Blue Zones Philosophy
LINKING SPACES TO CREATE MEANINGFUL GREENSPACES

- Adopt a new consciousness toward nature
- Recognize how much our physical and mental wellbeing relies on the quality of our environment
- Fluid connection visually and programmatically between interior and exterior
- User needs
- Repetitive use
- Intergenerational
QUIET REFLECTION
PASSIVE INTERACTION
EXPERIENCE A SPACE THROUGH BIOPHILIC art

Framework for relating human experiences with nature.
ART AND NATURE
EXPERIENCE A SPACE THROUGH BIOPHILIC lighting

- Framework for relating human experiences with nature
REFLECTION OF NATURE IN LIGHTING
EXPERIENCE A SPACE THROUGH BIOPHILIC Accessories and Surfaces

Framework for relating human experiences with nature
Biophilic design aims to raise our awareness of our relationship with the natural environment. It becomes a perfect platform for conversation, education, and positive change. Through the arrangement of vignettes and applying natural elements to the surroundings those who live in these spaces may experience flowing interaction and sharing.
NATURAL COLOR SCHEMES AND TEXTURES
EXPERIENCE A SPACE THROUGH BIOPHILIC Furniture

Framework for relating human experiences and spiritual connections with nature
At present, designers have the ability to influence our health and well being, with our homes, workplaces, and urban settings which assists those who live in these spaces to make better life choices!