

# GOALS OF THE WEBINAR

- To increase understanding and benefits of Biophilic Design in Early Childhood.
- To share Biophilic Design resources and examples that are appropriate for Early Childhood.
- To increase Biophilic Design experiences to all children and adults in Early Childhood.
- To support the development of an action plan that works for classrooms/programs around Early Childhood Biophilic Design.
  @Early Childhood Ally



"HUMANS ARE INNATELY DRAWN
TO LIFE AND THE NATURAL
WORLD BECAUSE WE ARE PART OF
IT."

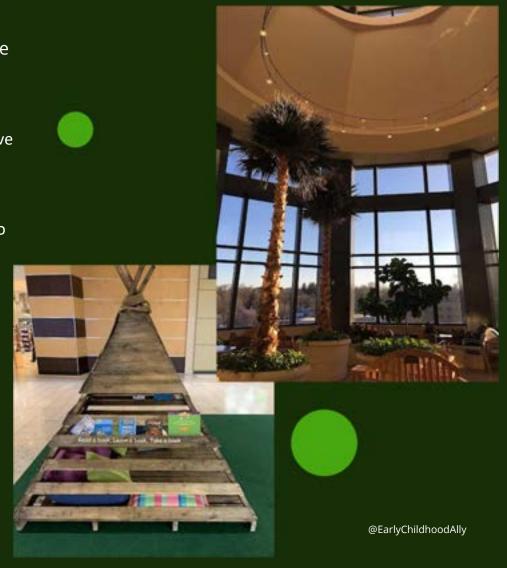
**E.O. WILSON** 

Biophilia design is blending nature into spaces to improve the health and well being of those who use the spaces.

We have all felt the innate pull, or connection, children and adults have with nature.

Biophilic design is used within buildings to increase our connectivity to the natural environment through the use of direct nature, indirect







young children and recognizing that they are often in care for several hours. How do we borrow from this research to enhance classrooms and buildings? Biophilic design is especially powerful for children who may have little access to natural environments when they are home. Research by Stephen Kellert, Elisabeth Calabrese and Richard Louv supports when we work and play in spaces reflecting biophilia we increase our overall health including

# 14 PATTERNS OF FOR HEALTH AND WELL-BEING IN THE BIOPHILIC DESIGN BUILT ENVIRONMENT



#### NATURE IN THE SPACE

- 1. Visual Connection with Nature
- 2. Non-Visual Connection with Nature
- 3. Non-Rhythmic Sensory Stimuli
- 4. Access to Thermal & Airflow Variability
- 5. Presence of Water
- 6. Dynamic & Diffuse Light
- 7. Connection with Natural Systems

#### **NATURAL ANALOGUES**

- 8. Biomorphic Forms & Patterns
- 9. Material Connection with Nature
- 10. Complexity & Order

### NATURE OF THE SPACE

- 11. Prospect
- 12. Refuge
- 13. Mystery
- 14. Risk/Peril



### **BENEFITS**

# **CLASSROOM ENVIRONMENT**

In classrooms, the goal is to increase the number of natural materials and elements.

**Natural storage:** Make a goal to eliminate as much plastic as possible. Goodwill and garage sales often have baskets at low cost.

**Plants and flowers:** Did you know they boost happiness? Families can be an excellent resource for sharing their clippings to start your own plants. .

















# **DISCOVERY**

BASKETS
Intentionally create opportunities for

children to touch shells, pinecones, rocks

and branches/twigs.

### **CLASSROOM**

Worm farms, hatching chicks and classroom pets

such as fish.





# **MUSIC**

Add nature sounds to the daily playlist and engage children with conversations on what the sounds are.







# TABLETOP WATER FOUNTAINS

Something you can pick up at garage sales or ask families for as a donation.

### **LIGHT**

If you are lucky enough to have windows make sure you don't block them. Supplemental lighting such as lamps, twinkle lights and led candles are less harsh than overhead lighting.

### **COLORS**

Select colors in the room that lean towards earth tones.

# **PICTURES & FABRICS**

Look for nature themes such as animals, water scenes or landscapes in pictures you post in the classroom. Placing pictures in small frames intentionally throughout the room can be powerful. There are many wall decals available such as trees that would support the principles of biophilia. The fabrics we select for pillows, window coverings can be subtle nods to









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# **SIGN IN - HALLWAY EXPERIENCES**





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### TAKE IT OUTSIDE

Whenever possible, take it outside. Take your small group, snack or circle time outside.

### **CLASSROOM**

#### **JOBS**

Water the plants/flowers, weather watcher and bird feeder support.

### CLASSROOM VISITORS

Organize classroom visitors who support biophilia. This could include a botanist or a nature center guide.

### **FIELD TRIPS**

Go to the Farmers

Market, plant store

or nature center.

# LEARNING CENTERS

There are many opportunities within the learning centers we offer children to increase biophilia.



# WATER AND SAND PLAY

Whenever possible either individually or as a group, connect children to the elements.

(Consider individual dish pans for children.)















### **ROCK AND**

### STICK PLAY

A basket of mid-size rocks and sticks children have gathered.

### **BLOCK AREA**

Having textured materials such as backsplash for kitchens (stone, tile, etc.) rocks and sticks available for children to use to enhance their play.



As many real experiences as possible. Leaf matching, pinecone, animal tracks, shells, bark, discovery bottles, plants and seeds.

















# A ZEN ZONE (QUIET SPACE)

Pillows with nature books and materials can be a calming space to children. Consider spaces that children can have the "illusion of hiding".







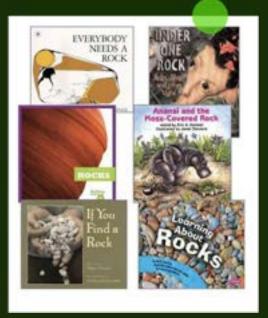




# **BOOK CENTER:**

Selection of books with nature themes.

















### **MATH CENTER**

Stock area with natural items to count, match, seriate and group.

### **WRITING CENTER**

Include words relevant to children's interest such as pine tree, oak tree, pinecone, sap or leaf.

# **DRAMATIC PLAY**

Set up a Botanical Garden, Nature Center, Veterinarian or Farm for children to explore.

# **HOUSEKEEPING**

Blankets with earth colors, baskets that are wicker/natural materials.





### **ART AND CREATION CENTER**

Create art on found materials such as bark, leaves, paper bags or boxes.





# LEARNING EXPERIENCES

Learning experiences that are planned intentionally have a big impact on children's development.

Including opportunities to connect them to nature throughout the week is important.

# **SCAVENGER HUNTS**

Plan a scavenger hunt in small groups for nature items. Keep it simple and do it often. Have children make a list or draw pictures of what they found.











### **ART**

Paint pictures of plants and flowers. Paint with flowers, leaves or sticks. Paint with mud and/or sand mixed into paint. Tree and leaf rubbings. Paint rocks big and small....give them to other rooms as gifts.

# **VOCABULARY**

Intentionally brainstorming vocabulary you will use with children for the week around your plans is essential. Nature is ripe for new words....drizzle, blazing or drought when describing weather.





# SOCIAL EMOTIONAL

Create opportunities for children to describe how they feel when they are in nature. Tapping into the magic they often describe.

# **MOVEMENT**

Spending time dancing like the trees, moving like the rain or doing yoga in the grass is time well spent.





# **CIRCLE TIME**

Planning songs, books, flannel boards and conversations around books such as Leaf Man or We Dig Worms is engaging and fun.



# ROCK AND STICK PLAY

Making shapes, numbers and letters with sticks and stones is an excellent hands-on experience for young children.

# **TECHNOLOGY**

Look up nature questions and images online. The web is rich with materials for discovery.



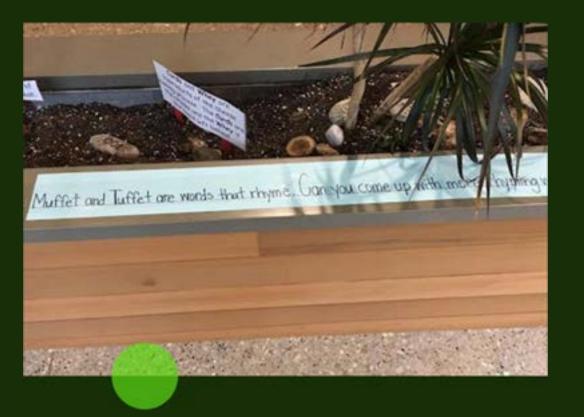




## **OUTDOOR SPACES**

Outdoor spaces typically have more opportunities to increase biophilia. Start small and work with your families and community to build an outdoor space that reflects biophilia.



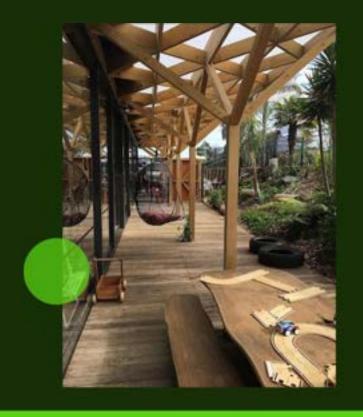




### **GARDENS**

Big or small gardens matter.
Flowers, vegetables and fruit
can be tended to in very small
containers and spaces.

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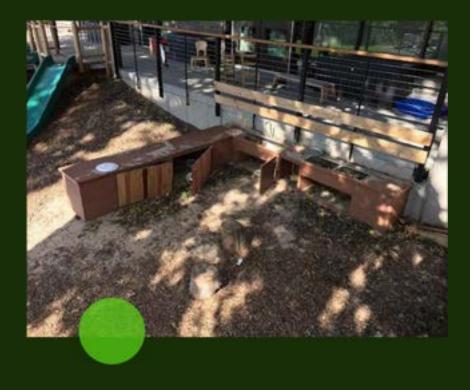


### **NATURAL MATERIALS**

Big or small gardens matter. Flowers, vegetables and fruit can be tended to in very small containers and spaces.

# **MUD KITCHENS**

Design a simple outdoor kitchen for children to manipulate grass, twigs, etc.









# **BIRDHOUSES AND**

# BIRD FEEDERS Have children make a birdhouse and bird

feeder for the outdoor space.

# PROGRAM WIDE IDEAS

Working program wide to support biophilia is meaningful and creates a sense of connectedness.



















#### **PROPER GEAR**

Invest in gear for all types of weather. This includes umbrellas and rain boots. (These can be purchased at the end of season, donated or via a grant.)

## **FAMILY EVENTS**

Have a bulb planting activity (send home some with the family). Have a family trip to the Nature Center.











### **SPECIAL DAYS**

Celebrate special days such as Earth Day by planting trees. During the fall time have a pumpkin patch set up on your outdoor space.

