

**Creating Nature-Rich Environments**  
**Ridgewood Public Schools**  
**Wellbeing Speaker Series**  
**March 11, 2019**

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Healing the broken bond  
between our young and  
nature is in everyone's  
self-interest, not only  
because aesthetics or  
justice demand it, but also  
because our mental,  
physical and spiritual  
health depend upon it.

Richard Louv

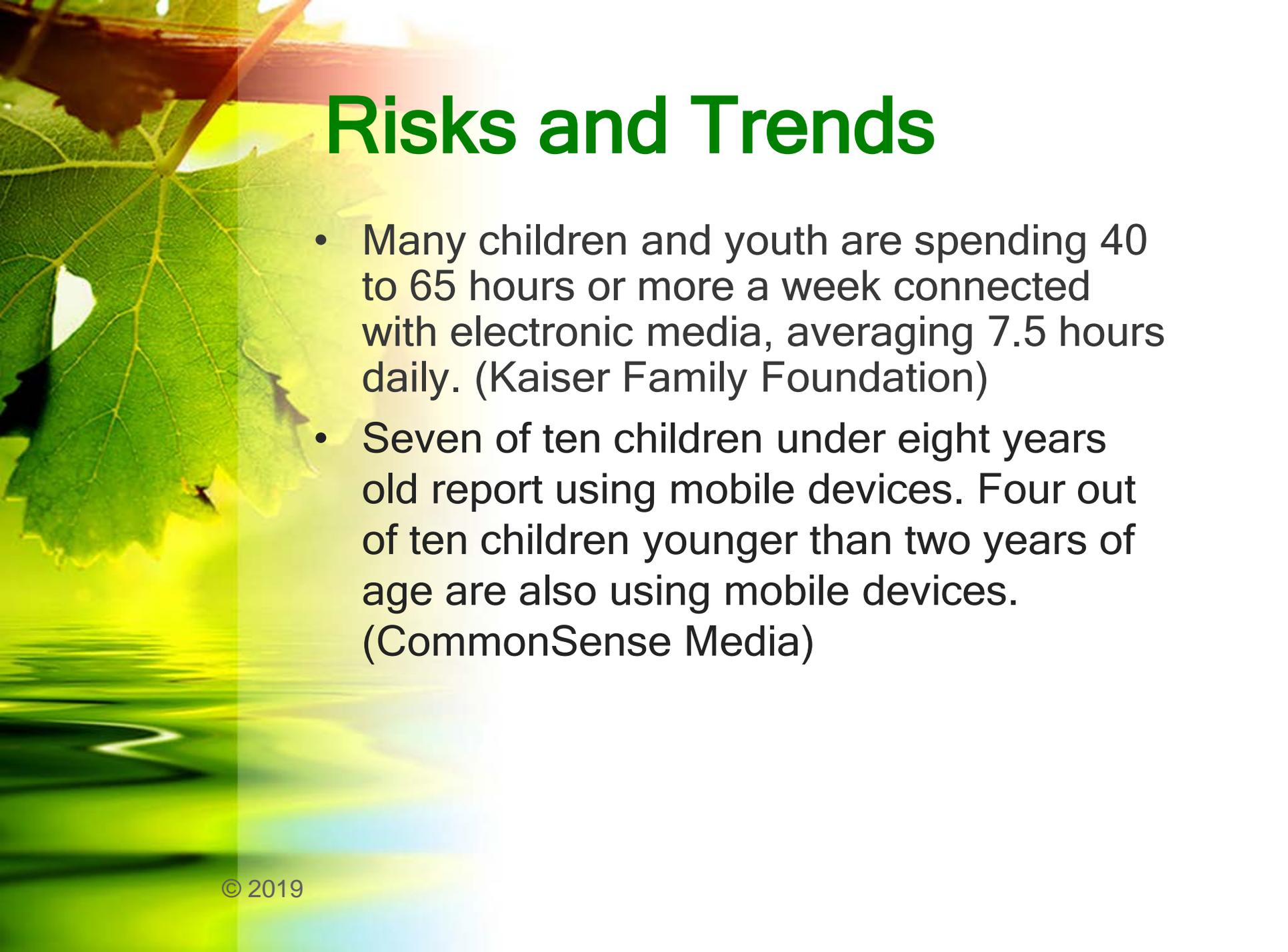
*Last Child in the Woods: Saving  
Our Children from Nature-  
Deficit Disorder*



# Definition of Children and Nature-Centered Experiences

- Nature-centered experiences for children are those that instill wonder and engender curiosity; occur primarily in outdoor settings ranging from backyards to neighborhoods to schools to city parks to wilderness; and occur in the form of guided activities as well as unstructured nature play and learning in children's everyday lives.





# Risks and Trends

- Many children and youth are spending 40 to 65 hours or more a week connected with electronic media, averaging 7.5 hours daily. (Kaiser Family Foundation)
- Seven of ten children under eight years old report using mobile devices. Four out of ten children younger than two years of age are also using mobile devices. (CommonSense Media)

# Risks and Trends, cont.

- Childhood obesity and severe overweight in children and youth has increased from 4% in the 1960s to about 20% today, and is substantially higher in some communities. (Centers for Disease Control)
- Approximately 60% of obese children ages five to ten have at least one cardiovascular risk factor, such as high cholesterol. (Centers for Disease Control)
- There is an upward trend in high blood pressure in children ages eight to 18. (Journal of American Medical Association)



# Risks and Trends, cont.

- There is a dramatic increase in diabetes in children and adolescents. (National Institutes of Health)
- The prevalence of childhood asthma has increased significantly in the past 20 years and is particularly high in poor urban communities. (Journal of Epidemiology and Community Health)
- In countries throughout the world, children's major free-time activity is watching television and little time is spent in free play exploring nature. (Singer et al.)



# Risks and Trends, cont.

- Myopia or nearsightedness has become increasingly common in young children. (Ophthalmology)
- Worldwide there is a high prevalence of vitamin D deficiency in infants, children and teens, and is associated with chronic diseases. Reduced sun exposure is a risk factor for vitamin D deficiency. (Reviews in Endocrine and Metabolic Disorders)

# Risks and Trends, cont.

- Youth spend significantly less time in moderate-to-vigorous physical activity as they move from childhood to the teen years. Only 17% of 15 year olds were found to get an hour a day of MVPA. (Journal of the American Medical Association)
- Children have less time for unstructured, creative play in the outdoors than ever before in human history. (Various researchers)



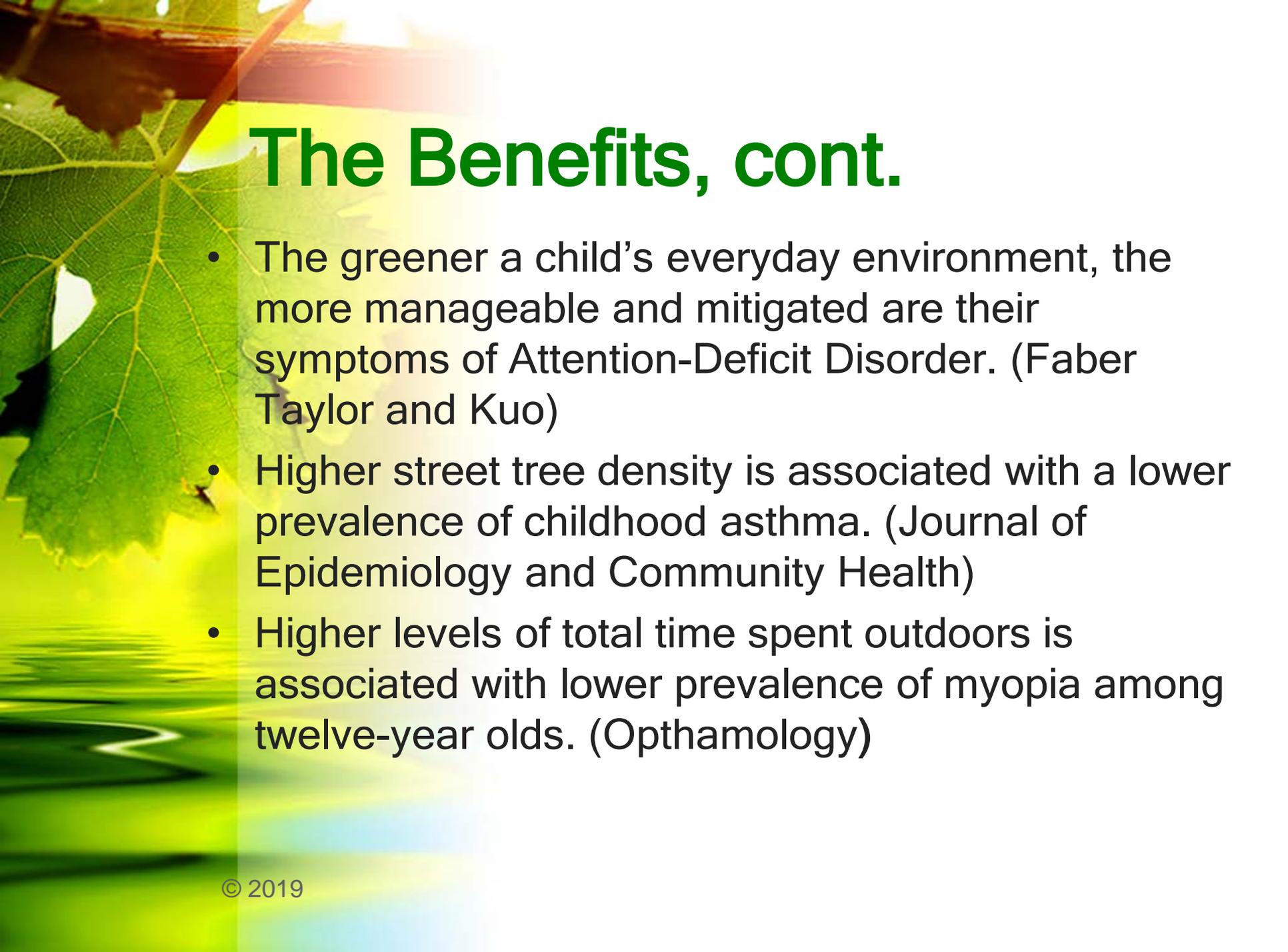
# What the Evidence Suggests: The Benefits

- Children tend to be happier, healthier and smarter when they connect with nature.
  - **Happier:** Nature play increases self esteem, improves psychological health and reduces stress. Children learn self-discipline and are more cooperative.
  - **Healthier:** Nature play improves physical conditioning, reduces obesity and mitigates other health risk factors.
  - **Smarter:** Nature play stimulates creativity and improves problem solving. Children do better in school.

A large green leaf with a prominent hole is shown in the upper left corner. Below it, a reflection of the leaf and a bright light source is visible in a body of water, creating a shimmering effect. The background is a soft, out-of-focus natural scene with green and yellow tones.

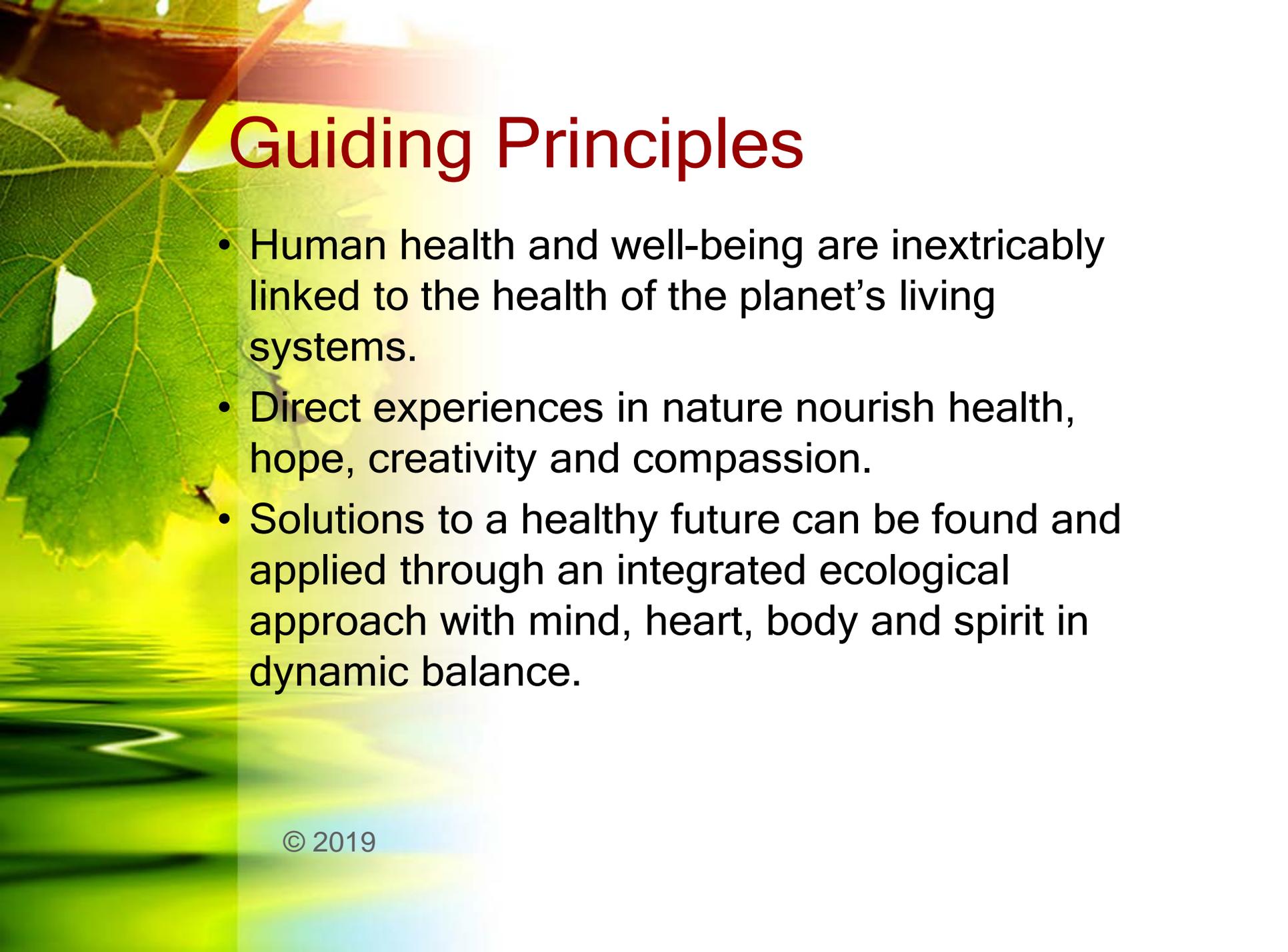
# Benefits, cont.

- Daily exposure to natural settings is associated with children's ability to focus and enhances cognitive abilities. (Wells)
- Children are less stressed, more self-disciplined, and have better social relationships with access to—and even a view of—nature in their daily lives. (Kuo, Kuo and Sullivan)
- Outdoor classrooms and nature-based education is associated with significant student gains in academic achievement. (American Institutes for Research)



# The Benefits, cont.

- The greener a child's everyday environment, the more manageable and mitigated are their symptoms of Attention-Deficit Disorder. (Faber Taylor and Kuo)
- Higher street tree density is associated with a lower prevalence of childhood asthma. (Journal of Epidemiology and Community Health)
- Higher levels of total time spent outdoors is associated with lower prevalence of myopia among twelve-year olds. (Ophthalmology)



# Guiding Principles

- Human health and well-being are inextricably linked to the health of the planet's living systems.
- Direct experiences in nature nourish health, hope, creativity and compassion.
- Solutions to a healthy future can be found and applied through an integrated ecological approach with mind, heart, body and spirit in dynamic balance.



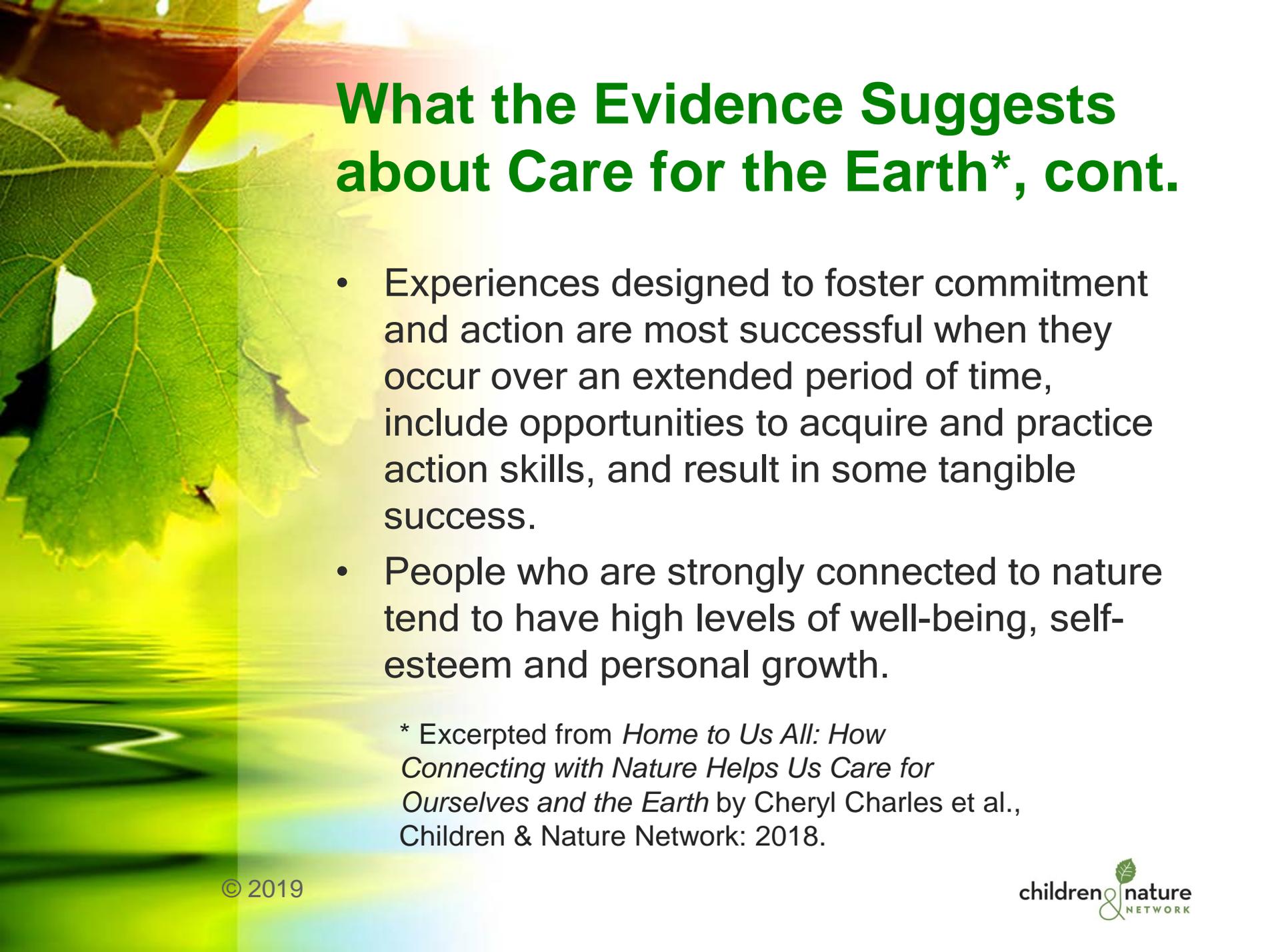
# What the Evidence Suggests about Care for the Earth\*

- **Positive, direct experiences in nature** during childhood and **role models** of care for nature by someone close to the child are the two factors that most contribute to individuals choosing to take action to benefit the environment as adults.
- **Social experiences** in nature foster connectedness to each other and to nature.
- People who develop a **sense of place** are more likely to want to protect it and to oppose the degradation of the environment.
- **Knowledge** is important but **is not enough** on its own to cause people to take action to benefit nature.



# What the Evidence Suggests about Care for the Earth\*, cont.

- Meaningful, positive experience in nature is a powerful way of developing a connection with, or love of, nature that can in turn guide people toward care for the Earth.
- Connectedness to nature is a strong predictor of positive conservation behavior.
- Self-directed learning and play, repeated exposures, a perceived belief in one's own personal efficacy, and an emotional bond are among the strongest influences.



# What the Evidence Suggests about Care for the Earth\*, cont.

- Experiences designed to foster commitment and action are most successful when they occur over an extended period of time, include opportunities to acquire and practice action skills, and result in some tangible success.
- People who are strongly connected to nature tend to have high levels of well-being, self-esteem and personal growth.

\* Excerpted from *Home to Us All: How Connecting with Nature Helps Us Care for Ourselves and the Earth* by Cheryl Charles et al., Children & Nature Network: 2018.

# A Few C&NN Resources



## TOGETHER IN NATURE

*Pathways to a Stronger, Closer Family*

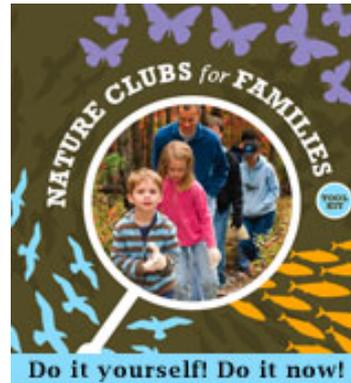


by Sara St. Antoine  
with Cheryl Charles and Richard Lovv

Supported in part by



Together in Nature: Pathways to a Stronger, Closer Family  
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## Home to Us All

How Connecting with Nature Helps Us Care  
for Ourselves and the Earth



November  
2018

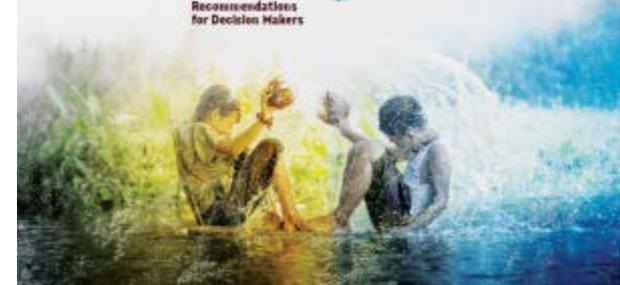


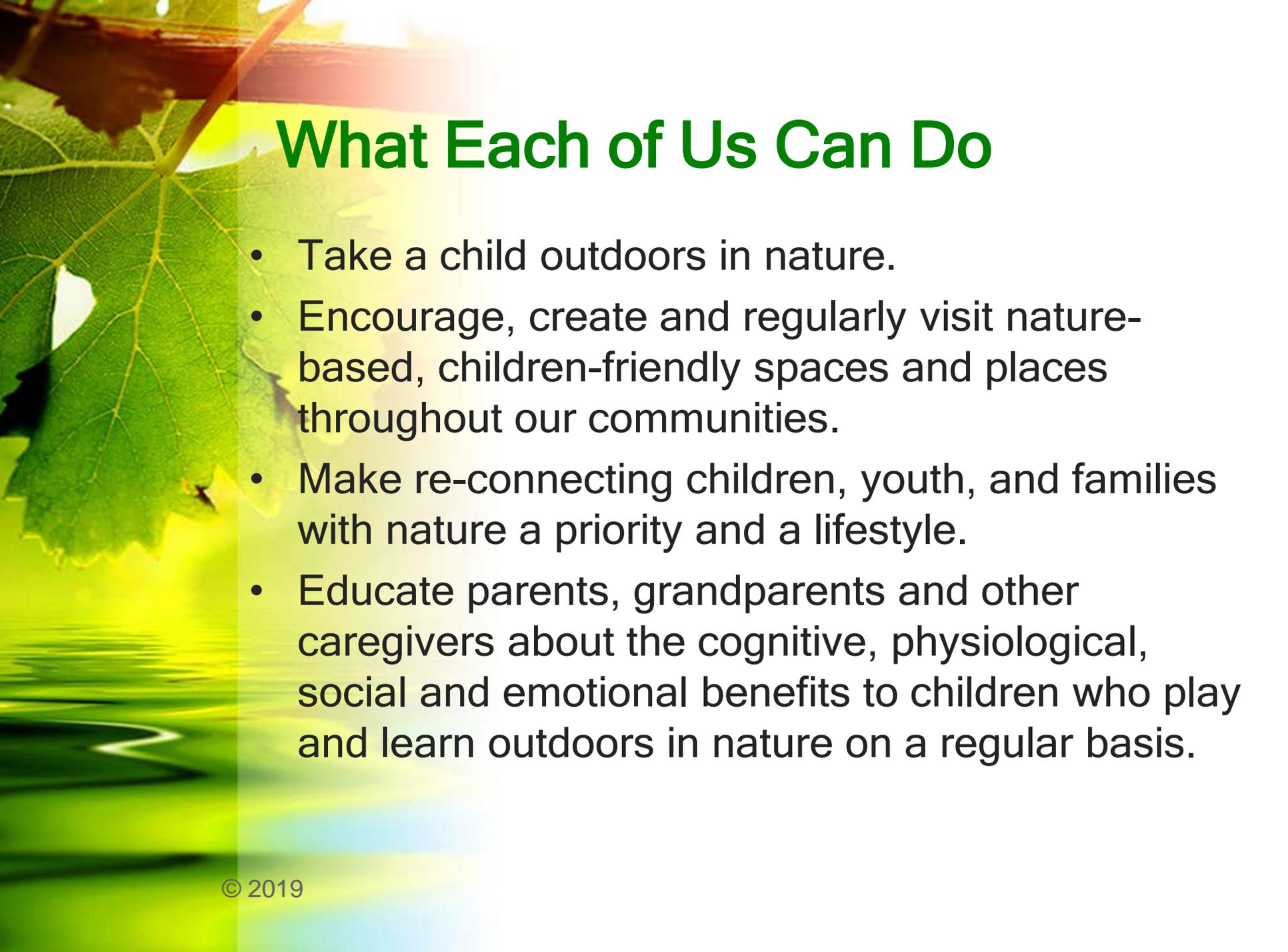
## THRIVING THROUGH NATURE

*Fostering Children's Executive Function Skills*

## connecting

with Nature to Care for  
Ourselves and the Earth  
Recommendations  
for Decision Makers





# What Each of Us Can Do

- Take a child outdoors in nature.
- Encourage, create and regularly visit nature-based, children-friendly spaces and places throughout our communities.
- Make re-connecting children, youth, and families with nature a priority and a lifestyle.
- Educate parents, grandparents and other caregivers about the cognitive, physiological, social and emotional benefits to children who play and learn outdoors in nature on a regular basis.



# What Communities Can Do

- Engage pediatricians and other physicians to encourage them to prescribe nature-play, because it is good for children.
- Educate architects, builders, community planners, the clergy and civic leaders about the importance of nature- and place-based play and learning so children have places to play that foster their imagination and nourish their well-being.
- Engage the whole community in a children and nature initiative, now and for the future.



# For Additional Information

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