The positive impacts are many:

- **Developmental health.** Nature is important to children’s development in every major way—intellectually, emotionally, socially, spiritually and physically (Kellert, 2005).

- **Creativity and problem solving.** Studies of children in schoolyards found that children engage in more creative forms of play in the green areas. They also played more cooperatively (Bell and Dyment, 2006). Play in nature is especially important for developing capacities for creativity, problem-solving, and intellectual development (Kellert, 2005).

- **Cognitive abilities.** Proximity to, views of, and daily exposure to natural settings increases children’s ability to focus and enhances cognitive abilities (Wells, 2000).

(Continued on reverse side)
• **Academic performance.** Studies in the US show that schools that use outdoor classrooms and other forms of nature-based experiential education support significant student gains in social studies, science, language arts, and math. Students in outdoor science programs improved their science testing scores by 27% (American Institutes for Research, 2005).

• **Helps Attention Deficit Disorder.** Contact with the natural world can significantly reduce symptoms of attention deficit disorder in children as young as five years old (Kuo and Taylor, 2004).

• **Physical activity.** Children who experience school grounds with diverse natural settings are more physically active, more aware of nutrition, more civil to one another and more creative (Bell and Dyment, 2006).

• **Nutrition.** Children who grow their own food are more likely to eat fruits and vegetables (Bell & Dyment, 2008) and to show higher levels of knowledge about nutrition (Waliczek, & Zajicek, 2006). They are also more likely to continue healthy eating habits throughout their lives (Morris & Zidenberg-Cherr, 2002).

• **Eyesight.** More time spent outdoors is related to reduced rates of nearsightedness, also known as myopia, in children and adolescents (American Academy of Ophthalmology, 2011).

• **Social relations.** Children will be smarter, better able to get along with others, healthier and happier when they have regular opportunities for free and unstructured play in the out-of-doors (Burdette and Whitaker, 2005).

• **Self-discipline.** Access to green spaces, and even a view of green settings, enhances peace, self-control and self-discipline within inner city youth, and particularly in girls (Taylor, Kuo and Sullivan, 2001).

• **Stress reduction.** Green plants and vistas reduce stress among highly stressed children. Locations with greater number of plants, greener views, and access to natural play areas show more significant results (Wells and Evans, 2003).

For more information on how you can connect your child, or a child you know, to nature, please contact: Colleen Kelley, Education Director colleen@hitchcockcenter.org • (413) 256-6006 or visit www.hitchcockcenter.org