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Addressing Issues, Policies, Practices, and Research That Matter

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NAAEE Executive Director's Welcome Note

Judy Braus
North American Association for Environmental Education

It is my sincere pleasure to welcome you to the inaugural issue of the *International Journal of Early Childhood Environmental Education*. This is an exciting and important venture for the North American Association for Environmental Education (NAAEE). As an organization, NAAEE is committed to promoting excellence in environmental education. Publishing *IJECEE* is an essential component of our continuing efforts to strengthen the field of environmental education and increase the visibility and effectiveness of the profession.

Across the globe, growing numbers of educators are recognizing that connecting young children with their environment needs to be a fundamental part of early childhood education. Preschools, daycare centers, head start programs, nature centers, zoos, and parks departments are incorporating environment and nature focused experiences into their programs. They are providing opportunities for young children to play in nature, explore their local surroundings, and learn about themselves, others, and their environment. We strongly believe that this education is crucial and that giving young people access to nature and high quality environmental education programming will provide a firm foundation leading to environmental literacy.

IJECEE is a peer reviewed, on-line journal that will provide easy access to research and other resources. It is intended to help strengthen our understanding of early childhood environmental education and help us all improve our practice.

I invite you to read our first issue and those that follow. And I hope you will share this journal with others. And, after reading this first issue, please let us know what you think and how we can best support this growing movement to provide all kids with a magical childhood with access to nature, learning, and creative exploration.

Judy Braus, Executive Director, NAAEE, October 2013

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WELCOME NOTE FROM THE EDITORS

Cultivating understanding and long lasting desired impacts through intentional discourse on early childhood environmental education

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Bora Simmons
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We gaze with constant amazement and wonder at the biological diversity that surrounds us, and our spirits are continually uplifted. We have gained much by observing nature, intensely enjoying and learning from nature's magic. We nurture an art of patience, wrestle with and overcome fears imagined, and embrace both solitude and company of others in the presence of nature. Each of us, in our own way, have taken action to protect and restore lands and waterways and the great variety of life that it supports. We are passionate about extending these learning and transcendent experiences to the youngest of our children, sparking a hope in them of a strengthening regard and love for the natural world.

It was this very hope for the children that sparked our idea for the journal, in germination for more than a year, as our thoughts clarified and became more defined. Then the effort took off rather quickly, with the very willing assistance of those whom we asked to join in the effort - the consulting editors, NAAEE leaders and staff, and countless others who provided encouragement, ideas, and referrals. It seemed as if everyone were waiting for just this opportunity. Just prior to the 2012 Annual Conference of the NAAEE, the decisions and processes fell in place quite easily and logically - a deadline for the first issue was set, protocols were created, templates designed, and announcements and strategies to spread the word about the journal was developed and implemented.

Vision

We envision the journal will serve as a forum to (a) encourage thoughtful sharing of information about important concepts, epistemologies, frameworks, research methodologies, and guiding values, as well as effective practices and policies in early childhood environmental education, and (b) reach an extensive global readership in order to maximize the impact of the thoughtful information. Avenues for the sharing of information may be book reviews, descriptions of educational approaches and programs, research investigations, and development or interpretation of theoretical perspectives. Associations among and between the following variables will be of great interest:

- Young children
- Family circumstances
- Community opportunities
- Policy mandates or recommendations
- Environmental activities, education, or experiences
- Mechanisms or processes related to knowledge acquisition
- Attachment or maintenance of affective dispositions
- Abilities, behaviors, or skills development related to good decision making in a range of environmental contexts;
- Cognitive, economic, and social influences or impacts; and
- Assessment and evaluation methods.

Original research investigations are especially needed. Towards that end, we hope the journal will serve as an important medium in (a) encouraging quality research and thinking, and (b) contributing both conceptual and methodological innovations to the body of literature. Studying the complexities among environmental and social systems, and making links to policy and practice at multiple levels that are most appropriate for young children is the intention.

Core values

At the core of our effort is the development of a worldwide community of learners. We would like everyone to be involved. Translations of articles in other languages are encouraged, and resources in assisting authors with translations in both directions will be sought as we progress. This is also the reason why the journal is available for free to the global audience.

We value a process that will nurture authors. While a rigorous process will be applied in the review of submitted manuscripts, our reviews will be constructive,

providing authors detailed and specific instructions in improving the submissions until it is fit for publication.

We believe this journal can be an important conduit in promoting inclusion of all children and people, social justice and tolerance, and selflessness in service of others. These themes are natural overlaps in early childhood environmental education. Written work addressing intersections with the aforementioned themes will be especially appreciated.

And, finally, we want to support all in reading, reflecting, and engaging in discussions about early childhood environmental education. We believe parents, teachers, administrators, community leaders, policy-makers, advocates, and both public and private organizational leaders can all nurture understanding and ultimately the positive impacts that we wish to see. Towards this end, we intend to promote written work that emphasizes practical suggestions that affect multiple domains, levels, professions, sectors, and systems.

Concluding remarks

We welcome you to read this inaugural issue and we welcome you to join in our effort in promoting effective early childhood environmental education. Please join us in contributing your written work, assisting to spread the word about this journal, and taking steps in promoting effective early childhood environmental education practices at all levels.

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A Sense of Autonomy in Young Children's Special Places

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Early childhood is a significant time when children begin to develop their place identity. As they discover their environment, young children claim special places in which to construct their own experiences. In exploring ways to connect children with place, particularly nature, caregivers need to consider children's place perspectives in the various settings of their lives. This research explored the question: how do young children experience special places in the home environment? Qualitative data were collected during two phases. The first consisted of book discussions and representational activities with 51 children at school. The second included special place tours and informal interviews with 12 children and parents in their homes. Analysis revealed four activities representing children's place experiences: playing, hiding, resting, and exploring. Children's descriptions and observed behaviors were categorized and quantified to demonstrate their range of place use. Through self-initiated activities, children gained a sense of spatial autonomy and control of their environment. This is important to the development of their place identity and environmental competency in using the environment to meet social and personal goals. Additionally, through adult supported exploration, children gained an appreciation for the natural world. Early childhood educators should consider the balance between child-initiated and adult guided experiences with place particularly by designing open-ended spaces and activities that allow children to gain a sense of control.

Keywords Special places, environmental education, early childhood, autonomy

Young children develop unique relationships with places in all the various settings of their lives. Whether at school, at home, in private, or social settings, young children begin to distinguish places based on the feelings and/or experiences they associate with them. Early

childhood is a significant time when more stable aspects of children's place identities are developed, that is their thoughts, feelings and beliefs about the physical environment (Chawla, 1992; Proshansky & Fabian, 1987). Subsequently, exposing young children to natural environments is essential in promoting a sense of wonder and affection towards nature. Indeed, some argue that a strong relationship with place results in a high degree of stewardship or care for built and natural environments (Wilson, 2008). As early childhood caregivers aim to foster experiences to connect children with place, it is important to consider young children's perspectives, particularly the way in which they experience places.

In this paper, I present findings on children's *experiences* of special places. These experiences were extracted from a larger dissertation study on the nature of young children's special places within the home environment. While the larger study also revealed children's special place locations, the aim of this paper is to hone in on children's place experiences in order to reveal more about their interactions with certain places. The research question addressed in this paper is: How do children between the ages of 3-5 experience their special places in the home environment?

Theoretical Framework

The study was shaped around honoring children's perspectives and viewing them as active agents who create their own experiences and place in the world (Corsaro, 2005). The intent of this paper is to recognize the importance of children's participatory rights and learning about what's important to them (United Nations, 1989, 2005). As the field of early childhood environmental education grows, caregivers must remain cognizant of what matters to children expressed through their interactions with the physical and social environment.

In order to understand the significance of place(s) in children's lives, this study highlights the "physical-world socialization of the child" (Proshansky & Fabian, 1987, p. 22). Specifically, research was grounded in theories of place identity and attachment in considering not only how physical settings affect the growth and development of children, but also how children, as they grow and develop, shape, influence, and become attached to the physical environment.

Proshansky and Fabian (1987) define place identity as a substructure of self-identity, which includes "cognitions about the physical environment that also serve to define who the person is… represented as thoughts, memories, beliefs, values, and meanings relating to all the important settings of the person's daily life…Place-identity cognitions monitor the person's behavior and experience in the physical world" (pp. 22-23).

Place attachment, an aspect of place identity, is defined as the positive bond and emotional attachment that a person develops towards a place (Chawla, 1992; Low & Altman, 1992). Place attachment is an integrating concept that involves not only affect and emotions, but also knowledge and beliefs, and behaviors and actions towards place (Proshansky & Fabian, 1987; Scannell & Gifford, 2010). Place identity and attachments may fluctuate and change over time; however, early childhood is a significant period when more stable aspects of place identity are developed (Chawla, 1992; Proshansky & Fabian, 1987).

The formation or maintenance of children's place attachments may be influenced by one or a combination of any of the three aspects of human-place relationships, including: (1) psychological, (2) sociocultural, and (3) environmental (Low & Altman, 1992; Scannell & Gifford, 2010). Psychological aspects include the affective, cognitive, and behavioral responses that a person may have towards a place (Scannell & Gifford, 2010). Sociocultural aspects refer to how social norms, culture, and ideologies influence human-place relationships (Low & Altman, 1992). Environmental aspects assume that certain environments create certain people-place relationships (Low & Altman, 1992).

This study primarily focused on the psychological aspects of children's experiences of place, through studying their special place activities. However, findings were also considered within the environmental and sociocultural aspects of the research setting. Specifically, this study was positioned in the U.S. Rocky Mountain west, in an environment typically known for its cold windy winters. During this research, harsh weather conditions limited access to the outdoor environment, which may have also influenced the places and experiences that children shared. Also, the children in this study, for the most part, came from middle-class privileged families and had access to places and objects reflective of the dominant westernized American culture. Therefore, findings may not be generalizable to children from other geographical settings, cultures, and socio-economic classes.

Literature Review

Numerous studies have focused on children's places, informing various disciplines, including: education, psychology, landscape architecture, geography, and environmental studies. Beginning with Hart's (1979) seminal study on *Children's Experience of Place,* a long line of research has focused on understanding children's place perspectives, with a particular interest in special places. Special places can be defined as spaces that children lay claim to or call their own. Chawla (1992) explained that childhood place studies are important, "because they contribute to the present quality of a child's life, or because they leave enduring effects after childhood is over" (p. 73).

Through recognizing how my own childhood special place experience influenced my passion for environmental education, I became interested in studying children's early place

experiences. In reviewing the literature, there appeared to be a gap in special place studies with young children. Childhood places have been investigated through adult memories (Chawla, 1992), middle childhood outdoor environments (Hart, 1979; Kylin, 2003; Moore, 1986; Sobel, 1992), and early childhood school and daycare settings (Dowdell, Gray, Maloney, 2011; Fjørtoft, 2001; Lowry, 1993; Maxwell, Michell, & Evans, 2008; Skånfors, Löfdahl, & Hägglund, 2009). However, prior to this research, no study had explored young children's special place experiences in the home environment. A brief review of the literature is included, delineating two main ways in which children experience place: through play and gaining a sense of privacy.

Places of Play

Play, in its simplest form, consists of child-initiated pleasurable activities. Smilansky and Shefta (1990) defined three types of play: functional, constructive, and symbolic. Functional play, also referred to as motor or practice play, is characterized by repetitive movements performed to gain mastery of a skill. In constructive play, children use problem-solving skills to construct or create something. Symbolic play, also referred to as pretend or dramatic play, occurs when children use their imagination or role-playing to transform themselves or objects. Additionally, exploration is a type of play described as "a sort of fingering over the environment in sensory terms, a questioning of the power of materials as a preliminary to the creation of a higher organization of meaning" (Cobb, 1977; p. 48). Through play children develop a sense of place-identity (Hart, 1987; Proshansky & Fabian, 1987).

Children experience places through play and exploration. Open-ended places provide potential for children to claim ownership of their environments (Titman, 1994). Some suggest that natural spaces stimulate a higher degree of fantasy (Dowdell, Gray, Maloney, 2011) and motor play (Fjørtoft, 2001) than traditional outdoor playgrounds and indoor settings. Furthermore, the varied terrain, vegetation, and living elements in natural spaces provide stimulus for discovery and exploration (Dowdell, Gray, Maloney, 2011; Moore, 1986; Waters & Maynard, 2010). While loose parts (i.e. sticks, leaves, and grass) lead children to engage in imaginative and constructive play (Hart, 1979; Kylin, 2003; Moore, 1986; Sobel, 1992).

Outdoor studies reveal children construct their own places out of loose parts (Hart, 1979; Kylin, 2003; Maxwell et al., 2008; Sobel, 1992). Constructed places allow children to control and manipulate their environment and provide a space separate from adults (Sobel, 1992). Older children (ages 7-11) tend to build places further from home and focus on the construction and design of the structure. Whereas, younger children (ages 5-7), chose locations closer to home and are less likely to modify the structure's physical elements; instead, modifications are made through imaginative and dramatic play (Hart, 1979; Kylin, 2003; Sobel, 1992).

Studies of children's place activities have been limited, for the most part, to outdoor experiences (Hart, 1979; Kylin, 2003; Sobel, 1992) and school environments (Maxwell et al., 2008). Little, if any, research has explored children's place activities in and around the home. As Hart (1979) argued, when young children begin to walk, there is a natural urge to make a place of their own. Therefore, it is important to explore children's experiences of places in all the contexts of their lives, in both outdoor and indoor locations (L. Chawla, personal communication, February 19, 2009).

Spatial Autonomy and Privacy

Children achieve spatial autonomy and a sense of privacy through gaining control over particular spaces (Proshansky & Fabian, 1987, p. 27). A child's growing independence is demonstrated through the manipulation of physical objects and spaces, providing a child with a sense of individuality (Proshansky & Fabian, 1987). Privacy is essential to psychological development, in that it enhances children's personal dignity and self-esteem (Laufer & Wolfe, 1977), individual autonomy and self-identity (Proshansky & Fabian, 1987), and future ability to achieve a sense of personal space (McKinney, 1998).

Hart (1979) found that elementary-age children have a particular need for quiet places and places to hide. Early childhood studies also reveal that young children are attracted to places of secrecy or that lend themselves to the purposes of exclusive and/or selective play (Lowry, 1993; Skånfors et al., 2009). Lowry (1993) found that when two privacy structures were added to a preschool classroom, children used these structures to gain a sense of privacy or to play exclusively with peers. Skånfors et al. (2009) identified two withdrawal strategies in preschool children, including: "making oneself inaccessible" and "creating and protecting shared hidden spaces" (p. 105). In order to become inaccessible, the children read books, acted distant, and hid. Children created and protected shared hidden spaces in order to play exclusively with others.

The literature reveals young children's desire for spatial autonomy. However, for the most part, early childhood studies have been limited to the preschool environment, a setting subject to specific rules and regulations. This research sought to expand understanding of young children's place experiences through studying places identified within the home setting, an environment that tends to be less structured. Studying children's place experiences in their home can help inform a wide spectrum of adults (early childhood teachers, environmental educators, and parents) as they consider ways to engage children with place.

Methodology

The research embraced an "interpretive qualitative study" in which the "researcher is interested in understanding how participants make meaning of a situation or phenomenon, the meaning is mediated through the researcher as an instrument, the strategy is inductive, and the outcome is descriptive" (Merriam, 2002, p. 6). Specifically, my interest in young children's special places resulted from experiences teaching kindergarten, early childhood environmental education, and observing my own children develop certain behaviors and preferences for places. Because early place connections play a crucial role in children's development (Chawla, 1992), I wanted to learn more about how young children experience these places in the home environment. In an interpretive study, particularly one involving children, it is essential to recognize the power imbalances between the adult researcher and children participants and to remain conscious of biases and/or subjectivities. Hence, throughout the study, continuous efforts were made to set aside my own understandings and experiences of special places, in order to view place experiences through the eyes of young children.

This paper includes data collected during both the pilot and formal stages of a dissertation project. Similar methods were used during both inquiries. Five interactive methods were utilized during two sequential phases in settings relevant to the children's everyday lives (Green, 2012). The first phase of the research was initiated at school, consisted of book discussions and representational descriptions, and included 51 three-to-five-year-old children (24 girls and 27 boys). The second phase was conducted in children's homes, consisted of child-led special place tours and informal conversations with 12 children and their parents. Children selected for the second phase were particularly interested in special places and actively engaged in conversations during the first phase. Selection was also based on parents' responsiveness and willingness to allow the researcher to visit their homes. Participants included six girls (Hope, Sarah, Tesa, Fern, Lisa, Emily) and six boys (Logan, Bradon, Nathan, Caleb, John, Robert). Two pairs were siblings: Caleb and Sarah, Fern and Lisa.[1] Informed consent was obtained from participating parents and children.

Phase One at School

Phase one began at school with a puppet show to gain the children's interest and help establish a positive relationship with them. A conversation with the puppet was used to describe the purpose of the study and the research activities. Children were invited to participate in the study and ask questions.

In the first phase of data collection, a book, written specifically for the study, was read to the children in order to prompt conversations about special places. The book included

[1] Pseudonyms were used to identify children who participated in home visits.

eleven examples of indoor and outdoor places and featured boys and girls from diverse backgrounds and home settings. (Although some of the places depicted may be biased towards a Rocky Mountain landscape with illustrations including mountains and pines in the background). The places selected for the book were based on personal observations, as well as ideas generated from parents, grandparents, and early childhood educators. The book was piloted and found to be an effective tool *for initiating conversations with children about their special places. Children* drew on their own lived experiences to reflect on the pictures they encountered *in* the book (Torr, 2007). They negotiated their *own meaning of special places rather than mimicking the places in the book.*

Book discussions were collected and video-recorded over a two-week period in the classrooms with small and large groups of children. Several children participated in the discussions multiple times. Children were encouraged to interject their own thoughts during the story rather than withholding comments until the end. They were asked about their special place locations and activities. The extent of these informal discussions varied among participants. In other words, more or less details were shared about their place experiences depending on the nature of conversations and the dispositions of the children.

After the book discussions were completed, children were invited to create representations of their special places. They were provided with materials to draw, paint, mold with play dough, and/or build with blocks. Several children chose to represent their special places in multiple forms. As Isenberg and Jalongo (2001) point out, "art is a symbol system that can be used to generate meaning" (p. 106). After each child had created his or her representation, they were asked to describe it. Because children's artistic abilities varied significantly, the contents of the representations were not analyzed. Instead, only their oral descriptions were used as data for the study. The representations, however, provided an artistic visual of their experiences.

Phase Two: Home Visits

The second phase of the study consisted of home visits, including: child-led special place tours and informal conversations with children and parents. Data was collected as video recordings and added more qualitative depth to the study, allowing for detailed descriptions and interpersonal responses from the children in their natural settings.

The home visits began with a special places tour. The children served as tour guides and were encouraged to show and talk about all the places they considered special. Tours lasted between ten and forty minutes, concluding when children decided. During tours, children were asked about their place feelings and activities. Most were excited to have someone visit who was interested in learning more about what was important to them.

Care was taken to ensure children's comfort during visits; shy children often preferred the accompaniment of a parent and/or sibling.

Parental conversations were included in this study because parents, generally speaking, can provide information regarding the nature of children's day-to-day activities. While the special place tours provided an opportunity to see children's places firsthand, they seldom provided opportunities to view children in their authentic engagement with place. Additionally, it is often difficult for young children to articulate their feelings and behaviors (Piaget, 1936/1952). Therefore, parental interviews were included to provide further insight into the children's experiences. However, parental insights were indicated as such in the findings and were not used to provide voice for the children.

Observational field notes were taken during all phases of the research. These notes consisted of contextual clues, incidents that stood out, and connections between data. Additionally, data collection activities were video recorded and transcribed for analysis.

Data analysis

Data underwent three cycles of qualitative analysis, utilizing reliability measures throughout the process. Specifically, inter-rater reliability measures included consultation and guidance from early childhood education experts during data interpretation. Additionally, data triangulation measures included analysis and reading of the various transcripts multiple times in order to compare similarities and possible differences in categories and themes that emerged.

During initial data analysis, data was tracked as it was collected to identify emerging patterns and pose questions for follow-up (Grbich, 2007). Once all the data were collected, holistic coding was utilized in order "to grasp basic themes or issues in the data by absorbing them as a whole" (Dey, 1993, p. 104).

During the second cycle of analysis, taxonomic coding was used in order to categorize the types of special place activities mentioned by the children (i.e. play, hiding, sedentary use, exploration, and other) (Grbich, 2007; Saldaña, 2009). Categories of the children's special place activities were gleaned from past childhood place literature and the pilot study findings. First, children's responses in the first phase were structured and quantified in order to reveal the wide range of their special place use. (Please refer to Table 1). Next, data from both phases were combined in order to more fully describe the children's experiences with each special place activity. These activities appear in the findings section of this paper.

Lastly, axial coding was used to specify themes in which characterize the holistic nature of children's special place experiences (Saldaña, 2009). Specifically, all the various transcripts were read multiple times in order to locate and combine the findings that supported particular themes. Combined data were then used to draft a description of each theme in order to "explain more fully" children's place experiences (Cohen & Manion, 2000, p. 254). Lastly, through the process of writing and reading the data multiple times, themes were further refined and interpreted through the childhood place literature. These themes are presented in the discussion section of this paper.

Findings

From playing, hiding, exploring, and resting, findings reveal that young children do not have one particular type of special place; rather, they have many kinds of places that serve different purposes in their lives. For the most part, the children referred to special places that held a positive meaning in their lives, indicating they preferred places that were fun or simply because they liked them. Table 1 includes the activities mentioned by children during the first phase; all activities mentioned are displayed in order to show the range of place use. Play was the most prevalent activity. Activities were classified as play when the children specifically used the word. Children frequently associated special places with hiding, alluding to the secretive nature of their spaces. Indoor places were preferred for sedentary purposes, such as reading books, snuggling, and sleeping. Exploratory activities, such as climbing and looking for diamonds and rubies were primarily associated with outdoor places, alluding to children's natural inclination to discover their environment. Place uses that could not be categorized elsewhere such as eating and buying new toys fell under the *other* domain. In the following sections, findings from all phases of the study are described, including both indoor and outdoor activities, in order to provide richer detail of children's special place experiences.

Places to Play

Children largely interacted with their special places through play. Play activities fell into three distinct categories: functional, constructive, and symbolic as described in the literature (Smilansky and Shefta, 1990).

Functional play. Riding bikes, jumping on trampolines, and swinging on gymnastic rings are some of the functional play activities mentioned or demonstrated by children.

Emily showed me her gymnastic rings mounted on the top of her bunk bed. "This is fun," she said while flexing her body in different shapes and forms. Through practice, Emily appeared to gain confidence in her gymnastic ability.

Table 1
Special Place Activities Mentioned by 51 Children During the First Phase.

Special Place Activities	Number Mentioned
Play Cars, dolls, babies, trucks, toys, Wii, games, dress-up, monsters, color, puzzles, throwing snowballs, riding bikes, throwing Frisbees, running, jumping on trampoline, swinging, sliding, tea parties, building houses and castles,	45
Hiding Hiding from parents, siblings, friends, and other visitors or objects	20
Sedentary Use Reading books, sleeping, napping, watching T.V./ movies, snuggling, curling-up, sleeping with kitty and stuffed animals under blankets, laying and looking at stars	20
Exploratory activities Climbing rocks, finding rocks, adventures, packing things, collecting chicken eggs, digging holes, planting flowers, catching crawdads, camping, looking for diamonds and rubies	12
Other (Eating) Picnics, music and snacks, helping mommy, making a mess, talking to daddy, warming up by the heater, buying toys, taking clothes down	9
Total:	106 activities

Likewise, Sara exercised motor skills in many of her special places. She tumbled across her brother's bed, rolled over blankets on the floor, and maneuvered behind the dresser and into small places between furniture. Outside, Sara and her brother, Caleb, showed me the swing on their porch. Similarly, Fern and Lisa pointed to the swings in their neighbor's yard.

Children selected both indoor and outdoor places to practice motor skills. While outdoor spaces typically allowed for larger motor movements, specifically designed indoor spaces, such as Emily's gymnastic rings, were also significant in strengthening particular skills.

Figure 1. Emily practicing her gymnastics

Constructive play. Children constructed their own special places and used objects to create certain social environments. Constructing places appeared to be a both a social activity and a mechanism for gaining privacy.

During the home visits, seven children shared that they liked to build structures out of blankets. Emily described constructing a tent with "blankets on chairs." She explained that she went in the tent, "all by myself, and with my friends, sometimes." Lisa and Fern's mother described how the children liked to build blanket structures in their living room. Often they used the structure to devise imaginary settings (e.g. the ocean) and act out situations. Caleb and Sara also frequently built a "blanket bed" on the floor, where they played make believe with dolls and stuffed animals.

Nathan identified a bush house near his front porch. After his parents helped clear out some of the excess branches and shrubs, the structure of the bush allowed him and his friends to climb inside and "hide out." The children used rocks and other "loose parts" to construct furniture inside their exclusive social environment.

At school, Tesa described building a structure out of books, "I put a little covering thing on my tent made out of books. I had a little door thing so no one could sneak inside. I had a little fire pit, so the fire could block my tent, so no one could get through it."

Tesa stated two strategies for keeping others out, her "little door thing" and a "fire pit." Although it is not likely that she constructed a fire pit, her statement suggests that she gained a sense of control of her environment in the devising of imaginary elements.

Symbolic play. Children's symbolic play in their special places frequently overlapped with constructive activities.

Emily participated in symbolic play, "playing babies," and "having tea parties," under a table and behind her couch. Emily showed me her special place behind a couch where she had two tiny chairs and a little round table with a small purple tray, a pink teapot, and two tiny mugs. She described how she used this space to host tea parties for her friends and dolls. Emily also talked about her activities behind the couch on several occasions at school. Figure 2 includes Emily's painting of her special place.

Figure 2. Emily's painting her special place behind a couch.

Tesa described her imaginary activities in her closet. "Sometimes I turn some stuff into magic, sometimes I play with magic, sometimes I play witch, and sometimes I play with people."

After leading his father and I up the hill behind his apartment complex, Nathan described how he constructed bombs and concocted magic potions to “thwart off the enemy” out of the old rusted metal parts littered among the rocks and sand of the barren landscape.

Additionally, both Nathan and Hope enjoyed playing “pretend” campout. Hope tucked behind a living room chair and Nathan escaped in his closet with a stuffed animal, blanket, and flashlight.

Places to Hide

The children frequently associated special places with places to hide. They mentioned hiding from siblings, parents, friends, and cousins in closets, under beds, beneath tables, inside bushes, and in cars. During home visits, all of the children demonstrated their enjoyment of hiding in their places by appointing me seeker in a game of hide and seek.

Sara and Caleb were already hiding under their kitchen table when I arrived. Quickly, Sara ran into the living room and pointed to a little corner behind the couch where she hid. Caleb opened the door to a cabinet under a staircase, tossed out all of the blankets, and crawled inside. The game continued throughout the tour, with the children revealing 18 special *hiding* places.

When asked why they like to hide, Sara explained, “Because…when friends come, we hide!” Caleb added, smiling, “Because we want to.”

Sara and Caleb altered rules in order to gain access to their special places. Aware that their older brother’s room and the cabinet under the stairs were forbidden, the children challenged parental guidelines by including those places on their tour.

Additionally, Sara and Caleb’s hiding activities appeared to be influenced by environmental features. Specifically, the structure of their home consisted of several large built-in cabinets and the upstairs walls were angled, creating many nooks and crannies for tucking away. Rather than build their own hideouts, the children selected indoor and outdoor hiding places with elements that existed in their landscapes including under a tree and inside a plastic playhouse.

During his special place tour, John also became really involved in hiding, sneaking around from place to place and continuously checking to see if I followed his lead. He slid behind a curtain, under his brother’s crib, into several closets, behind a rocking chair, and under a table. At one point, he paused in the living room, appearing as if he was making up the rules as he went.

Figure 3. Caleb hiding in his cabinet under the stairs.

"Hmmm…where can I hide?" he stated out loud to himself, before slipping into a small space between two pieces of furniture.

While on many occasions, the children hid while I was watching so as to reveal their location. At other times, they moved quickly ahead of me hiding conspicuously in places before I entered the room.

Trying to fit into small hiding places added an element of excitement. Robert attempted to show me how he fit in a special place under his bed. He positioned himself on his hands and knees, moaning as he tried to get under the low railing. Next, he stuck his feet under first and ducked down using his arms to pull himself underneath. Unsuccessful, he rolled onto his belly and looked up with uncertainty, still attempting to pull himself under the bed. He smiled, with a silly grin, before finally attempting head first, laying flat on his belly. Quietly, he stood up, giving up his quest.

Robert's mother was surprised by his behavior and choice of place. Indeed, the space under his bed was not intended for his use. Perhaps, through choosing to crawl into this space, Robert was demonstrating his need to claim a space of his own.

Figure 4. Robert trying to crawl under his bed

Lisa also enjoyed the challenge of fitting into small spaces, maneuvering her body into a small cloth dollhouse. Perhaps she had underestimated her size, or maybe she had grown since the last time she had crawled inside. Nevertheless, squeezing into the small space appeared to be fun.

Places to Rest

Reading books, sleeping, and cuddling were mainly associated with indoor special places, particular children's bedrooms and beds. Because of the personal nature of these places, they seemed to provide children with a strong sense of belonging. The children shared their beds as places where they kept their real and stuffed animals. As one child described her painting in Figure 5, "It's a big bed. I like to put my bears in there." Emily also pointed out her top bunk during her special place tour, explaining, "my kitty likes to sleep with me."

The first place Lisa went was her bed where she covered herself completely with a sheet surrounded by several small blankets, dolls, and stuffed animals. "Oh, is this your special place?" I asked. "Yes," she answered, giggling as she peeked through the sheet.

Figure 5. A girl's painting of her bed.

Tesa also led me to her bedroom and crawled under her covers. Along with describing how their beds were places for rest, both Lisa and Tesa showed me how they liked to hide. This may have been due to the social interactions that occurred between the children and me during the tours, which was distinctly different from their day-to-day activities.

According to his mother, Robert spent a lot of time on his bed, reading books or cuddling with stuffed animals. She had specifically designed this space for him, family photos hung on the wall next to his pillow, books were neatly arranged on his headboard, and his favorite stuffed animals were tucked in the blankets.

Although Robert appeared to like this place, it was not the first place he selected to show me. Rather he showed me this space only after he had attempted to crawl in the novel space under his bed, possibly demonstrating a preference for a space he could claim as his own.

Places to Explore

Along with small spaces for playing, hiding, and resting, children preferred wide and open natural spaces for exploration. During the first phase, children mentioned building castles in the sandbox, collecting eggs in the chicken coupe, and planting flowers in the garden.

Although these activities were associated with built places, these environments, for the most part, involved living elements and natural objects.

During her tour, Hope roamed aimlessly around her backyard, perhaps indicating her boredom with the groomed landscape near her home. Then, she wandered down the sidewalk past her home, taking charge in leading a "rabbit hunt." Her mother explained that they frequently scouted the neighborhood for rabbits and other wildlife. While Hope appeared disenchanted with her backyard setting, she bloomed with excitement during the rabbit expedition.

Similarly, Bradon spent very little time in his own backyard; he was more interested in exploring the undeveloped field behind his house. "This is where the wild asparagus grow," he explained as he climbed up the railroad tiles separating his yard from the undeveloped land. Bradon scurried through the native grass and wildflowers along a faint trail that paralleled the fence on the backside of his yard. Pointing towards a sandy incline, he scaled up, nibbled on a leafy green, and offered to share a taste.

Admittedly, I was a bit nervous when Bradon led me outside the confines of his yard. I was afraid we were venturing where he was not permitted to go. However, I was relieved when his mother joined us leaning over the fence to smell a wildflower that Bradon pointed out.

Nathan led me around his yard pointing out a woodpile, a fire pit, and two bush houses that him and his friends had recently claimed. Additionally, he led his father and I on a hike up the hill next to his apartment complex. Along with showing me the rusted metal parts which he used to construct "art sculptures, knight weapons, …and bombs that come out of the ground," Nathan pointed out the native flowers that grew in the sand between the rocks. His father had taught him to identify the flowers by name, encouraging familiarity with the landscape.

In contrast, Logan led me outdoors during his tour but stopped short inside his fenced backyard. He pointed to the swings, his sandbox, and a doghouse neutrally indicating that his play domain was limited. Then he grinned and climbed on top of the doghouse, perhaps demonstrating his pleasure in gaining some sense of control.

Logan's father expressed a different view than Logan regarding what constitutes a place as special. His father mentioned "working in the garage" and "riding his bike" as special, whereas, Logan neglected to mention either of these places or activities.

Discussion

This study explored how young children experience their special places in the home environment, particularly focusing on the psychological aspects of their place experiences (i.e. behaviors and activities). Findings suggest that children were drawn to special places that provided them with a sense of autonomy and control. Specifically, through playing, hiding, resting, and exploring, the children gained autonomy in 1) claiming and constructing their own places, 2) creating their own rules, 3) engaging in creativity and imagination, and 4) exercising environmental competency.

Claimed Places

The children selected special places that were important to them. They often chose places and activities that were seemingly different than what parents anticipated. For instance, Logan showed me how he liked to climb on top of his doghouse, whereas his father spoke about "working in the garage." These two activities contrasted. Particularly, Logan's actions may demonstrate his desire for autonomy and independence, while working in the garage with his father presumed a dependent, perhaps subordinate role.

Children also claimed places that were not intended for their use. Robert's attempt to crawl under his bed was unanticipated by his mother. This novel place offered a space for him to be creative and explore his own identity (Proshansky & Fabian, 1987).

On the other hand, children also claimed familiar and cozy places, such as beds or bedrooms. Blankets, pillows, and stuffed animals were arranged on the children's beds for snuggling; family photos hung on the walls. These items gave the children a sense of belonging, comfort, and security. The children appeared to have an emotional attachment to such places, presumably contributing to their place identity (Chawla, 1992; Proshansky & Fabian, 1987).

Creating the Rules

Young children preferred places and activities that allowed them to set their own rules. In hiding, children exercised control through choosing when, where, and from whom they wanted to hide. During my visits, the children sought out familiar and novel places, while ensuring that I followed their lead.

Furthermore, Sara and Caleb challenged and evaded parental rules in order to access their places. Although they were normally not allowed in their brother's room or in the cabinet under the stairs, during their tour they demanded that the rule be bent, therefore gaining charge. Corsaro (2005) used the term, secondary adjustments, to describe how children

evade or adjust rules in the creation of their own childhood culture. More often than not, children are positioned subordinately in society. Special places provided the children with spaces to set their own parameters and exercise control (Corsaro, 2005; Proshansky & Fabian, 1987; Sobel, 1992).

Fostering Creativity and Imagination

Through symbolic and constructive play, children devised their own situations (i.e. tea parties, magical spells, and campouts), utilizing props and loose parts to act them out. For instance, Nathan used old metal parts on the hillside to build weapons and rocks around his yard for furniture. Unlike findings from middle childhood place studies (Kylin, 2003; Sobel, 1992), none of the children built structures in outdoor settings. As previously suggested, the children in this study, for the most part, claimed places that already existed, modifying these spaces through their imagination and symbolic play (Hart, 1979; Kylin, 2003; Sobel, 1992). However, findings also suggest that children possess an inclination to construct their own structures indoors, with blankets being the primary "loose part" associated with this activity. As such, children's special places became the backdrop to inspire make-believe adventures and act out real and imaginary situations (Sobel, 1992).

Environmental Competency

Through their place activities the children developed environmental competency. *Environmental competence* is defined as the "knowledge, skill, and confidence to use the environment to carry out one's own goals and to enrich one's experience" (Hart, 1979, p. 225). Emily developed competency in practicing her skills on the gymnastic rings. Likewise, Nathan, Bradon, and Hope demonstrated knowledge and appreciation for the native flora and fauna in the landscapes near their homes.

Children also exercised environmental competency through restricting access to their special places in order to gain privacy (Laufer & Wolfe, 1977; Skånfors et al., 2009). Tesa devised elements in her book tent to prevent others from entering. Additionally, the small size of some special places prevented adult access. I had originally thought that I would be able to enter the children's special places; however, I was never invited, and the mere size of them alone prevented my entrance. Indeed, all children demonstrated some degree of environmental competency through shaping their places to serve their own needs (Proshansky & Fabian, 1987).

Conclusion and Implications

This study extends childhood place literature through exploring the special place experiences of young children in their home environments. Through learning about the

activities that children like to do in both indoor and outdoor settings, environmental educators and caregivers can gain deeper insight into what inspires and excites young children. Indeed, in a time of growing concern about children's disconnection with the natural world, findings from this study offer hope in that technology related activities, such as video games and movies, were scarcely mentioned by the children. Rather, the children in this study were actively engaged with their physical environments through playing, hiding, resting and exploring in special places.

While children's special places were distinctly their own, caregivers played a significant role in influencing children's place experiences. Positive support and guidance from a caring adult is essential in providing children with comfort and security to explore and discover their environments (Chawla, 1992; Hart, 1979; Wilson, 2008). Particularly, many parents took care in designing the children's bedrooms as personal spaces, which, in turn, seemed to influence children's feelings of belonging and self-identity. For example, parent's hung family photos on walls and provided cozy blankets, pillows, and stuffed animals that afforded children security.

Parents also encouraged children's exploration. Nathan's father accompanied Nathan on adventures up the hillside, taking part in his imaginative (knight and pirate) play schemes and teaching him to identify native flora. Hope's mother took her around the neighborhood on rabbit hunts. And Bradon's mother modeled an appreciation for nature by introducing him to the wild asparagus plants and sharing in the aroma of a flower.

A caregiver's role in children's development of secure place attachments, both indoor and outdoor, provides a backdrop for children to develop a sense of spatial autonomy and environmental competency. While John's father had introduced him to hiding, John claimed the game as his own by setting his own parameters and identifying novel spaces. Similarly, Hope, Bradon, and Nathan demonstrated confidence in leading exploratory excursions, sharing the knowledge about their environment that they had gleaned from parents. It is important, however, for caregivers to consider the balance between child-initiated and adult-initiated place activities. Particularly, caregivers should aim to provide appropriate scaffolding (supportive guidance), while at the same time allowing children to set their own parameters and define their own places.

In the same sense, caregivers should also consider the balance between structured and unstructured environments. Over structured environments, such as fenced in lawns, may interfere with children developing their own initiative and relationship with place. In particular, children's environments should be designed with a degree of openness, including rich and varied elements, loose parts, and nooks and crannies, for children to manipulate and create their own experiences. By designing spaces which allow children to claim their own place, create their own rules, exercise creativity and imagination, and allow for the

development of environmental competency, adults can better support children in fostering their place identity and a positive relationship with the natural world.

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Supporting Early Childhood Environmental Education through the Natural Start Alliance

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The Natural Start Alliance is a new initiative of the North American Association for Environmental Education. Natural Start was created to support and expand early childhood environmental education (ECEE) by creating a network of organizations, educators, parents, and others who care about using environmental education to support young children's healthy development. Some of the Natural Start Alliance's specific activities include: promoting professional development opportunities; collecting and interpreting research; curating resources; promoting diversity and inclusion; upholding quality standards; advocating on behalf of children, families, and educators; and promoting ECEE to new audiences. At naturalstart.org, anyone can join the Alliance and receive the monthly newsletter, join in online conversations about current issues in ECEE, share resources with the Natural Start community, and network with other members.

Research over the past several decades has made several facts clear:

- Early childhood is a critically important time in human development, when biological paths are set that affect lifelong learning and habits (National Symposium on Early Childhood Science and Policy, 2013);

- Children who are exposed to high-quality early childhood education do better throughout their lives (educationally, economically, and in other dimensions) than children who are not (Campbell et al., 2002);

- Children's health has declined and can be correlated to increases in screen time and other passive activity (Biddle & Asare, 2011; Sisson et al., 2009);

- Natural environments make excellent learning environments for young children (Wilson, 1995), in addition to providing opportunities for physical activity and emotionally restorative play (Faber, Taylor, & Kuo, 2006; Fjørtoft, 2001); and

- Frequent, positive experiences in nature early in life can contribute to the development of environmental literacy (Bögeholz, 2006; Wells & Lekies, 2006).

For all of these reasons, the North American Association for Environmental Education (NAAEE) has received a grant from the George B. Storer Foundation to create an ambitious new program to support early childhood environmental education (ECEE). Called the Natural Start Alliance, the program serves as an alliance of educators, as well as parents and other supporters, with a common interest in promoting nature-based education for young children.

Importance of Early Childhood Environmental Education

Early childhood spans the years from birth to age eight (National Association for the Education of Young Children, 2009). Particularly during the preschool years (roughly ages 3-5, before children enter kindergarten), educators focus on developing, among other things, early skills in literacy, numeracy, science, and other disciplines. Likewise, the environmental education field regards early childhood as a time to begin early development of environmental literacy, and this most typically begins during the preschool years, though important ECEE activities can occur both before and after preschool.

According to the North American Association for Environmental Education's *Early Childhood Environmental Education Programs: Guidelines for Excellence* (2010), environmental education in early childhood involves building knowledge, emotional dispositions, and skills. "The ultimate goal of environmental education," the *Guidelines* explain, "is building an environmentally literate citizenry" (p. 3). Not only does environmental literacy require basic knowledge about the environment, but it also requires "a positive and caring attitude toward the environment" (p. 3). And, because attitudes form early in life, environmental education must begin in early childhood.

While environmental education in K-12 settings can be more structured, in early childhood the emphasis is on "free discovery on each child's own terms." The *Guidelines* continue: "Personal perceptions, attitudes, and connections with nature are the key goals at this stage, and facilitating positive experiences varies from child to child" (p. 3). The Guidelines describe activities such as exploring woodlands, following insects, watching plants and animals change through their life cycles, learning how to gently handle plants and animals, and other activities that can help children learn respect for the natural world and other living things. The *Guidelines* conclude that "The task of

environmental education for young children is to forge the bond between children and nature" (p. 4).

Some of the best examples of ECEE in practice can be found at nature preschools. Bailie (2012) defines nature preschools as "a state licensed preschool for three to five year olds, housed and/or operated by a nature center or environmental education center. In this setting, children have the opportunity to visit different habitats on a daily basis. Early childhood educators work with environmental educators to provide a nature-based curriculum." There are currently less than two dozen nature preschools operating in the United States (Bailie, 2012). Forest kindergartens are another model for preschool education that emphasizes immersion in nature. At these schools, students spend all or most of the school day outdoors. Cedarsong Preschool on Washington's Vashon Island is one such school. While the forest kindergarten format is more popular in European countries, there are very few of these programs available in the United States (Bailie, 2012).

A far more common offering of ECEE in preschool settings includes more limited, occasionally inserted activities related to the environment or nature (for example, a school might engage in recycling, conduct an occasional outdoor walk, or celebrate Earth Day). Other programs might take on longer-term nature-based projects, such as planting a garden or regularly using an ECEE curriculum guide. Still others might fully adopt the NAAEE Guidelines for ECEE, or could create a long-term partnership with an environmental education center to offer regular nature experiences.

Preschools, though, are not the only venue for ECEE. Nonformal environmental education centers such as zoos, aquariums, museums, parks, nature centers, and other centers often offer ECEE through stand-alone programs for young children and families. These might include toddler walks at a nature center, "mommy and me" programs at museums, or family interpretive programs at state or national parks. The San Antonio Zoo, for example, is home to the "Tiny Tot Nature Spot," an interactive zone designed specifically for young children and their families to encounter and interact with nature.

And, finally, parents and family members are perhaps some of the most important environmental educators in young children's lives. Parents, ultimately, control the amount and type of nature experiences and ECEE that young children receive. Parents take babies to parks to play and walk in the grass, teach toddlers to touch animals and plants gently, ask children to help sort trash and recycling, remind children to turn off the water when they brush their teeth, and so on. Either deliberately or inadvertently, parents help children form their first bonds with the natural world, develop values of care and respect for other living things, nurture habits of resource conservation, and more.

Assessing Needs in ECEE

In order to better understand the needs of this broad diversity of early childhood environmental educators, NAAEE conducted an informal needs assessment that included a literature review, survey, and interviews.

Literature Review

The literature review revealed that there are relatively few researchers actively investigating ECEE. In fact, Davis (2009) concluded that the early childhood environmental education literature represents a "research 'hole.'" The limited research available about the quality and extent of ECEE available in American preschools today suggests that regular nature exposure is uneven at best, and is probably rare in many preschools. In a survey of Minnesota childcare teachers (including licensed family childcare providers, Head Start programs, and preschool programs) 92% of teachers reported that they spent the majority of their outdoor playtime in "maintained/developed spaces." "None indicated using unmaintained or natural areas for the majority of their outdoor playtime" (Ernst, 2012). Further, in the same study, a third of the teachers "indicated lack of support for daily outdoor play in natural settings."

Nature and science instruction may also be a low priority among preschool educators. Torquati et al. (2013) surveyed in-service and pre-service preschool teachers and found that both groups rated "nature/science as the least important for young children in terms of experiences and learning outcomes" (p. 721). Language and literacy experiences rated most important.

Ernst (2013) found that key barriers to nature play in preschools include access to natural areas, lack of appropriate clothing for children, and safety or liability concerns. Other researchers have found that socio-economic factors can also play a role in access to natural areas. Strife and Downey (2009) reviewed a large number of studies and concluded that "empirical evidence suggests that youth's experiences in and access to nature and green spaces are likely to vary according to race, ethnicity, and socioeconomic status" (p. 110). Ernst (2012) states that early childhood educators serving children of higher socio-economic status report having greater access to natural areas.

In terms of professional development, Torquati et al. (2013) found that the early childhood educators are more confident in teaching reading, math, and other subjects, and are least confident in conducting nature/science activities.

Torquati and Ernst (2013) surveyed pre-service early childhood educators and found that "knowledge of the benefits of nature experiences, the perceived difficulty in using natural settings, and personal levels of nature relatedness each significantly predicted

[the pre-service early childhood educators'] intention to use natural settings in future teaching" (p. 191). Ernst (2012) also notes that:

> "A cluster of obstacles seem to be regarding the "know-how" to incorporate this type of play (how to reduce the time involved in getting children ready for going outside, how to incorporate this type of play when there are also babies/toddlers to care for and additional staff are not available, how to provide this type of play safely, how to incorporate this type of play even in the winter or in the messiness of snow-melt and mud, etc.). Perhaps there is an opportunity for addressing these obstacles through professional development workshops or even more informal avenues, such as sharing ideas or "tricks" that providers have already figured out." (p. 20)

Finally, Ernst (2012) reflects, "Given that lack of time was a frequently-listed obstacle to nature play, it might be considered unlikely that providers have time to walk their children off-site for nature play; thus, it may be appropriate to focus efforts on increasing access (creating access) to natural areas on-site" (p. 20).

Survey

An electronic survey was administered to ECEE professionals to gather their input about their interests and preferences for services from a potential ECEE Alliance. The professionals were identified from a list of participants in three nature preschool conferences held in 2012. (Each of these conferences was held for the first time in 2012, reflecting the growing interest in ECEE.) In all, 57 professionals responded, with the majority representing nature preschools.

Among the ECEE professionals, 98% indicated that an alliance would be valuable to them and the field. ECEE professionals indicated greatest interest in alliance activities around professional development, conferences and other gatherings, technical or financial support for professional development, certification programs, and networking opportunities. The most-preferred area of pre-service education was related to developmentally appropriate practice (which is not surprising, given that many environmental educators do not enter the field through traditional education training). ECEE professionals also indicated support for an internet depository of ECEE resources.

Interviews

Interviews were also conducted to reach a diversity of "front-line" early childhood education professionals who are familiar with ECEE in a variety of settings beyond nature preschools. In all, over 40 semi-structured interviews were completed, with each lasting approximately one hour. The purpose of the interviews was to glean

professionals' preferences and recommendations for how an alliance might support the field of ECEE.

Interview respondents indicated strong support for the development of an ECEE alliance, and most indicated that the field is undergoing tremendous growth. Interview participants particularly encouraged alliance activities supporting ECEE-related research and professional development for early childhood educators (both pre-service and in-service). Interview respondents also indicated support for alliance activities related to providing networking opportunities, curating resources, promoting the ECEE field, convening conferences and workshops, and providing a consultant and/or speaker bureau. Barriers to ECEE mentioned by interview respondents included: cost (for example, one early childhood education center mentioned an interest in installing gardens, but did not have money in the budget to cover the cost), state licensing requirements (for example, many respondents indicated that state licensing agents have wide latitude in their interpretation of licensing requirements, leaving early childhood education centers unsure of which natural elements might be acceptable), perception that nature is not available in urban environments, curricular focus on math and reading skills and little interest in science, and requirements imposed by insurers.

Supporting the Field

In July 2013, NAAEE convened a summit on ECEE at the National Conservation Training Center in Shepherdstown, WV. Over 20 individuals participated, representing non-profit organizations, professional associations, universities, government agencies, foundations, and private enterprises with an interest in and commitment to ECEE. The group reviewed the results of the surveys, interviews, and literature review described above, and helped NAAEE develop an initial plan for launching an alliance to support ECEE in the United States. Specifically, the results of the needs assessment and the input received from experts at the summit pointed to alliance work in the following areas:

- **Professional development**—promoting opportunities for pre-service and in-service education in ECEE for early childhood educators

- **Research**—Promoting new research in ECEE, and disseminating research results in ways that are useful for lay audiences

- **Resources**—Providing teachers, parents, and other key audiences with resources related to ECEE (for example, fact sheets, activity ideas, links to ECEE-related organizations and publications, etc.)

- **Diversity and inclusion**—Ensuring that ECEE opportunities are available to all young children, regardless of socio-economic status, ethnicity, race, or other factors

- **Quality standards**—Promoting the use of NAAEE's ECEE Guidelines for Excellence and otherwise promoting high-quality instruction in ECEE

- **Promotion**—Raising the profile of ECEE and the organizations and agencies that offer ECEE, and helping to generate greater demand for ECEE programs among the general public

- **Advocacy**—Advocating for more and better ECEE opportunities for young children, and mobilizing our networks to support opportunities to expand ECEE in the US

To focus on these priorities, NAAEE has launched The Natural Start Alliance to support and expand ECEE. With its reach and expertise in environmental education, NAAEE is well positioned to support the institutions and educators who are already making a difference in ECEE, a field that has been growing slowly but steadily for decades. But because the number of ECEE providers is small, the Natural Start Alliance will also reach out to early childhood educators, parents of young children, and others who haven't yet been exposed to the value of environmental education, or who want to incorporate ECEE into their teaching, but are facing challenges. While research shows that there are a variety of barriers to ECEE, our experience also shows that there is tremendous opportunity in this sector of environmental education. The Natural Start Alliance aims to help inspire, educate, and connect early childhood educators—whether they are professionals or parents—who want to help young children begin their path toward environmental literacy.

Join the Alliance

Different people and organizations support early childhood environmental education for different reasons: some care about connecting children to nature, others are concerned about creating great educational experiences that foster young children's development, and still others have their eyes on the future and hope to instill habits, skills, and connections today that will lead to a more sustainable world tomorrow. Some people share all of these motivations, and others have different ones. But whatever the motivation, the Natural Start Alliance can provide pathways to inspiration, connection, and learning. To learn more about the Natural Start Alliance, visit naturalstart.org.

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Christy Merrick serves as the coordinator of the Natural Start Alliance. Judy Braus is the Executive Director of the North American Association for Environmental Education. Please direct correspondence to Christy Merrick at christymerrick@gmail.com.

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The Growing Culture of Nature Play

Melody Wood
San Antonio Zoo

The importance of nature-based play has gradually become forefront in an array of research fields. From the more obvious physical benefits to the complex mental benefits, nature has proved time and time again to be the cure-all for a variety of common ailments. Richard Louv, author of the famed *Last Child in the Woods*, has spawned a growing culture of activists devoted to helping their communities re-learn how to play outside. At the San Antonio Zoo, you will find an entire exhibit dedicated to this very notion. Since *Kronkosky's Tiny Tot Nature Spot* opened in 2004, we have been working towards a single goal of helping families with young children "Grow with Nature." Last April, 2013, the Zoo even held a community-wide event focused solely on this purpose, called "Get Out and Play Day." Armed with the muscle of the Texas Children in Nature Network, the San Antonio Zoo brought together 15 organizations and more than 100 non-zoo volunteers from across the city that are all working towards the same goal of getting families outside.

Playing outside used to be the norm for kids regardless of where or how they lived; today is another story. Ecophobia has increasingly become one of the more common fears amongst today's children, a direct result from not having that vital interaction with nature. From reduced access, to an emerging culture of fear, to an increased activity schedule, there are a variety of explanations for this loss of free play in children. Many children grow up in neighborhoods that are legitimately unsafe for children to play in due to violence or environmental hazards. We have also greatly reduced the amount of natural space available to our children. Children today are more likely to know what a river looks like from seeing it on television as opposed to actually splashing in one. Then of course some of us feel the pressure to believe that children will only succeed if they take advantage of every possible structured learning experience, starting at age three. Many parents worry that they are failing as a caregiver if they do not

offer their children these possibilities. Even in school systems, children's recess and free play has been downsized to make room for additional academic work.

What many fail to realize, is that some aspects of what is expected to be gained from traditional school work can also be gained from nature play. All creatures, children included, learn from play. We are hard-wired to climb rocks, splash in puddles, and roll down hills. Nature provides infinite possibilities for kids to grow and learn, allowing their play to be more diverse and fostering language and collaborative skills. Nature play not only helps children develop powers of observation and creativity, it also helps them deal with stress and adversity, and enables them to concentrate better. Children allowed to regularly play in natural environments have increased coordination, balance, and agility. On top of the physical and mental benefits of playing outside, children also cultivate an emotional connection with the world around them. It is this connection that is so vital to developing a sense of wonder, which eminent biologist E.O. Wilson points out is an important motivator for lifelong learning.

Unfortunately fear is helping breed helicopter moms. You all know them; they hover closely, stopping their child from digging in the dirt and scolding them for getting their feet wet. So what can we do? The San Antonio Zoo is attempting to re-create the curious child by helping parents release that control. *Kronkosky's Tiny Tot Nature Spot* opened in 2004 with the sole purpose of helping families with young children "Grow with Nature." Specially trained staff, called Playleaders, model nature play by leading activities with guests. By playing with the child in the natural substrate, Playleaders demonstrate not only the benefits to the child, but to the parent as well. This is important because studies show having an active family role model engage young children in positive nature experiences to be one of the primary factors for developing a conservation-minded adult. By incorporating the parents in the activities, the *Nature Spot* helps generate this positive nature connection between parent and child. Without these early experiences, it is likely children won't grow to value the natural world and protect it as they get older.

Like many states, Texas has both state and regional children in nature initiatives. One easy way our regional collaborative made a difference was through the creation of Get Out and Play Day. This community-wide zoo event brought together children in nature member organizations and various local companies that promote nature-based play. By combining Get Out and Play Day with a local university's Play Conference, Texas Children in Nature Partnership's spring events, and the Children and Nature Network's "Let's Go" events, the Zoo not only gained 60plus well-trained play volunteers, we also had a much higher profile event. Over 20 activity stations were set up throughout the Zoo and were manned by both Zoo staff/volunteers and over a dozen outside organizations. Activities reflected the organization's site or mission and were all focused on helping families play in nature. Stations included activities such as fishing, an archeological dig, gardening, and story time. With over 7,000 Zoo visitors that day, evaluation efforts showed an overwhelmingly positive reaction to the event and nature-based play overall. Evaluation efforts for the event included a pre and post survey regarding the vendors, station activities, and the guest's frequency of nature-based play. During the pre-evaluation, guests were given a leaf cut-out and a map of the stations posted throughout the Zoo. Guests were encouraged to visit each station to get an idea of how/where they can spend time in nature. As guests prepared to leave the Zoo they visited the post-evaluation table. Guests were asked to record a nature-based "play promise" on the leaf and post the leaf on the tree (ex. "I will spend 30min/day playing outside). With over 7,000 visitors for the day, we saw an amazing 93 percent return rate on our "play promise" leaves. Initial examination of the data showed an overwhelmingly positive reaction to the event and nature-based play overall.

The number of physical, mental, and emotional benefits nature play offers is seemingly limitless. Where families are not comfortable in or have access to nature, the San Antonio Zoo is able to provide those outdoor opportunities. From exhibit design, to specialized staff, to creative activities, *Kronkosky's Tiny Tot Nature Spot* continues to grow budding naturalists. By combining our efforts with those of our community partners during Get Out and Play Day, we were able to capitalize on the knowledge of those partners without having to rely solely on Zoo resources. It is these partnerships that have enabled us to impact a greater audience to become healthier, happier, and smarter by playing outside.

Melody Wood is the San Antonio Zoo Spot Coordinator. This article was originally published in the July 2013 issue of the Association of Zoos and Aquariums' CONNECT magazine.

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Highlighting Resources and Books in Early Childhood Environmental Education: An Invitation for Submissions

With each issue, *IJECEE* will publish reviews of resources and books related to early childhood environmental education research or practice. Resources and books submitted to the *IJECEE* Book and Resource Review Department will be reviewed by a team of professionals. Reviews will include the title of the resource/book, author(s), ISBN when appropriate, cost if appropriate, how to obtain a copy of the resource/book, and an overview/summary of each resource/book. A variety of published materials will be considered for inclusion in the Book and Resource Review Department, including activity guides, research summaries or bibliographies, how to books, textbooks, and other appropriate materials relevant to early childhood environmental education.

To submit a resource or book to be reviewed, send a copy to Dr. Brenda Weiser, UHCL, 2700 Bay Area Blvd, #53, Houston, TX 77598. For questions contact Dr. Brenda Weiser at weiser@uhcl.edu or Dr. Donna Kirkwood at Kirkwood@uhcl.edu.

IJECEE Book and Resource Review Department Editor Biographies

Dr. Brenda Weiser is an Associate Professor, Science Education, for the University of Houston – Clear Lake. She is responsible for teaching science methods and coordinating the science methods courses. Brenda has been active in environmental and science education over the last 25 plus years. She has conducted a wide variety of workshops for educators, coordinated conservation and environmental education programs; assisted with the development of outdoor classrooms; co-coordinated Project Learning Tree and Project WILD, taught water quality programs to teachers and students; and has taught Biology, Environmental Science, 8th grade science, and Marine Biology in the K – 12 setting.

In addition, Brenda has served on numerous local, state, and national committees and boards including the NAAEE's Board of Directors, EPA's National Environmental Education Advisory Council, and Board of Directors the Artist Boat. She currently serves on the Board of Directors

for the for the Texas Association of EE, American Forest Foundation's Education and Operating Committee, and the Houston Zoo's Education Advisory Board. She works with the Galveston Bay Foundation and is a facilitator for Project WILD, Project WET, and Project Learning Tree.

Brenda holds an Ed.D. in Curriculum and Instruction/Science Education, University of Houston; Master's of Agriculture in Wildlife, Fisheries, and Sciences/Conservation Education, Texas A&M University; and a B.S. degree in Wildlife, Fisheries, and Sciences/Secondary Education from Texas A&M University.

Donna Kirkwood has a Ph.D. in Child Development from Texas Woman's University and is currently an Assistant Professor of Early Childhood Education at the University of Houston-Clear Lake. In addition to UHCL, she has taught Early Childhood Education at Texas Woman's University, Collin College, Tarrant County College and Eastfield College. She has also been a preschool teacher and served as the director of an NAEYC accredited preschool.

Donna has presented at local, state, national and international conferences including the Project Learning Tree International Coordinators' Conference, National Association for the Education of Young Children (NAEYC) Annual Conference, North American Association for Environmental Education (NAAEE) Annual Conference and National Association of Early Childhood Teacher Educators (NAECTE) Annual Conference.

Her research interests are high-quality environments for young children, developmentally appropriate curriculum, environmental education and critical thinking and reflection. Her research and practical articles can be found in *Childhood Education, Focus on Pre-K and K, Focus in Infants and Toddlers, Child Care Information Exchange, Voices of Practitioners and Dimensions of Early Childhood.*

Donna has served on numerous local, state and national boards and committees including: National Association for the Education of Young Children Annual Conference Proposal Reviewer, and Early Childhood Associate Degree Accreditation (ECADA) Program Reviewer, National Council for Accreditation of Teacher Education Program (NCATE) Program Reviewer, Texas Early Childhood Professional Development System Council member, Texas Association for the Education of Young Children Annual Conference Presenter Co-Chair, Texas Association for Early Childhood Teacher Educators President.

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AUTOBIOGRAPHIES OF THE BOARD OF EDITORS

AMY CUTTER-MACKENZIE, CONSULTING EDITOR

I joined Southern Cross University in December 2011 as an Associate Professor in the School of Education in the area of Sustainability, Environment and Education. I am the Director of Research for the School of Education and Research Leader of the Research Cluster 'Sustainability, Environment and Education' (SEE).

I commenced my career as a primary school teacher in Queensland, Australia, and later moved into academia after completing my Ph.D. My research is clearly situated in the area of children's and teachers' thinking and experiences in environmental education and sustainability in a range of contexts and spaces (including early childhood education, schools, teacher education, higher education, research and communities). I am the Editor of the Australian Journal of Environmental Education (Cambridge University Press).

Thought Provoking Quotation: "I wonder whether the process ordinarily referred to as growing up is not actually a process of growing down; whether experience, so much touted among adults as the things children lack, is not actually a progressive dilution of the essentials by the trivialities of living. This much at least is sure: my earliest impressions of wildlife and its pursuit retain a vivid sharpness of form, color, and atmosphere that half a century of professional wildlife experience has failed to obliterate or to improve upon" (Aldo Leopold)

BLANCHE DESJEAN-PERROTTA, CONSULTING EDITOR

Blanche Desjean-Perrotta, Ed.D., is professor of early childhood/elementary education at the University of Texas San Antonio. She has been a teacher educator for the last 18 years, and oversees her university's teacher preparation program as Associate Dean for Teacher Education. Over the last several years her research has evolved to studying the preparedness of early childhood preservice teachers to teach environmental education. This research serves to provide direction for her university and other teacher educator preparation programs in how to better prepare new teachers for this important task before they enter the field of teaching. Her involvement in environmental education has

included chairing the Preservice Teacher Council for the North American Association for Environmental Education, and co-authoring a national study of teacher preparation programs and environmental education for this organization. Dr. Desjean-Perrotta is also a trained facilitator for Project Wild and Project Learning Tree.

Results of her research have manifested recently in publications such as Desjean-Perrotta, B., Moseley, C., & Crim, C. (2010). Raising a generation of environmentally literate children: Assessing the impact of teacher knowledge. In Hoot, J. & Szenter, J. (Eds) *The Earth is our home: children caring for the environment*. Maryland: Association of Childhood Education International; Desjean-Perrotta, B. (in press). Raising a generation of environmentally literate children: Are preservice teachers ready? *Childhood Education;* and Moseley, C., Desjean-Perrotta, B., & Crim, C. (2012). Preservice Teachers' Perceptions of the Environment: Infusing Environmental Education into an Elementary Teacher Preparation Program. *Journal of Interdisciplinary Education, 11(1),* 1-14.

Thought Provoking Quotation: "Love by the way you walk, the way you sit, the way you eat. This world very much needs love." Thich Nhat Hanh

BORA SIMMONS, ASSOCIATE EXECUTIVE EDITOR

Bora Simmons is the founding director of the National Project for Excellence in Environmental Education. The Project was initiated in 1993 by the North American Association for Environmental Education (NAAEE) to help educators develop and deliver effective environmental education programs. The Project has drawn on the insights of literally thousands of educators across the United States and around the world to craft guidelines for top-quality environmental education. Publications in the series includes: *Early Childhood Environmental Education Programs: Guidelines for Excellence* (NAAEE, 2010). After twenty years as a professor of environmental education at Northern Illinois University, Bora retired in 2007 and moved the Project to the Institute for a Sustainable Environment at the University of Oregon.

Bora has been actively involved in environmental education research, evaluation, and professional development for over thirty years. She has taught courses, given presentations, and facilitated workshops internationally. She served on the NAAEE board of directors and as its president. She was chair of the National Council for the Social Studies' (NCSS) Environmental Education SIG, NCATE EE standards writing committee, and ASCD EE Network. She currently serves on numerous steering committees and boards of directors, including the National Project Learning Tree Education Operating Committee and Environmental Education and Conservation Global.

For her achievements in research and service, Bora has received various recognitions, including Walter E. Jeske Award for Outstanding Contributions to Environmental Education (NAAEE), Outstanding Contributions to Research in Environmental Education (NAAEE), and Applied Research Award (*Progressive Architecture*). Bora's research interests center on the development of environmental literacy.

She earned her B.A. in Anthropology from the University of California at Berkeley, M.S. in Natural Resources/Environmental Education from Humboldt State University and Ph.D. in Natural Resources/Environmental Education from the University of Michigan. After graduation from UC

Berkeley, she served as a Peace Corps Volunteer in Dae Cheon, South Korea.

Thought Provoking Quotation: "When one tugs at a single thing in nature, he finds it attached to the rest of the world." (John Muir)

CHRIS KIEWRA, CONSULTING EDITOR

In her role as Education and Outreach Specialist for the Dimensions Educational Research Foundation/ Nature Explore, Christine devotes her time to several initiatives for creating connections between families and nature as well as expanding quality educational opportunities for children. With a Master's degree in early childhood special education, she currently provides professional development and coaching for teachers.

Christine is part of the creation team at Nature Explore that develops resources to support children's connection to the natural world and is a World Forum Foundation Global Leader for Young Children.

Nature Explore is a collaborative project of Arbor Day Foundation and Dimensions Educational Research Foundation. For years, Dimensions Foundation has been collecting research data on the benefits of connecting children with nature. At the same time, Arbor Day Foundation has become concerned that children are more disconnected from the natural world that ever before. Working together, Nature Explore resources are developed based on research and field-testing with educators and children in real-life settings. All aspects of the Nature Explore program work together to help bring nature into children's lives in a significant, sustainable way. Dimensions' research continues to show how much children benefit when positive experiences with nature come at an early age and are supported by caring adults.

Thought Provoking Quotation: "I sincerely believe that for the child, and for the parent seeking to guide him, it is not half so important to know as to feel. If facts are the seeds that later produce knowledge and wisdom, then the emotions and the impressions of the senses are the fertile soil in which the seeds must grow. The years of early childhood are the time to prepare the soil." (Rachel Carson)

INGRID PRAMLING SAMUELSSON, CONSULTING EDITOR

Ingrid Pramling Samuelsson is Professor of Early Childhood Education in the Department of Education, Communication and Learning at Gothenburg University, Sweden. She is the UNESCO Chair in ECE and ESD and is the current World President of OMEP (Organsation Mondiale pour l Éducation Prescolare).

Main topics of my research are young children's learning, preschool education and curriculum, as well as education for sustainable development (ESD). Some of my recent publications include *The Contribution of Early Childhood Education to a Sustainable Society* (UNESCO, 2008); *Education for Sustainable Development in the Early Years* (Svenska OMEP, 2010); *Early childhood education and learning for sustainable development and citizenship* (International Journal of Early Childhood,2009*); and Why we should begin early with ESD: The role of Early Childhood Education* (International Journal of Early Education, 2011).

Thought Provoking Quotation: "Take children seriously – make early childhood education and sustainable development a priority" (my own)

JENNY RITCHIE, CONSULTING EDITOR

Dr Jenny Ritchie has a background as a child-care educator and kindergarten teacher, followed by 22 years of experience in early childhood teacher education. She currently holds the position of Associate Professor in Early Childhood Teacher Education at Te Whare Wānanga o Wairaka - Unitec Institute of Technology, Auckland, New Zealand. Her teaching, research, and writing has focused on supporting early childhood educators and teacher educators to enhance their praxis in terms of enacting an awareness of cultural, environmental and social justice issues. She has recently led three consecutive two-year studies funded by the New Zealand Teaching and Learning Research Initiative, focusing on implementing early childhood pedagogies reflecting these commitments.

Her recent publications include *"Caring for Ourselves, Others, and the Environment: Applying an Indigenous Paradigm in Early Childhood Education in Aotearoa, New Zealand"* (2011) in J. Lin & R. Oxford (Eds.), '*Transformative Eco-Education for Human and Planetary Survival*'(pp. 239-253); *'Bicultural Journeying in Aotearoa'* (2009) in D. Caracciolo & A. M. Mungai (Eds.), '*In the Spirit of*

Ubuntu - Stories of Teaching and Research' (pp. 135-146); and '*Early childhood education as a site of ecocentric counter-colonial endeavour in Aotearoa New Zealand'* (2012) in '*Contemporary Issues in Early Childhood', 13*(2), pp. 86-98.

Thought Provoking Quotation: "Being really means interbeing" (Thich Nhat Hahn)

JULIA TORQUATI, CONSULTING EDITOR

Julia Torquati is an Associate Professor of Child, Youth, and Family Studies at the University of Nebraska-Lincoln. She has been a teacher educator for 18 years, most recently teaching courses in math, science, and nature methods for early childhood education and human dimensions of sustainability. Her program of research focuses on several dimensions of children's interactions with the natural world, including development of biophilia, conservation knowledge and beliefs, and the influence of nature on executive functions and self-regulation. She also studies parents' and teachers' perceptions of the importance of experiences in nature for children's development and learning. She was a member of the writing team for the *Early Childhood Environmental Education Programs: Guidelines for Excellence* and has presented on early childhood environmental education at conferences in the U.S., Australia, and China.

Recent publications of Dr. Torquati's research include: Torquati, J.C. & Ernst J. (2013). Beyond the Walls: Conceptualizing Natural Environments as "Third Educators." *Journal of Early Childhood Teacher Education*, 34, 191-208*;* Rice, C. & Torquati, J.C. (2013). Assessing Connections between Young Children's Affinity for Nature and Their Experiences in Natural Outdoor Settings in Preschools. *Children, Youth and Environments,* 23(2), 78-102 http://www.jstor.org/stable/10.7721/chilyoutenvi.23.2.0078; Torquati, J.C., Cutler, K., Gilkerson, D., & Sarver, S. (2013). Early Childhood Educators' Perceptions of Nature, Science, and Environmental Education. *Early Education and Development*, 24(5), 1-23 http://www.tandfonline.com/eprint/rRmiBCwebvt5t7eDJRyu/full; Hong, S-Y, Torquati, J., & Molfese, V.J. (2013). Theory guided professional development in early childhood science education. In L. Cohen and S. Waite-Stupiansky (Eds.) *Advances in Early Education and Day Care*, *Volume* 17: *Learning across the Early Childhood Curriculum*, (pp. 1-32). Bingley, UK: Emerald Group Publishing; and Torquati, J.C., Gabriel, M., Jones-Branch, J., & Leeper Miller, J. (2011). Environmental Education: A Natural Way to Nurture Children's Development and Learning. In A. Shillady (Ed.), *Spotlight on Young Children and Nature* (pp. 8-14). Washington, DC: NAEYC.

Thought-provoking quotation: "Look deep into nature, and then you will understand everything better" (Albert Einstein)

JULIE DAVIS, CONSULTING EDITOR

Julie is Associate Professor in the School of Early Childhood, Queensland University of Technology. Julie's teaching and research interests are in early childhood education for sustainability (ECEfS), particularly those forms that support and promote the decision-making and action-taking of young children, and embedding education for sustainability into teacher education. Julie co-founded a network for those with an interest in early childhood environmental education/education for sustainability in 1996 - the *Queensland Early Childhood Environmental Education Network*, now the Queensland Early Childhood Sustainability Network (QECSN), of which she is now Patron. In 2007 and 2008, she attended meetings in Sweden, hosted by Prof Ingrid Pramling Samuelsson, that led to early childhood education being acknowledged as a 'natural starting point for lifelong learning in Education for Sustainable Development' in *The Gothenburg Recommendations on Education for Sustainable Development*. She edited of the 2010 textbook for early childhood preservice educators *Young Children and the Environment: Early Education for Sustainability*, published by Cambridge University Press, a world-first for early childhood teacher education. Julie is keenly interested in the promotion of research into the field of early childhood education for sustainability and, consequently, led the *Transnational Dialogues in Research in Early Childhood Education for Sustainability* - the first in 2010 (Stavanger, Norway), and the second in 2011 (Brisbane, Australia).

Thought Provoking Quotation: "Good planets are hard to find" (unknown)

JULIE ATHMAN ERNST, CONSULTING EDITOR

Julie is an Associate Professor and director of the Master of Environmental Education program at the University of Minnesota Duluth, where she teaches undergraduate and graduate coursework in environmental education methods, classroom applications, program evaluation, research methods, and statistics. Her prior experience includes environmental and conservation education work for the National Park Service, U.S. Forest Service, and U.S. Fish and Wildlife Service. Her research line includes evaluation of nonformal environmental education programs, environment-based formal education programs, and early childhood environmental education. Recent publications pertaining to early childhood environmental education include *Early Childhood Educators' Use of Natural Outdoor Settings as Learning Environments: An Exploratory Study of Beliefs, Practices, and Barriers* (2013, Environmental Education Research); *Early Childhood Nature Play: A Needs Assessment of Minnesota Licensed Childcare Providers* (2012, Journal of Interpretation Research); *Preservice Early Childhood Educators' Perceptions of Outdoor Settings as Learning Environments* (2012, Environmental Education Research); and *The Real Benefits of Nature Play Every Day* (2011, Childcare Exchange/Nature Action Collaborative for Children). She is

currently working with a local nature center on the development and establishment of a nature-based preschool and on the design and implementation of a natural playscape.

Thought Provoking Quotation: "Because children grow up, we think a child's purpose is to grow up. But a child's purpose is to be a child." (Tom Stoppard)

KEUM HO SHIN, CONSULTING EDITOR

I am working as an Assistant Professor of the Department of Early Childhood Education in Daegu University, South Korea. I also have been a principal of the kindergarten affiliated with the College of Education in Daegu University for past 4 years. While I was in the doctoral program in University of Victoria, Canada, I was interested in environmental education for young children and focused on the development of environmental education in the Korean kindergarten context. Since the last year, I have been conducting the project *Korean Kindergarten Teachers' Mental Models of the Environment* funded by the National Research Foundation of Korea.

My recent publications include *Validation of the environmental belief and attitude scale for young children (Korean Journal of Early Childhood Education, 2012); The effects of environmental education focusing on interpretative movement activities on emotional intelligence and environment friendly attitude (Korean Journal of Child Care and Education, 2011); An analysis on the young children's pro environmental attitudes, environmental preservation knowledge, and pro-environmental behaviors (Journal of Early Childhood Education Research and Review, 2009).*

Thought Provoking Quotation: "Human-nature relationship should be treated as a moral issue conditioned or restrained by ethics." (Roderick Frazier Nash)

MARY RIVKIN, CONSULTING EDITOR

Mary Rivkin, PhD, is associate professor of early childhood education at UMBC (University of Maryland, Baltimore County). She authored *The Great Outdoors: Restoring Children's Right to Play Outside*, for NAEYC, now under revision, and *Science Experiences for the Early Childhood Years,* currently in its 10th edition, and translated into several languages. A new publication is "Schools Going Green: Benefits for Children and Nature" (2012). She was a consulting editor on NAAEE's *Guidelines for Excellence in Early Childhood Education*. Previously she worked for the National Science Foundation, and taught elementary school and nursery school.

She is very concerned about the loss of habitat for our species, particularly for the young, in that many of them in developed countries lack direct experience with nature. Now that research has confirmed what many have known all along, that nature is good for us, we need to work harder to conserve wild nearby nature places for our children.

Mary and her husband Steve have six grandchildren whose outdoor play is of interest and concern.

Thought Provoking Quotation:

PATTI BAILIE, CONSULTING EDITOR

I have worked in the field of early childhood environmental education for the past 20 years at three different nature centers; as the founding director of the Schlitz Audubon Nature Preschool in Milwaukee, Wisconsin; as co-director of the Early Childhood Outdoors (ECO) Institute at Fontenelle Nature Association in Omaha, Nebraska; and as the Early Childhood Environmental Educator at the Nature Center at Shaker Lakes in Cleveland, Ohio.

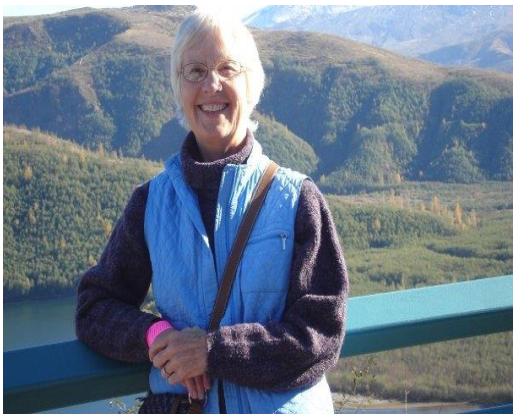
My research interests focus on nature center preschools (licensed preschools operated by nature centers) and how they integrate early childhood education and environmental education in teaching young children. I recently completed my Ph.D. in Educational Studies (with a focus on early childhood education and science education) from the University of Nebraska – Lincoln. Working at a nature preschool led me to better understand how nature experiences influence brain development resulting in the production of the Naturally Developing Young Brains packet (in collaboration with Braininsights). As Education Director of The Biosophical Institute, a foundation for peace, I've been involved with integrating peace, nature and spirituality for young children, resulting in a teacher workshop called Deep Teaching – Growing Peace (developed with Ruth Wilson).

I also serve as a trustee of the National Peace Academy and board member of Green Hearts Institute

for Nature in Childhood. As an educational consultant I've worked with various organizations (including National Audubon Society, Sesame Street, and the Children's Ecological Organization in Azerbaijan) to find ways to connect young children to nature and have presented on this subject at regional, national, and international conferences.

Thought Provoking Quotation: "This is what I want for children: a sensual, emotional, and conscious connection to place; the sure, sweet knowledge of earth, air, sky." (Ann Pelo)

RUTH WILSON, CONSULTING EDITOR



I am professor emerita from Bowling Green State University in Ohio with appointments in both special education and environmental education. Since my retirement, I've been working as a consultant and curriculum writer focusing on connecting young children with nature. My recent publications include *Nature and Young Children*, 2nd edition (Routledge, 2012), "Becoming Whole: Developing an Ecological Identity" (*Exchange*, 2011), and "The Spiritual Life of Children" (*Exchange*, 2010). My research in the early 1990's focused on integrating early childhood education and environmental education. During this time, I also developed a framework for using the ecological autobiography as a tool for understanding and enhancing one's connections with the natural world. My current research interests include integrating peace, nature, and spirituality in early childhood education programs.

Thought Provoking Quotation: "Faith is the bird that feels the light and sings while the dawn is still dark." (Rabindranath Tagore)

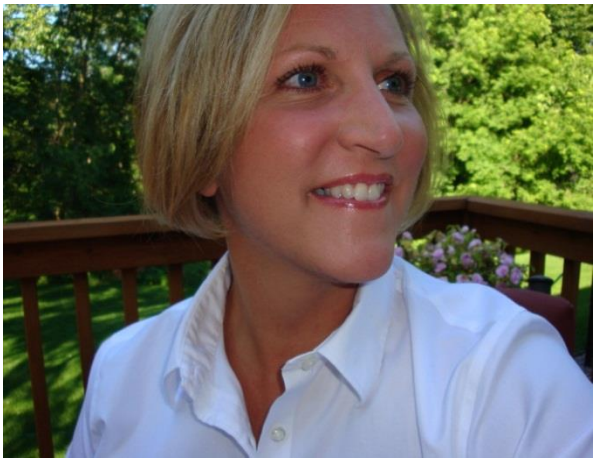
SUE ELLIOTT, CONSULTING EDITOR

Originally I qualified as a kindergarten teacher, but was soon drawn to further study in the biological sciences. This created the foundation for my work in the areas of early childhood education for sustainability, science education and natural outdoor playspaces. Over thirty years I have worked in various capacities in the early childhood field as a practitioner, lecturer, consultant, trainer and author. In particular, I established the first professional interest group Environmental Education in Early Childhood Vic. Inc. in 1992 and later was commissioned to undertake a review entitled *Patches of green, early childhood environmental education in Australia: Scope, status and direction* (NSW EPA, 2003). I was also a participant in the inaugural Transnational Dialogues for Early Childhood Education for Sustainability and a researcher for an Australian Research Council funded Schools-Community Partnerships for Sustainability study at RMIT University. My recent publications include the edited book *The Outdoor Playspace: Naturally* (Elliott, 2008) and the book chapter *Children and the natural world* (in Davis, 2010). Currently, I am a senior lecturer in early childhood education with the Faculty of Education, Australian Catholic

University, Melbourne Campus and founding convenor of the Association for Environmental Education Early Childhood Special Interest Group established in 2003.

My present research interests are education for sustainability and forest preschool approaches. In my doctoral thesis entitled *Sustainable outdoor playspaces in early childhood settings: Investigating perceptions, facilitating change and generating theory* (Elliott, 2012) I investigated how early childhood communities may engage in transformative processes through action research. Also, forest preschool programs are now emerging in Australia and in 2012 I was commissioned by Westgarth Kindergarten to co-author an evaluative report of a pilot Bush Kinder program.

Thought Provoking Quotation: "for authentic human being the attitude of sustainability is not a bolt on option but a necessity" (Michael Bonnett)



VICKI BOHLING PHILIPPI, CONSULTING EDITOR

I have been a Licensed Parent Educator with Minnesota's Early Childhood Family Education program for the past 16 years, providing education and support for parents in school-based classes, parents of children with special needs, Head Start parents, teen parents and English language learners. Prior to entering the early childhood field, I earned my M.Ed. in postsecondary administration from the University of Nebraska-Lincoln and went on to serve as Director of Leadership Development and Assistant Dean of Students at Doane College in Crete, Nebraska. In 2003 I became affiliated with the Dimensions Educational Research Foundation, and I am currently serving as trainer, teacher co-researcher, and research analyst for the organization's Nature Explore program.

My research interests have been devoted to the qualitative study of young children's skill development within an outdoor classroom setting, with a particular focus on the role parents play in supporting this learning. Manifestations of this study include two recent publications for the Dimensions Educational Research Foundation: *This Never Would Have Happened Indoors: Supporting Preschool-Age Children's Learning in a Nature Explore Classroom in Minnesota* and *Supporting Parent Engagement in Children's Learning Outdoors: A Single Case Study*.

Thought Provoking Quotation: "The only real voyage of discovery consists not in seeing new landscapes, but in having new eyes." (Marcel Proust)

V**ICKI D STAYTON,** CONSULTING EDITOR

Vicki is a Professor in Interdisciplinary Early Childhood Education (IECE) in the School of Teacher Education at Western Kentucky University (WKU) in Bowling Green, Kentucky. She teaches both graduate and undergraduate courses in the blended Early Childhood and Early Childhood Special Education programs.

Vicki has been the recipient of numerous state and federal grants specific to preservice education and professional development. She has been active in both state and national initiatives having served as a Past-President of the Division for Early Childhood (DEC) of the Council for Exceptional Children (CEC), as chair of DEC's Personnel Preparation Committee, and co-chair of the personnel preparation strand for DEC's recommended practices. She has served on CEC, NAEYC, and state committees specific to personnel standards and accreditation and is now DEC's representative to CEC's Knowledge and Skills Committee. Her involvement in Environmental Education began in 1978 when she coordinated a three year federally funded project, Environmental Approaches to Special Education, which was designed to facilitate the inclusion of young children with disabilities into "regular" classrooms through Environmental Education.Since that time, her ongoing focus on Environmental Education has included publications; pre-conference workshops; conference presentations; workshops for families, preschool and primary teachers; and the design and implementation of university coursework. She conducts research and has published articles and book chapters specific to issues in ECE and ECSE personnel preparation. Most recently, her research has addressed the extent to which preschool and primary teachers trained in Environmental Education curricula and methods implement these curricula and strategies with children and families.

Thought Provoking Quotation: "This we know. All things are connected." (Chief Seattle)

YASH BHAGWANJI, EXECUTIVE EDITOR

I am an Associate Professor and Coordinator of Early Childhood Programs at Florida Atlantic University. After receiving my Ph.D. in Early Childhood Special Education from the University of Illinois at Urbana-Champaign, and prior to FAU, I coordinated the Interdisciplinary Early Childhood Education Programs, served as the Co-Director of the Family Support Center, and was the recipient of several national and state-funded grants to conduct research and improve access to quality early care and education while at the University of Louisville in Kentucky.

Based on NAAEE's Guidelines for Excellence: Early Childhood Environmental Education Programs, I had developed the *Early Childhood Environmental Education Rating Scale: A Formative Evaluation Tool to Help Programs Improve Nature Education for Young Children* (NAAEE, 2011). Among my other activities most related to environmental education are professional presentations advocating nature-based curriculum, encouraging green or sustainable practices, and promoting healthy environmental and living conditions for children in early childhood programs. At the university level, the development of undergraduate and graduate courses focusing on topics related to early childhood environmental education has been an important focus.

My research interests focus on the complex relationships among children, families, communities, and policies that impact the well-being of all. Environmental education and places of nature have significant roles to play in enhancing quality of life. I believe quantitative and qualitative designs of study can both contribute in promoting our understanding, and mixed methods can be especially beneficial in providing greater contextualization and interpretation.

Thought Provoking Quotation: "How paramount the future is to the present when one is surrounded by children" (Charles Darwin)

Also serving as IJECEE Consulting Editors are Kristi Cooper, Courtney Crim, and Carolyn Edwards. Their autobiographies will be provided in a future issue.

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INTERNATIONAL JOURNAL OF EARLY CHILDHOOD ENVIRONMENTAL EDUCATION (IJECEE)
Addressing Issues, Policies, Practices, and Research That Matter

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The journal has two broad visions:

(a) To encourage thoughtful sharing of information about important ideas, conceptualizations, and frameworks, as well as effective practices and policies in early childhood environmental education; and

(b) To reach an extensive global readership in order to maximize the impact of the thoughtful information.

Thoughtful information may manifest through book reviews, description of educational approaches and programs, research investigations, and development or interpretation of theoretical perspectives. Associations among and between the following will be emphasized:

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· Community opportunities
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· Environmental activities, education, or experiences
· Mechanisms or processes related to knowledge acquisition
· Attachment or maintenance of affective dispositions
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