

## Regarding Animals: A Perspective on the Importance of Animals in Early Childhood Environmental Education

Patty Born

*Hamline University, USA*

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### ABSTRACT

Using the human-animal bond, relational ecology, and the “common world” framework as theoretical underpinnings, I set out to better understand the array of settings and experiences wherein young children are able to interact, either directly or indirectly with animals within the context of early childhood environmental education (ECEE). There is opportunity within the discipline of ECEE to reflect on practice and means of supporting children’s engagements with and relations to non-human animals. This approach asserts children and animals as co-creators of children’s learning and development. The relationships, nuances, and engagements between child and animal are themselves teachers (Taylor & Pacini-Ketchabaw, 2015). This has important implications as we move into a time where environmental connectedness and interspecies connectedness matter more than ever (Haraway, 2008; Kellert, 2012; Louv, 2007).

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### Author’s note:

Throughout this article, I refer to non-human animals and humans, as though they are two separate groups. In reality, humans, are of course animals, but I’ve chosen this binary because in children’s own usage, their tendency is to describe non-humans as “animals,” and exclude themselves linguistically from that definition (Herrmann, Medin, & Waxman, 2002). Maintaining that binary for the purposes of this article helps to shed light on the important point that children regard animals as “social others;” like them, but different (Myers, 2007).

Additionally, I use the word “animals” to include all members of the kingdom *animalia*, including insects and fish, which are occasionally left out of conversations about animals.

Finally, my use of the word “wild” is again an intentional choice based on children’s parlance. Personal communication with the Oxford Centre for Animal Ethics led me to the understanding that their preferred term is “free-living” as opposed to wild, when referring to animals in their natural habitats. However, since most children use the term “wild” to refer to same, I’ve chosen to do so as well.

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Evident within the disciplines of environmental education (EE) and early childhood education (ECE) is increased awareness of the important role of nature in young children’s lives. In recent years, as interest in this topic has grown, the fields of early childhood education and environmental education have each expanded to create a new disciplinary area where the two fields overlap: early childhood environmental education (ECEE). While the overall goal of environmental education is described in the Belgrade Charter as education to “develop a world population that is aware of, concerned about the environment and its associated problems” (UNESCO, 1976), undergirding any individual’s capacity for environmental concern is a fundamentally positive attitude toward, and personal connection to the environment (Chawla 1993; NAAEE, 2016; Nisbet, 2009). This begins in the early years, hence, the goals for

early childhood environmental education are more about fostering a sense of wonder and curiosity about the environment. Early childhood environmental education aims to support young children in the development of knowledge, appreciation, curiosity, and respect for the natural world within a developmentally appropriate framework (NAAEE, 2010; Wilson, 1993). In 1984 E.O. Wilson famously asserted that as humans, we have an innate need to associate with other living things, including plants and non-human animals. This approach, “biophilia” has informed and shaped the field of ECEE. Indeed, a number of studies show that children’s academic growth, behavior, and stress levels improve when they have frequent exposure to natural settings and opportunities to engage with their environment (Chawla, 2012; Kuo, 2010), underscoring the suggestion that contact with nature has an important role in development and childhood well-being.

Since 1967 when the first nature-based preschool in America was created, the total number of (self-reported) nature-based preschool settings has increased to over 130, according to the Natural Start website (Natural Start Alliance, 2017). Worldwide, the number of nature-based preschools or early care settings is not yet measured, although certainly there are many nature-based preschools located in numerous countries around the globe. A nature-based preschool is characterized by three principles: “nature is the central organizing concept of the program,” it is “based on high-quality practices of both early childhood education environmental education,” and it “address[es] both child development and conservation values” (Baillie & Finch, n.d). In addition to nature-based preschools in America, recent years have seen an increase in “forest kindergartens” (Sobel, 2016) inspired by the European forest schools which originated with Sweden’s very first “Rain or Shine” school. Forest kindergartens are characterized by an approach that includes lengthier immersion in nature, with children often spending full days outdoors (Robinson, 2008; Sobel, 2016). Within “nonformal” environmental education settings (Heimlich, 1993; La Belle, 1982; Schlomo & Shmida, 2009,) which occur outside of school in places such as nature centers, arboreta, zoos, and aquaria, there is a marked increase in outreach and opportunity for very young children to participate in nature-based activities, classes and experiences.

Nature based preschools, forest kindergartens, and informal EE settings, each in a multitude of ways, promote young children’s engagements with nature and the natural world. ECEE experiences often are characterized by children’s opportunities to bond with nature through risk-taking, teamwork, physical challenge, creativity, and unstructured play, behaviors which have resulted in measurable impacts on children’s self-efficacy, agency, and prosocial behaviors (Baillie, 2010; Chawla, 2012; Kellert, 2002).

In 2008, the World Forum Foundation published *A Call to Action: Reconnecting the World’s Children with Nature* which urges “families, educators, and community leaders worldwide to take action to strengthen children’s connection to nature.” That same year, the organization convened a gathering of educators and established the Nature Action Collaborative for Children to support caregivers in connecting children to nature in developmentally appropriate ways.

The North American Association for Environmental Education (NAAEE) developed *Guidelines for Excellence in Early Childhood Environmental Education programs* in 2010 to support educators and interested others in better understanding what makes something a high-quality ECEE experience, asserting that “the task of environmental education for young children is to forge the bond between children and nature” (NAAEE, 2010). Soon after, an organization, the Natural Start Alliance, was created within NAAEE to organize and support the many entities that aim to deepen the connection that young children have with nature.

Paralleling the growth of ECEE, the field of education for sustainable development has increased in scope to include early childhood education for sustainability or ECEfS. ECEfS refers to education *about, in, and for* the environment (Davis, 1998, 2009; Lewis, Mansfiel, & Baudains 2010; Maynard, 2007), which encompasses knowledge about ecological systems, direct experiences in nature, and making socially just and sustainable choices (Hedeval, Almqvist, & Ostman, 2014).

Though these numerous domains all acknowledge the importance of nature in children’s lives, and aim to deepen the bonds and sense of nature-connectedness (Carson, 1956; Nisbet, 2009; Reed, 1996) experienced by young children, the discussions of “nature” within the domain of EE tend to refer to the environment as a whole: plants,

animals, rocks, water, and all the other elements that make up the natural environment. The term 'nature' encompasses "green space" (Taylor & Kuo, 2006;) "wilderness areas" (Hofmeister, 2009) or "nearby nature" (Wells, 2000) for nature settings ranging from untrammled acres to those green places and parks found in urban environments, and rarely makes direct reference to the role of animals and their places within natural settings. Within these definitions of nature, the role of non-human animals, and consequently, their role in children's lives, as well as their place in children's perceptions of and feelings about nature, remain largely unexplored specifically within the domain of ECEE.

Relationships with animals, whether domesticated or wild is important for the development of empathy (Daly & Suggs, 2010; Melson, 2001, 2003; Myers, Saunders, and Garrett, 2004; Poresky, 1990; Sobel, 1996.) Animal interactions may ease tension, anxiety, stress and feelings of depression (Beck, & Meyers, 1996; Katcher, 2002; Thomas & Beirne, 2002), and at times provoke children to speak or express their innermost feelings or questions (Burke, & Copenhaver, 2004; Karniol, 2012), practice caregiving (Melson, 2001, Myers & Saunders, 2002), and may even improve the quality of their academic learning (Daly & Suggs, 2010) as well as their confidence, social skills, and cooperation (Friesen,. 2010; Jalongo, 2015; Katcher, 2002; Redefers & Goodman, 1989). Moreover, and of particular importance within the discipline of ECEE, animal interactions seem to result in a generalized sense of care toward other creatures (Baillie 2010; Chawla, 1999; Kahn, 1997) and the natural environment, as well as contributing to a deepening sense of place in children's development (Sobel, 1993; 1997).

### **Animals in Children's Lives**

Even from infancy, many children demonstrate curiosity about and interest in animals (Kidd & Kidd, 1987). Prolonged gazes, reaching or gesturing at animals, and grunting or vocalizing are ways that infants and toddlers express curiosity and indicate interest in animals and pets at home and elsewhere.

Americans spend billions annually on the care, feeding, and presumed happiness of our domestic pets such as guinea pigs, cats, dogs, birds, goldfish, rabbits, etc. (APPM, 2017). Children who grow up in homes with pets typically show a willingness to participate in directly caring for the pet through actions such as feeding, grooming, and talking to the pet (Katcher, 2002; Poresky, 1990). In over 60% of American households with pets, parents report obtaining pets "for the children," suggesting that adults are cognizant of at least some of the benefits to young children that pet ownership can provide and that they perceive some value in the relationships between children and animal (Melson 2003).

While most adults love and cherish companion animals such as household pets, or value charismatic megafauna for their important role in nature, children value animals simply because *they are*. Children recognize the intrinsic value of animals not because of what animals do for us, what we can take from them, or how they help us, but simply because they are living creatures (Kidd, & Kidd, 1990). This viewpoint warrants special consideration, as it suggests a view of and relationship with animals that is very different from the view of animals held by many adults. This "common world" framework, described by Taylor and Giugni (2012), as adapted from Latour (2004) positions young children as members of a community in a world inclusive of non-human animals, rather than one where animals are simply characters or "supporting actors." In other words, animals are regarded as important beings who have both agency and autonomy, and are valued intrinsically, rather than being valued because they give us companionship, food, amusement, and products.

### **Animals in EC Classrooms**

In many early childhood classrooms, both nature-based and traditional, classroom pets are kept, although licensing regulations vary from state to state and impact not just whether animals may be kept, but which species. Teachers who do keep classroom pets do so for a variety of reasons, including their potential to enhance curricular goals (Gee et al. 2012; Hachey & Butler, 2012), reduce stress and anxiety (Kellert, 2005; 2012) and their presumed role in the development of pro-environment feelings (Acar & Torquati, 2010; Baillie, 2010), especially of young children. The role of children in caring for classroom pets is varied, but may include feeding, cleaning the tank or other enclosure,

and creating signs or decorations for the pets (Uttley, 2013; Selly 2014). Animals most frequently kept in early childhood classrooms are fish, followed by reptiles and amphibians (Uttley, 2013).

In addition to feeding and directly caring for pets, one of the more common behaviors children engage in is talking to animals. This sense of “animal as peer” asserts the child’s awareness of animal as another being, capable of communicating, understanding, and perhaps even responding to a child’s social advances (Myers, 2007; also see Figure 1). When children talk to non-human animals at home, or those who live in classrooms as pets, it indicates a desire for communication with them. This is known as affinity, or attunement: a sense that the animal not only recognizes what the child is saying, but that the animal is interested and sympathetic to the child’s feelings and thoughts (Blue, 1986; Daly & Morton, 2006; Lasher, 1998; Myers, 2007). Indeed, when asked what their pets think about, some children even answer, “My pet is thinking about me” (Triebenbacher, 1998).

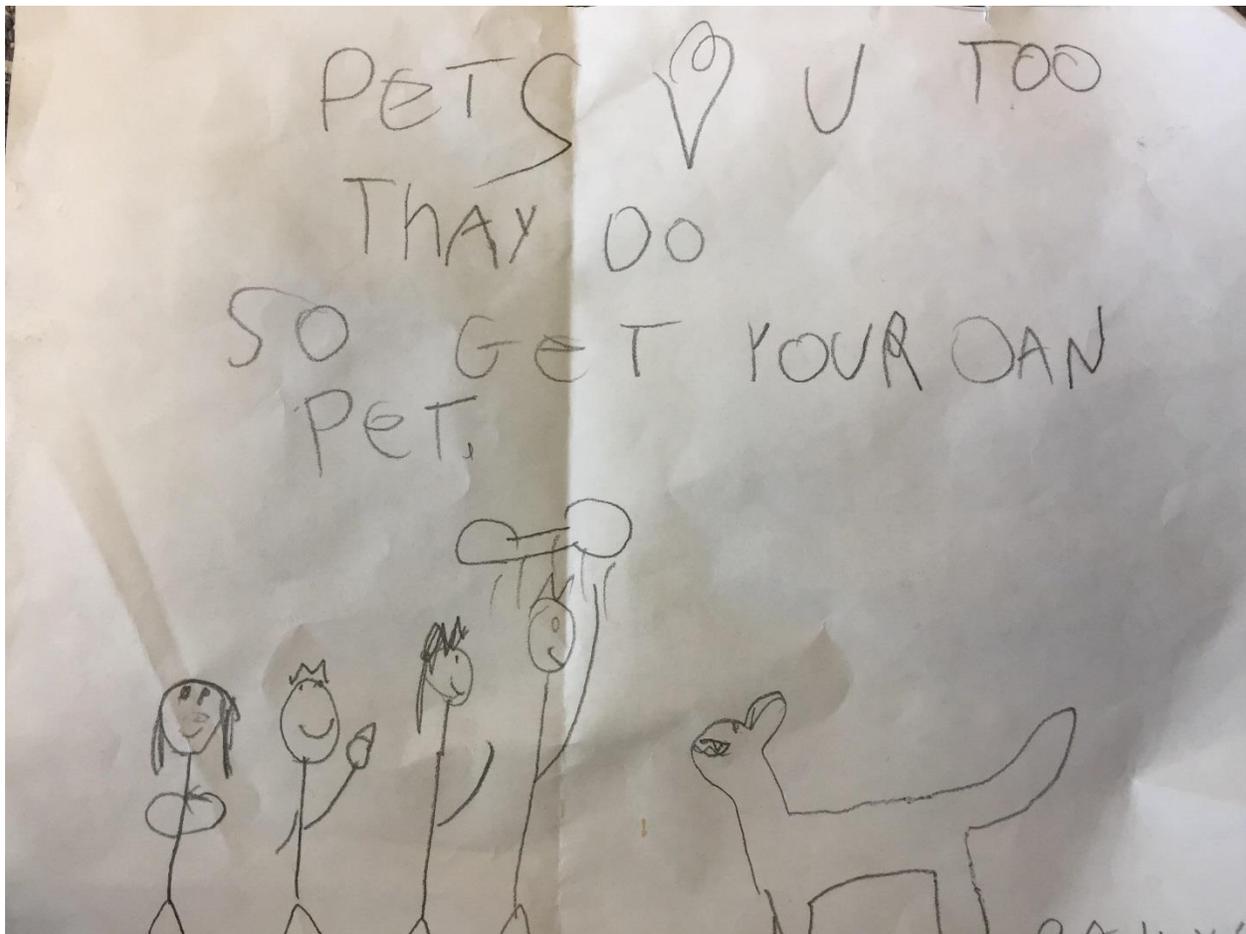


Figure 1: Illustration of a child’s sense of “animal as peer”

During dramatic play in the EC classroom, children frequently engage in zoomorphism, taking on the characteristics of animals, and playacting at being animals, often making animal noises, moving like animals, or saying the things they wish the animal would say. These zoomorphic behaviors are ways that young children internalize their understanding about animals. In addition to deepening their understanding of animals, playacting and demonstrating animal behaviors can demonstrate children’s knowledge of animal behavior, movement, and even habits. In so doing, children acknowledge animals as individuals as well (Sobel, 1996; Myers, 1997). Speaking for animals-giving voice to the animal they are pretending to be, is a way that children demonstrate that they’re taking the perspective of another creature-or attempting to, anyway. Verbalizing the things they think the animal might

say or want to say is a way that they share with us their understandings of what animals perceive and understand. This demonstrates an understanding, or a desired understanding, of animals' subjective needs (Blue, 1986).

When in the presence of animals, whether captive in zoos or nature centers, companion animals such as the family dog, or common, free-living "wild" animals like geese and squirrels, children react with a mixture of curiosity, delight, excitement, trepidation, or other strong emotion. Young children often love to talk about animals, look at pictures of animals, cuddle with toy animals, and encounter real animals. Clearly, animals have a large role to play in the inner landscape of the child. Children are intrigued by the variety of sounds, smells, textures, and colors of animals. They are curious about these creatures who are alive and share our physical needs for food, shelter, and water, and who sometimes seem to display emotions. How children perceive animals, their characteristics, and their abilities is influenced by many factors-cultural and family beliefs and values, media such as books, movies, video games and apps, personal experiences, and exposure to animals in a variety of settings including home, zoos/aquaria, the classroom, and in nature. There are some ways that animals are like us, and other ways that they're different. In this way, animals become "social others" (Myers, 2002; 2007), helping children identify and understand oneself in relation to other beings, and through interactions with others.

### **Animals in nature**

Where then, are the interactions with wild animals, and what qualities can be said to characterize them? How do children regard wild animals? How do they make sense of the lives and being-ness of wild animals, when they are encountered? There is a rich emotional complexity to young children's understanding of and connection to animals. Within the context of ECEE, the term "affordance," is commonly used to describe the relationship between an individual and the potential of an object (Gibson, 1977; Jones, 2003). For purposes of this discussion, and since it is a term largely well-understood within the context of ECEE, I've cautiously adapted the term "affordance" to include the potential for something to happen between one individual and another—in this case, a child and an animal—as a result of being in the presence of one another. Note that in adapting the term in this way, I seek to broaden the definition of the word to include objects *and* animals, rather than to reduce animals to the status of objects. Moments between young children and animals can therefore be characterized as *interactions* (when the child and animal are interacting directly, as in capturing insects or feeding fish) or as *affordances*, when the child is in the presence of an animal and is interested or cognitively engaged with the animal.

There remains a gap in research and practice when it comes to children's interactions or affordances with wild animals, perhaps because animal encounters, when they happen outdoors with wild animals, are unpredictable, usually unplanned, and of varying levels of intensity for everyone concerned: child, adult and animal alike.

During any given day in a nature-based early childhood setting, children may encounter ducks swimming in a pond, squirrels scampering up and down the trees, and countless insect species. In ECEE settings, wild animal encounters often include activities such as birdwatching, capturing or observing insects, or observing regionally common species such as gray squirrels, lizards, or other animals that are relatively desensitized to humans (Selly, 2014). Educators may respond to animals and animal encounters very differently, depending on their own positionality and comfort with regard to certain species, and there are many factors that influence one's positionality toward animals or animal interactions (Kellert & Westervaldt, 1984).

Teachers' reactions to wild animal encounters, and the extent to which they support children's curiosity or desire to interact, watch, or ask questions about animals, vary depending on their own feelings toward the animal species they encounter. For example, just like children, teachers may exclaim with joy, recoil in fear or disgust, or demonstrate hesitation and uncertainty. Modeling, as we know, is a powerful means of educating young children. Adult behaviors and responses to animals can significantly influence children's perceptions, comfort, expectations, and affinity toward animals. This can have a positive or negative impact on the children's own developing feelings about animals (Muris, van Zwol, Huijting, & Mayer, 2010).

When willing to support children's engagement with animals, caregivers may rely on strategies such as describing the animal's actions: "*he's coming to the birdfeeder, now he's pecking at the seeds,*" narrating the child's

observations: “*Rebecca sees the geese swimming away! Bye bye geese!*” or anthropomorphizing the animals: “*the butterfly came up to say hi to you this morning*” in an attempt to satisfy curious children. This is not evidence of poor intentions or ignorance, rather, it demonstrates that most adults themselves are somewhat tentative in their relations with other-than-human species. (Dwyer, 2007). If adults had a better understanding of the role of animals in children’s development, or had a stronger sense of the “common world” experience of children and animals (Taylor & Giugni, 2012), which asserts animal and child as equal partners in co-creating an experience together, they may employ different strategies in response to animal-child affordances, rather than assuming roles as narrators, describers, or storytellers. While each of these roles has a purpose and supports development in some way, each misses the opportunity to allow for the multispecies interaction to occur, which can be a meaningful and intimate connection between child and animal that happens between those two beings on their own terms.

As educators we need to reflect on how we as adults enter and support that “childspace” - that place that is uniquely situated in the experience of the child, that is the animal-child affordance . How do we do it a way that honors nonhuman animals and acknowledges animals as other without reinforcing the human-animal-nature separation? It is difficult for adults to “grant wild creatures their otherness, their own particularity” (Dwyer, 2007). Young children, however, are inclined to accept and value animals for their “otherness” - children naturally see animals as unique non-human others, and don’t need adults to narrate, explain, or prompt: they can engage in connecting with animals on their own terms, and experience the animal in their own way (Kidd & Kidd, 1990; Melson, 2013; Myers, 2007). We can learn from their example.

At this time, there are no identified, common practices for educators or practitioners with specific regard to engagement with wild animals in early childhood programs, other than a short list of recommendations around care of animals in captivity (NAAEE, 2010), nor are any of the *Guidelines* specifically focused on animal-child interactions or pedagogy. Nevertheless, animal contact may be important in children’s development of autonomy and sense of self (Kidd & Kidd, 1990; Melson, 2013; Myers, 2007), connection to nature, sense of place, and nascent feelings of stewardship-all outcomes valued by ECEE. The ECEE field is missing a key support for educators who wish to better understand and foster child-animal interactions and connections.

The North American Association for Environmental Education *Guidelines for Early Childhood Environmental Education* do acknowledge the presence of animals within ECEE several times throughout the document. First, they are mentioned in *Key Characteristic 1, “Program Philosophy, Purpose, and Development* (p. 11-12).” Here the *Guidelines* caution educators to ensure the program addresses “appropriate specimen collection” and asserts the role of adults as “role models for the care of plants and animals in the environment.” Later in a statement, there is a suggestion about “handling animals and plants gently and with respect” (p. 12). This conflation of animals and plants is common in the ECEE literature, and reinforces a human-animal separation that removes children from the realm of animals. It further suggests a power dynamic wherein humans are free to collect and handle animals, albeit respectfully. This implication is troubling if one is cognizant of the human-nature binary narrative so common in environmental education. The field of eco-pedagogy acknowledges and explores the dichotomy that maintains an anthropocentric (human-centric) way of being and participating in the world, implying that humans are neither part of nor connected to nature (Kahn, 2010). Within the context of the discussion of reconnecting children with nature, some reflection on this presumed separation seems appropriate. As well, reflection on how adults’ sense of the separation between human and nature, and resulting reinforcement of that position through our language, relationship with the natural world, and modeling of relationships to other species, is in direct opposition to children’s own experience of being connected to nature (Chawla, 2002).

It’s important that ECEE as a discipline acknowledge the power dynamic that is reinforced by this dichotomy. Many toddlers become agitated when their peers grab butterflies or caterpillars and when a child unintentionally crushes a living creature, it can be deeply upsetting to both onlookers and to the child who does the crushing (Gilligan & Wiggins, 1987; Myers, 1997; Myers & Saunders, 2002; Poresky, 1990). In addition, many young children who are beginning to explore relationships of power and vulnerability explore this dichotomy through capturing, chasing, or otherwise provoking animals, testing to see “what can I do?” Conversely, exploring feelings of care, and practicing caregiving and nurturing are other ways children explore the human-animal power dynamic (Melson, 2001; Selly, 2014). In order to support children’s growing sense of self in relation to other, their sense of nature-relatedness,

and their understanding of the natural world and the creatures who inhabit it, adults should recognize and support these moments as opportunities for children to grapple - albeit playfully-with their role in the human-animal-nature landscape.

Of course, it is very important to give young children lots of hands-on opportunities in nature, and to guide them in safe, sensitive handling or physical contact with other species. Physical connections with living beings in nature can be powerful motivators for learning and invoke a sense of wonder (Carson, 1965; Sobel, 1993). The tacit acknowledgement by NAAEE of the responsibility of adults to serve as role models underscores the need for adults to think critically about how we ourselves approach and model animal-human interactions, relationships, and values.

Later, in *Guideline 1.8, Interpersonal and Intergenerational Relationships*, there is a recommendation about respecting the feelings of others, however these recommendations are limited to human-human interactions. While human-human interactions are the primary focus of this section of the *Guidelines*, I posit that the field of ECEE could powerfully affirm the importance of the child-animal relationship by also recognizing the presence of animals in children's social relationships, and by acknowledging the overall importance of animals in children's lives, through a mention of respecting -or at least developing an awareness of- the feelings and needs of animals. Certainly, respecting the perceived feelings and needs of animals is an important element of ECEE, if the discipline aims to support children's social, psychological, and emotional well-being. If one is uncomfortable with the potential of anthropomorphizing or "assuming we know what animals feel" - one could at least begin conversations with children about what they think animals feel and need, as this is an area rich with children's thoughts and ideas; likely, the children have been wondering about animals' thoughts, feelings and experiences for some time and have some ideas about what they need (Myers, 2004).

While ECEE as a field, along with its seminal literature, does acknowledge that animals are part of nature, and the disciplines of EE and ECEE, each recognize that animals are important for the many benefits they offer children, I assert that the discipline is in need of an explicit focus on the role and potential of animals in children's development. It is in need of a shared understanding about how educators can best support child-animal relationships. This understanding should encompass not just the value of animals for what they offer or bring to children's lives, but for what they are, innately. Since environmental education is generally considered to be education *about, for* and *in* the environment (Davis 1998; 2009; Deans & Brown 2008; Hedevalk, Almqvist, & Ostman, 2015; Lee 2001; Lee & Ma 2006; Lewis, Mansfield & Baudains 2010; Maynard 2007), I respectfully suggest that we include in our working understanding of ECEE, elements of environmental education *about, for* and *with* animals. It behooves the discipline of ECEE to better examine and understand how to support educators in creating and facilitating intentional ethical interactions with free-living animals. I further propose that ECEE practitioners consider, in addition to the NAAEE guidelines when evaluating their programs, the following recommendations:

Education **about** animals means renewing a commitment to critically examining the portrayals of animals in EC settings. As practitioners committed to both children and the natural world, we must acknowledge the impact of stereotypical, negative, or unrealistic portrayals of animals and the subsequent effect of those portrayals on children's perceptions of animals and their relationships to animals. (Karniol, 2012; Marriott, 2002; Burke & Copenhaver, 2004; Bettelheim, 2010; Campaign for a Commercial-Free Childhood, 2012). In order to provide children with opportunities to gain authentic knowledge and develop accurate understanding about animals, we should seek to provide authentic portrayals in media, games, toys, and other materials whenever possible. By aiming to present scientifically accurate portrayals of animals in EC settings, rather than stylized versions of the same, we honor the importance of animals in their own right, as well as their role in children's nature-connectedness. Children will connect an accurate representation of a butterfly to the natural world much more readily than a stylized one. Education about animals means actively seeking out opportunities to discuss animals, their needs and roles within nature and providing children with opportunities to make discoveries and ask questions about animals when so inclined. Using best practices in ECEE, such as inquiry-based approaches, (Chaloufour & Worth, 2003; NRC, 2000; Worth 2010; Worth and Grollman, 2003), the project approach (Edwards, Gandini, & Forman, 1998; Helm & Katz 2011), and developmentally appropriate practice (Copple & Bredekamp, 2009), teachers can thoughtfully and

ethically engage children in thinking about, learning about, and building knowledge about animals that is grounded in realistic portrayals, and discussions about real animals in “real life.”

Education **for** animals means engaging in conversations, discussions and experiences that allow children to begin to wrestle with their own developing sense of ethics, justice and care toward animals. Being mindful of the need to not present “too much too soon” when it comes to environmental education (Sobel, 1996) and also recognizing the desire and responsibility many educators feel to be careful about appearing to advocate or influence children’s thinking in one way or another, I suggest instead that educators simply allow children space, time, and sensitivity when grappling with big feelings about what animals need, feel, and experience. When finding a dead frog on the path, for example, rather than steering children around it or making a glib comment, it means allowing children to stop and notice, to discuss their feelings, thoughts, and ideas, and treating the dead frog with respect. It means creating and maintaining space for children to experience their feelings upon seeing a dead creature, and allowing them to process those feelings ethically, respectfully, and safely. It means refraining from imposing one’s own opinions or assumptions about what animals might need or experience, so that children are free to have their own ideas and explore them respectfully and safely. It means talking frankly about whether it’s OK to pick up a creature simply because you are curious about it, it means, as an educator, reflecting on the animal-human binary and how you participate in or dismantle systems of power within that binary.

Education **with** animals means seeking out affordances and encounters with animals, both free-living and domestic, recognizing that simply being with or in proximity to animals is valuable and important in its own right. Rather than the prevailing attitude of learning “from” animals (which implies that they are either teacher or tool, each a role in service to humans) learning with animals means viewing them as partners in the experience, members of a community of nature who have agency and autonomy. For example, learning “with” animals would mean spending time outdoors in search of animals or animal homes, but doing so ethically and responsibly, acknowledging the importance of animals’ own agency in creating their homes, rather than viewing animal homes as “ours to learn from.” It means supporting children in their explorations and observations of insects and other commonly encountered animals, while being gentle and mindful of demonstrating care and sensitivity toward animal species. It requires reflecting on classroom practices that involve the use of animals as “tools” or “specimens.” A common experience in many EC settings involves using animals themselves as tools, scooping up earthworms and bringing them indoors for children to examine on damp paper towels, poking and prodding them to provoke reactions. Instead, if approaching this experience with a perspective of learning “with” animals, a teacher would encourage children to instead observe worms in nature, crawling through the humus or emerging from their underground homes after a rainstorm. Education with animals requires us to recognize that child-animal interactions or affordances have meaning and potential to impact children in ways that we don’t yet understand—they are between the child and the animal. It also requires us to change our view of animals—they are not “tools for investigation” or “helpers in the classroom,” they are instead partners and “others” in a child’s experience, living beings who have agency and freedom. It steps away from the anthropocentric view of humans-as-center of nature, and instead views animals as neighbors, members of a shared community entitled to their own experiences.

Continued study of the value and meaning of animals in young children’s lives, development, and nature-connectedness will expand the capacity and quality of ECEE as a discipline, and will allow us to better honor children’s relationships with non-human animals, thereby strengthening our own development and nature-connectedness. In order to be congruent with the values of EE to create environmentally literate citizens who are deeply connected to nature, it’s time to regard animals with a greater sense of value.

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