

world; and laying the groundwork for skills and dispositions related to taking action to improve and protect the environment. Our review sample studies describe programs focusing on trees, water, and nature more generally; many take place in immersive, nature-rich settings, while others bring nature-rich elements into classrooms. The programs include a range of outcomes designed to nurture children's development of action skills and encourage developmentally appropriate pro-environmental behaviors. In addition to an environmental focus, the reviewed studies indicate that ECEE programs emphasize related early childhood goals of personal development as well as academic progress (e.g., in the form of kindergarten readiness).

Our sampled studies provide evidence of strongly positive outcomes from ECEE, when measured holistically across a range of affective and cognitive dimensions, conveying how those programs often engender a sense of joy and curiosity inherent in effective early childhood educational programs. The programs encourage young participants to connect those affective elements with environmentally related knowledge, action orientation, and civic engagement, focused on the environment not only as an educational setting, but in its totality (Sauvé, 2005). As Bailie (2012) writes, "the combination of early childhood education and environmental education is more powerful together than each by itself" (p. 132). Such a synergistic relationship offers promise to enhance the quality of the human experience in the world with beneficial impacts for spaces and species, for generations to come.

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### CRedit authorship contribution statement

**Nicole M. Ardoin:** Conceptualization, Methodology, Formal analysis, Resources, Writing - original draft, Writing - review & editing, Supervision, Project administration, Funding acquisition. **Alison W. Bowers:** Conceptualization, Methodology, Formal analysis, Investigation, Writing - original draft, Writing - review & editing.

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### Appendix A. Supplementary data

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