

# Are We Evaluating Children's Nature Experiences?

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**The theme of the 2010 International Zoo Educators Conference is "Connecting Children to Nature."**

**Why is this theme so relevant for conservation educators today?** A number of past studies (Chawla 2006) have investigated which life experiences have motivated people to act to protect the environment, and when in their lives, people had these experiences. Researchers found that people in the United States and Europe consistently point to the same kinds of life experiences, mainly in childhood, as profoundly influencing their later environmental interests and activism. So, if we want an informed and environmentally-supportive voting public who care about wildlife then connecting children with nature is a priority.

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Zoos and aquariums with their breathtaking animals, audiences largely comprised of families with young children, and professionally-trained educators working on site, are arguably some of the best places to watch this child-nature connection unfold.

But not all are believers.

In 2006, Dr. Chris Kuhar opened his presentation at the 18th International Zoo Educators' (IZE) Biennial Conference by paraphrasing an eminent primatologist's article that said that education has not been proven to be an effective tool in the field of conservation.

Although many conservation educators may disagree with this statement, it is true that there is very little evaluation data on conservation education with children. In fact, in reading through the new special issue of the *American Journal of Primatology* on conservation education (Volume 2, Issue 5, May 2010) I am astounded at how many times the various authors state that only a limited number of quantitative studies that measure the effect of conservation education have been published.

**For an education program to achieve long-lasting effects, a change in knowledge, attitude, and behavior has to occur. These are all measurable as long as we as educators include evaluation as part of our programs.**

At a February 2010 *in-situ* conservation education workshop held at the Brevard Zoo in Florida (USA), many educators presented wonderful educational materials that they had created and/or purchased, brought to developing countries and trained in workshops. However, few were evaluating these materials or their impact on teachers, students and wildlife conservation. How were these materials used by the teachers once in the classroom? How did students respond to these new materials? Did any change occur in students' willingness to adopt positive wildlife behaviors after participating in the program? Were there any changes in the conservation of a species or ecosystem due to the education program (e.g. reduction in snares, less wood being removed from the forest, reduction in eating bushmeat, increase in species numbers from census data, etc.)? Biological changes are perhaps the hardest to identify which is why longitudinal studies are most important when assessing changes in species and/or ecosystems over time.

**It seems clear that to become creditable in the education and conservation fields, conservation educators need to evaluate and publish their work.**

It sounds so easy, but we know that evaluation isn't easy. If it were, we'd all be doing it. Time, funds, negative information, design, and knowledgeable partners in statistical analysis of data are challenges that may cause barriers to including evaluation components in our education programs and projects that involve children.

But once evaluation results are obtained, the rewards are great. Educators can state percentages and results about their program's conservation impact with conviction. Funders will be more supportive of projects with clear evaluation results. And educators have data

that confirms their target audience is leaving a program with the intended messages. So, when you are planning your next conservation education program think about what research questions you might want answered about the program's impact on children's wildlife conservation. Develop partnerships with scientists who can help you analyze your evaluation data. There are many social scientists working in universities or in the private sector who would be eager to work on non-formal education projects. Then identify a journal that might accept your data. Some journals to consider are the: Journal for Environmental Education, Journal of Interpretation Research, Curator, Journal of the Visitors Studies Association, Zoo Biology, Applied Environmental Education and Communication.

With evaluation in hand, conservation educators will move the field of wildlife education into the 21st century, increase their credibility in both the conservation and education fields, and rest well at night knowing that their education efforts are making an impact on wildlife conservation.



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#### What questions are conservation educators asking about children and nature experience?

- What knowledge do children take away from a nature experience?
- Does a positive change in conservation knowledge, attitudes and behaviors persist over time?
- How does a zoo-based nature experience change children's attitudes about nature? Do these changes persist into adulthood?
- How interested are children in initiating positive conservation behaviors after participating in an education program?
- What barriers do parents perceive in assisting children with nature activities?
- What are the pre-existing conservation knowledge, attitudes, and behaviors of children visiting zoos and aquariums, and how do these entering characteristics contribute to changes in their understanding of animals and conservation?
- Does a nature experience for children lead them to adopt or enhance caring attitudes toward wildlife?
- Do children spend more time outdoors as a result of a conservation education program?
- Do children have a heightened awareness of their surroundings as a result of a conservation education program?

