





Marilyn Brink, the Chicago Zoological Society's manager of professional development and early childhood, works with kids and adults in urban settings.

NURTURING NATURE EXPLORERS

NATURESTART™ NETWORK
INSPIRES PLAYTIME

We live in an increasingly urbanized world. Today, more than 80% of Americans reside in cities, compared with only 50% at the beginning of the last century. In industrialized countries, up to three-quarters of all young people live, learn, and grow up in cities. Plus, the majority of youth in the developing world will be living in urban areas in the next few decades.

Nature play and exploration are important components of children's development, yet there is no other time in human history when so many children are separated from direct experiences with nature. A growing body of research emphasizes the vital role that direct contact with nature has for children's physical, cognitive, emotional, and social health and development. For example, studies show that children diagnosed with attention deficit disorder (ADD) or attention deficit hyperactivity disorder (ADHD) function better after nature experiences.

Children engage with the natural world through their senses, discovering how living and nonliving things interact and how they work. These early childhood experiences provide the building blocks for science learning and, later, conservation action.

For many urban children and their families, nature experiences will be facilitated through the zoo, aquarium, and museum community. Programs in these institutions cultivate knowledge and interest in nature. At the Chicago Zoological Society, though, we have taken this area of study to a whole new level. Our early childhood initiatives develop leadership among parents, caregivers, and educators who act on behalf of all children. We work to increase the opportunities children have to play, explore, and learn in nature indoors and out as a basis for developing lifelong environmental stewardship.

PLAY IN A NEW FIELD

In 1997, educators here began developing a unique new field called conservation psychology. The field applies social research to foster awareness and care related to the environment, including understanding how early nature experiences promote in children the development of emotional connections to nature and an environmental ethic. Conservation psychology research demonstrates that time spent playing in nature is especially important in helping children cultivate caring attitudes toward the natural world and learn to protect it. Today, our conservation, education, and training programs draw upon conservation psychology research, applying theory into practice. So do the activities offered to the public in our HAMILL FAMILY PLAY ZOO.

At Brookfield Zoo, the PLAY ZOO is ground zero for conservation psychology because it embodies the knowledge we have gained. Each year, more than 300,000 children ages 0 to 8 and their families get hands-on as they explore the 15,000-square-foot exhibit, which is surrounded by two acres of outdoor discovery gardens and features more than 300 animals.

Thanks to years of continuous improvement on the ideas originally

incorporated into the PLAY ZOO, we founded an initiative called NatureStart™ in 2010. Through this professional development training, our manager of professional development and early childhood helps informal educators in museums, zoos, aquariums, gardens, and nature centers gain the expertise necessary to design nature play curricula for children and their families. She and colleagues here have presented this training to educators from more than 100 institutions as diverse as the Chicago Park District, Indiana Dunes National Lakeshore, zoos and aquariums throughout the country, and even Temaikén Bioparque in Argentina.

NatureStart™ has received significant national attention, including recognition by the White House as a Champion of Change program; was certified as a course offered by the Association of Zoos and Aquariums; inspired a new academic certificate in early childhood and nature through Morton College in Cicero, Illinois; and was the impetus for the first play site established at a U.S. national park (Indiana Dunes).

A GROWING FAMILY

The success of NatureStart™ has fostered a large alliance of professionals who implement early childhood nature programming. Based on our partnerships with these early childhood educators and also with environmental educators, we expanded on the innovative NatureStart™ program by establishing the NatureStart™ Network in 2015. With funding from the Institute of Museum and Library Services, the NatureStart™ Network



Teaching tools that foster care for wild things can be found everywhere.



advances our ability to inspire young children and families to nature play and nature appreciation specifically in urban Chicago neighborhoods. This iteration of NatureStart™ includes a multidisciplinary cohort of participants, including experts in early childhood education and environmental education in both formal settings in schools and informal ones in museums and nature centers.

To facilitate nature play among young children in urban areas, the NatureStart™ Network targets audiences on a variety of levels and within several organizations. Two of these are El Valor and Mary Crane Center, both of which are established

Chicago-based Head Start programs that provide educational services to children of ages six weeks to five years in underserved neighborhoods. Nearly 350 children from 329 families, 97% of which are low-income, are enrolled at Mary Crane.



Through the NatureStart™ Network, formal and informal educators learn to see nature and practice nature-related activities from the perspective of children.

El Valor serves a low-income audience, with 1,306 children currently enrolled.

A third partner in the NatureStart™ Network is the Forest Preserves of Cook County, which as one of the largest districts in the country has land holdings that include more than 69,000 acres—about 11% of Cook County. Its 40 million annual visitors, including school and community groups, have access to interpretive nature programming at six nature centers.

So far, nearly 80 participants from the three organizations have attended NatureStart™ professional development workshops. These participants

include Head Start teachers, family engagement supervisors, education managers, and site directors from Mary Crane and El Valor, as well as Forest Preserves naturalists, nature center directors, outreach coordinators, and recreation supervisors.

The NatureStart™ Network succeeds because it is collaborative in an unprecedented way, with each organization offering unique capabilities and resources. It provides a common ground on which to build organizational relationships and shared goals. Environmental educators become familiar with the learning needs of young children and the resources and approaches utilized by Head Start programs. Early childhood educators discover local places and resources for nature play and exploration. Teams made up of educators from all three organizations work together and learn from each other throughout the project, staying connected through regular meetings and through social media like Facebook, Twitter, and Yammer.

To ensure that all stakeholders are involved, Chicago Zoological Society training staff and Forest Preserves educators meet with parents of children at Mary Crane and El Valor to engage them in the project's goals, activities, and progress and to empower them to increase their children's opportunities for nature play and science. During these meetings, parents learn about nature play and how we are working with their children's educators to incorporate more opportunities for nature play throughout the day. The parents are even invited to take part in some of the nature play activities. They also receive admission passes to Brookfield Zoo and are encouraged to participate in activities at Forest Preserves locations.

All of this interaction culminated in a two-day spring 2016 symposium attended by 150 educators from zoos, aquariums, nature centers, museums, and early childhood centers. They gathered to articulate which facets of the NatureStart™ Network have worked so far and how the field at large can utilize the lessons learned. The keynote address was given by Dr. Louise Chawla, a University of Colorado expert on child development whose research provided the foundational theory for the development of HAMILLY FAMILY PLAY ZOO and many key components of NatureStart™ training.

Currently, staff from El Valor, Mary Crane, and the Forest Preserves are discussing ways to develop urban green spaces and nature play gardens that Head Start families can enjoy together. Beyond these organizations, the NatureStart™ Network has a built-in capacity for expansion throughout Chicagoland, and we hope it can serve as a replicable model with zoos, nature preserves, and Head Start programs around the country. ■