

## Excerpts from Literature & Research

The value of nature and realizing all it has to offer has increased immensely in the past decade. It has been brought to the forefront by Richard Louv's national bestseller book, Last Child in the Woods: Saving Our Children from Nature Deficit Disorder.

Since that revealing publication on how this lack of outside experiences has been effecting our children, there has been much attention given this resulting in an abundance of writings and research on the topic. Over the past several years this benefit has been explored for children on the autism spectrum, finding most beneficial results.

In her excellent essay on *Why Include Nature in the Sensory Diet of a Child with Autism*, Connie Hammer, MSW of Progressive Parenting emphasizes that children on the Autism Spectrum need to maintain a diverse sensory diet and that it is important to create opportunities "outside the house" to maintain a healthy sensory diet for optimal brain development for the child.

Ms. Hammer suggests that the child's sensory diet should be balanced with outdoor play in nature. She points out that when we immerse our children in the great outdoors many wonderful things begin to happen, all of which are beneficial to their physical, social, emotional, and spiritual development. The experiences a child encounters in a natural environment works to enhance brain development and make new connections in other areas.

### Advantages of Being outside in Nature

1) Nature encourages the expansion of important skills by providing a place to support the development of the social and communication skills that children with autism are often weak. Since movement provides a wonderful way of stimulating the verbal centers of the brain, providing them a relaxed environment to do this can be very helpful in enhancing these skills.

2) Nature offers restorative experiences that can feed the soul. Outside in nature provides solace and comfort while being in a quiet space restores calm and thoughtful reflection.

3) Nature utilizes all five of the senses. A good sensory diet is important for children on the autism spectrum and being immersed in nature can provide a calming and stimulating experience based on the child's needs.

4) Nature is broadcast in a 3-D spectrum. You can't get any better than being in the three dimensional world of nature with the abundance of rich experiences it has to offer children.

Sachs, Naomi, Director of Therapeutic Landscapes Network and Tara Vincenta (creator of Sequential Outdoor Learning), Prescription for Play: Nature-Based Play and Learning for Autistic and Special Needs Children

Creating outdoor spaces allowing children to play at their own comfort level, overcoming common challenges in a safe, FUN, nature-based environment.

University of Michigan, 2008 study, "*Nature helps our ability to focus*", Outside, 2012

## **WHY CAN NATURE BE SO IMPORTANT IN THE LIFE A CHILD WITH AUTISM?**

Dr. James R. Taylor

Over the past 45 years of my professional career working with children with developmental disabilities, I have had many opportunities to observe, teach and be with this special population in a variety of learning environments. The learning environment which I have been so impressed is nature and the benefits it has for children on the autism spectrum.

Taking a sabbatical leave from East Carolina University for two years in the nineties, I returned to the classroom to teach preschool children with developmental disabilities including those with autism on an island in the Pacific. The small building where my preschool was located was encased in a natural environment, even having the ocean a stone's throw away. It was there I began to observe what a difference being outside of the four walls of the classroom in nature made to the development of the child with special needs.

Almost 20 years later, I have again had the opportunity of observing children with autism interacting with nature. For the last two years I have volunteered at Camp Crinkleroot, a day camp program for children on the autism spectrum conducted by Appalachian State University. Along with this over the past four years, my wife and I have hosted children on autism spectrum and their families here at our cabin on 25 acres in the Blue Ridge Mountains near Boone, NC. I am now even more firmly convinced of the value nature has in the development of the child on the autism spectrum.

With the latest statistics being released in March of 2012, the Center for Disease Control, 1 in 88 children in the United States are being diagnosed with autism--nearly doubling of the prevalence since the CDC began tracking these numbers --autism can be now officially be declared an epidemic in the United States. When I began my career in Special Education in the sixties it was 1 in 2000!! Being a program developer, not a biological scientist, I find there is a crucial need to develop programs for this population.

Having the conviction of the values and benefits that the nature environment provides for children on the autism spectrum, KAMPN (Kids with Autism Making Progress in Nature) was incorporated on May 1, 2011, receiving its nonprofit 501(c)(3) status on that same date. KAMPN will be a family affair with siblings and parents being involved with the experience. It is not only for the child with autism. Parents and siblings need to be a part of it in order to see just how valuable and fun being together, sharing and trying something new can be. It is projected to begin operation in July of 2013.

There have been innumerable articles written and much research conducted over the past several years emphasizing the benefits for the body, mind and spirit that the outdoor natural environment has for all children. More recently focus is developing on what this rich natural environmental setting can mean to a child on the autism spectrum. On the following page I have referred to just a few of these studies.