



# About Nature Explore

By Nancy Rosenow, Executive Director, Dimensions Educational Research Foundation

## What is Nature Explore?

As parents of children in the Dimensions Early Education Programs, I know you understand all about the wonderful experiences that happen each day for children and teachers as they celebrate the joys of learning together. What I'm not sure everyone knows is that the research collected in the Early Education Programs helps support the development of resources for a national initiative called Nature Explore.

Nature Explore is a collaborative program of the Dimensions Foundation and the Arbor Day Foundation. The goal of this comprehensive, research-based initiative is to help children and families develop a profound engagement with the natural world, where nature is an integral, joyful part of children's daily learning

The Nature Explore Program provides research-based workshops, design consultations and hands-on, field-tested resources to schools; nature centers; national forests, parks and wildlife refuges; zoos; arboretums and early childhood programs.

A network of certified Nature Explore Classrooms is developing throughout the United States. They are appropriate wherever a traditional playground might be built. (You can go to [natureexplore.org](http://natureexplore.org) to view certified classrooms around the nation.)

Our Nature Explore consultants (some of whom are teachers in the Early

Education Programs) deliver keynote addresses and presentations at educational and environmental conferences throughout the nation. Since 1998, the Dimensions Foundation has been conducting ongoing research on nature education at the Dimensions Early Education Programs, which serve as primary research classrooms, and currently at two additional regional research sites in Minnesota and California. (You can go to [dimensionsfoundation.org](http://dimensionsfoundation.org) and click on the research section to read the latest draft of a new research paper.)

The Nature Explore program works in collaboration with many national and international partners, including the Nature Action Collaborative for Children, sponsored by the World Forum Foundation; the Children and Nature Network; U.S. Forest Service and U.S. Fish and Wildlife Service; Keep America Beautiful and many others.

## How can you and your child benefit from Nature Explore Resources?

Many of you might already be participating in the Nature Explore Families' Club outings that happen in our program throughout the year. (There are many of these Families' Club groups around the United States enjoying experiences that were field tested right here in your child's program!)

You are also receiving a copy of the newest Nature Explore Resource Guide. You'll notice ideas for materials and books that might be of interest to you

## Harlem Nature Explore Classroom

A grand opening celebration occurred at the Home Depot Foundation Community Garden in New York City. During the event, a resident of this East Harlem neighborhood with tears in her eyes approached Susie Wirth, Nature Explore Outreach Director, with a question: "Do you mean our children get to come here anytime they want to?"

Thanks to the nonprofit New York Restoration Project and the founder, Bette Midler, this wonderful new Nature Explore Classroom is changing the lives of children at New York City Public School 155. Here's what Ms. Midler had to say:

*"I am thrilled to be working with visionaries like The Home Depot Foundation, the Arbor Day Foundation and Dimensions Educational Research Foundation. I am grateful that these wonderful people understand that the future of the country – indeed, the world – lies in the hands of our children. We owe them the very best of everything, and how fabulous it is to be able to give the students of PS 155 a first-class introduction to nature."*



The press release issued by the New York Restoration Project...

[arborday.org/media/pressreleases/pressreleasetxt.cfm?id=186](http://arborday.org/media/pressreleases/pressreleasetxt.cfm?id=186)

or your child (found in the Sourcebook at the back of the Guide). Many parents told us they were having a hard time finding natural toys for young children that didn't contain potentially harmful finishes, so you'll notice that we've been able to find a source for these. We hope we'll inspire you to think of open-ended toys for your children... like blocks and art materials. And don't forget... the "toys" nature provides

us... like leaves, sticks and pine cones... are some of the very best! Thank you for all the support you provide each day to your child's Early Education Program. The wonderful, life-changing work happening there wouldn't be possible without such encouraging families working in partnership with teachers. You are much appreciated!

# 'Farming' takes place in greenhouse

text by Kristi Reitz; photos by Beth Pauley

If you and your family take a drive and leave Lincoln, what do you find? In all directions extending from the city limits lay abundant farm ground. Autumn, especially, is a beautiful time to watch the farmers at work in their combines, grain trucks, and semis. The colors, sounds, and smells of Nebraska farms in October and November are truly something to experience. Although our class did not leave the city to visit a farm, one week in November I brought the 'farm' into the greenhouse at preschool. Thanks to the generosity of a neighboring farmer we were able to become familiar with several different types of crops.



Mrs. Reitz gives preschoolers a taste of bread and explained how grains were used to make it.

We started on Tuesday by tasting corn flakes. As the children ate, we discussed what corn flakes are made of. Then I simulated planting seeds with a child sized tractor and seed drill. When the 'seeds' were in the ground, the children made pretend rain fall from their outstretched fingers and sunshine from their flattened palms. After we discussed how small seeds grow into tall plants, the children helped a small combine go back and forth to harvest the corn. Then I introduced field corn, still in the husks.

As they peeled the husks away to discover the hardened corn inside, the children noticed that this corn was different than the sweet corn they eat during the summer months. We discussed those differences while the children began to manipulate their ear of corn. Some children simply turned the ear over in their hands, feeling the husks, kernels, and cob. Some began to pull the kernels



Soybeans, milo, corn and alfalfa were shared with the preschoolers in the Greenhouse.

off the cob. Others used the tractors, trailer, and combine in their play with their corn.

On Thursday, we began by tasting bread and crackers. The children learned that the main ingredient in both bread and crackers is wheat. Again while they ate, I demonstrated how a tractor, seed drill, and combine would go back and forth in a field and what their purpose would be.

The children were then able to experience the feel of wheat in their hands and through their fingers. The next crops introduced were soybeans and milo. They were able to pull the tiny milo seeds right off the plant. They pulled bean pods from a bean stalk and opened the pods to find what was inside. I then brought out small farm animals. The class discussed what farm animals might eat. Alfalfa was brought out next. The children became aware that the wonderful smell of alfalfa is what set it apart from the other crops. Then children were free to use corn, soybeans, milo, wheat, alfalfa, farm equipment, and animals as they wished. Pretend play, creativity, and ideas abounded!



The children interacted with small-scale versions of machinery used to plant and harvest crops.

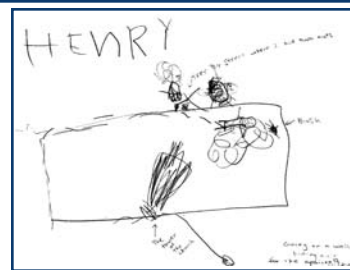
# Mapping Our Pecan Walk

text by Kris Van Laningham

On a recent Wednesday we enjoyed walking around outside our school. To help the preschoolers have a focus I gave each child two pecans to hide for squirrels. While walking around the block everyone chose two spots to hide their pecans. Each child then represented the walk in a different way, depending on his/her learning style.

When we had walked almost completely around the school block, Henry decided to hide both of his nuts by a tree next to the street. Then he convinced the whole class to hide under two evergreens so we could watch the squirrel come and get his pecans. Everyone sat quietly so Henry could observe the action but no squirrels came while we watched.

When his Mom picked him up he was ready to go out and check to see



if the nuts were gone. His mother told me the next day (when he wasn't in school) he wanted to drive back to see if the nuts were still there. By Friday, when we went out during our first Outdoor Time to check on the nuts, Henry was delighted to find them gone. He was sure that the squirrel had found them and eaten them.

Henry drew a map of our walk and where he hid the nuts. He also drew the bush where we hid when we watched for the squirrels to eat the pecan. The short strokes show the path that we walked out of the building and around to the bush.

# Flying experiences related to Preschoolers

text by Joyce White; photos by Beth Pauley

Our class was fortunate to have Lucas Beckman's uncle and grandpa visit our class last month. Uncle Gabe Griess was on leave from the United States Air Force. He took time to share his experiences with our class and took us on our own adventure. He brought a model air plane (a replica of the plane he flies in) which helped us visualize our own pretend plane.

Some of the things we learned:  
*You steer the plane with a yoke*  
*The wings make the airplane fly and propellers drill into the air*  
*There is a pilot, co-pilot and navigator (Uncle Gabe)*  
*The back of the plane opens to parachute food, trucks and people to*



Uncle Gabe shows the class what his plane looks like and tells them what it's like to parachute out.

the ground.

Uncle Gabe explained that paratroopers wear back packs on their backs when jumping out of airplanes.

"Do you want to try this?" he asked the children as he got down on the floor. Soon the entire class was on their stomachs, arched back and arms up parachuting out of a plane. Uncle Gabe gave the signal to pull the cord and they all popped up.

"Let's do that again!" he heard from his new fans.

It's obvious why Lucas is so fond of his uncle. Our class felt the same way.

"Hey, we should send him a note. I'd say 'Thank you,'" Thea announced after the visit.



Lucas and his Grandpa Jim look on as Uncle Gabe tells Erik about flying in a plane.

# Digging for Bones

text, photos Kris Van Laningham

Ms. White discussed using turkey bones as a digging experience. It was something she was interested in doing with her students because one of her student's mother is a paleontologist so I saved the bones from my sister-in-law's cooking this Thanksgiving. I brought the bones home, boiled them and scraped off the meat to get them as clean as possible.

During Small Group time I shared the bones with the children. They each sketched a bone. I linked the experience to literacy by writing "TURKEY BONE" on the dry erase board so the children could add the words to their sketch. Many of my children are capable of writing their own letters from an example. Most of the three-year-olds needed help forming the letters. Charlie was intent on writing "BONE TURKEY" and thought it was funny that he switched the order of the words.

The teachers on our NEC cooperated with me in sharing the space so I could do a "turkey bone dig" for



Miley, Mac and Griffin search for bones.

Small Group outdoors. Ms. Heinzman read **Bones Bones, Dinosaur Bones** by Bryron Barton to the children while I buried the bones in the Digging Space on the NEC.

Long handled tools were available to use to dig up the bones. I decided it was important to let the youngest students dig first (letting everyone dig at the same time would be too challenging).

We used a potato fork and spade for digging. Three of my students were only three year olds. Ryder hadn't used long handled tools before and she needed my assistance in showing her how to put her foot on the right side of the fork tines and push down

with her foot while her hands (and mine) were on the handle. She worked diligently at digging through the soil. (I had already loosened the soil up while burying the bones). The spades worked better as digging tools because they moved the soil out of the way to allow children to dig deeper in the space.

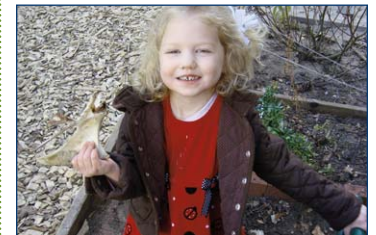
Griffin uncovered the first bone and had a huge smile on his face as he showed everyone his bone. Miley found the next bone and had the same reaction as Griffin. She wanted to continue digging after she found a bone so she got a small shovel from the sand and also used her hands to move the soil. After about 6 bones were found, we started re-burying them so children would have quicker



Griffin uncovers a bone.

success in finding them.

Griffin never left the Digging Space. He waited until he was able to get a turn to use a tool to dig for more bones. He found at least three more bones. The amazing thing about Griffin, a "young" three-year-old, is that he never left the Digging Space to play anywhere else. He was there for at least 60 minutes digging or waiting for a turn to use a tool. He was determined and focused on uncovering the bones. Everyone had the chance to use a long handled tool and the bones gave them a purposeful focus to use the tools.



Miley is excited about her bone discovery.

# Children manipulate corn

text, photos by Donalyn Katt

The children in Mrs. Katt's group were finding corn kernels on the playground and Larkin remembered that we took corn off the corncobs last year. "Remember how the corn went flying on the floor," Larkin said, remembering pushing off the kernel and it flying across the texture table to the floor, "we had to sweep them up." Listening to these words Jack asked, "Can we do that again Mrs. Katt?"

We talked about how the farmers get the corn out of the field. During Small Group time I brought ears of corn in for the children to shuck. Some children knew all about the combine and its job in the cornfields and



The children focused intently on shelling their corn.

others asked questions trying to figure out how this machine could pick all the corn. Emerson mentioned that he eats corn on the cob in the summer but Larkin corrected him telling him that "We eat sweet corn." A discussion emerged about what kinds of corn we eat and what kind of corn is eaten by animals.

As the children finished shelling the corn the question was asked, "How many kernels do you think that you took off your corncob?" Sophie thought that she had "100" kernels in her pile while Ben answered, "I have 51." Leo decided to count all of his seeds. He got to 49 and stopped for a brief moment. Mrs. Katt gave him the clue, "What comes after 4?" He said, "5" and then quickly counted 50 and on up until he counted all of his kernels which was 112!



Sophie and Sam shell corn on the Nature Explore Classroom.

# Making a worm habitat

photos and captions by Katie Mezger



The toddlers recently went outside to make a home for worms. First they piled up dirt and wetted it down with water in spray bottles. Next the toddlers added worms to the dirt mixture.



They decided to bring them inside for further exploration. When the toddlers were done exploring the worms they decided to feed them. They went over to the Nature Explore Classroom greenhouse and gathered old food scraps, paper, and even some more worms. By feeding and keeping the worms watered, the toddlers are hoping the worms continue to grow.

# Thank you!

When I look at all the beautiful artwork and projects that Lucy proudly brings home everyday, I am aware that one of her special teachers has taken the time to get out the paints, to clean up the glue, to wash the brushes, refill the tape dispenser, wipe down yet another spill, scrape playdoh off the chairs. I am so thankful that my child also gets to not only get messy in her classroom in order to "do her work" but also is allowed to get messy outside. A paint or marker, or mud on her clothes at the end of each day, is my way of knowing she had fun that day!

November 7th, a group of parents, their children (and even a few alumni!) arrived at Dimensions ready to dust, organize toys and disinfect chairs, tables, highchairs and refrigerators! Thanks to the parents who pitched in that morning -you made a difference! The rooms were left with an added sparkle and shine.

As parents we see how hard the teachers work, often putting in long hours to make our children's school experience a rich and engaging one, everyday. This was one small thing we could do in support of them. The less time they have to spend cleaning, the more time they can spend with our children! Thank You!

Jane Cogan, parent and Advisory Council member

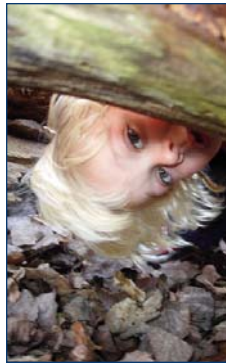
# Families, friends gather at Pioneers Park Nature Center for Nature Explore Families' Club

captions, photos by Joyce White



Mark is gathering tools to document important findings of his day.

While examining every inch of a decaying tree trunk, Cooper climbed inside the tree and peeked (upside down) through a hole. Cooper's curiosity and initiative allowed him to find a unique perspective of this tree.



"Is this clams?" Scientist Tiegan hypothesized while examining fungus on the tree bark.



As we finished the trail, several families gathered in the Nature Building to look at the owls, turtles and snakes. James took in every little bit of information.



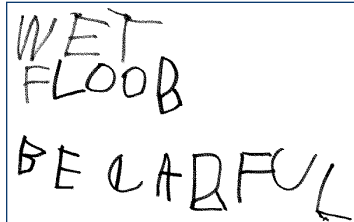
As we approached an area of fallen trees, Magda picked up a large piece of bark. "I found a really big stick," she announced. Her comment encouraged several younger children to gather and compare sticks. As they touched the different textures and experienced the weight of the heavy bark, our friends were experiencing math (size and weight comparisons) and science (part of a tree, smell and colors of decaying wood etc.).

## Preschooler engages in real-life problem-solving experience

text by Suzan Haley

Andrew took an active role in solving a plumbing problem in a North Preschool bathroom recently. He noticed the sink faucet was loose and freely turned. This allowed water to spill onto the floor which then needed to be mopped up. I went with Andrew to get a mop and then we mopped the floor.

We discussed the need for a sign on the bathroom door, since the floor was still a little wet. Andrew went to the Art Area for a piece of paper and a marker. With a little help, he sounded out and wrote the words **WET FLOOR**. He looked at the sign and decided to add **BE CAREFUL**, again with a little sounding out assistance.



When his sign was completed, Andrew went back to the Art Area for some masking tape, which he skillfully used to tape the sign to the bathroom door.

With the wet floor problem solved, Andrew moved right into the next step of his problem solving mode. He

realized that the water problem would occur again unless the faucet was repaired.

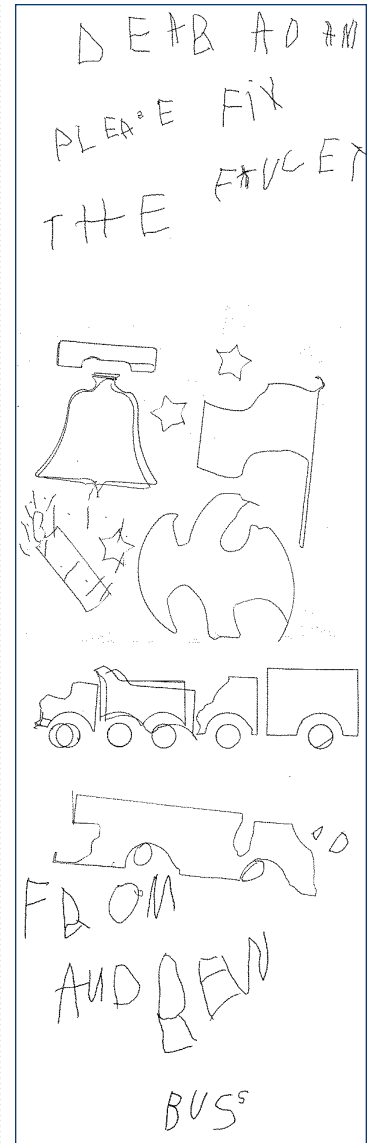
I listened as Andrew thought through what to do. He finally decided to write a note to Adam (one of the Building Managers), asking him to "fix the faucet." He returned to the Art Area for paper and pen and to the Writing Area for a stencil. He wanted to add a special surprise to his note!

Andrew worked carefully, composing his message and stenciling pictures on both sides of the paper. Once again, he needed very little assistance and only with sounding out the words. When he finished the note, he and Mrs. Haley went to deliver it.

As Andrew placed the note on the desk in the Boiler Room, Jeramie walked into the room. (Adam had gone off duty so it was Jeramie's shift.) Andrew explained the plumbing problem to Jeramie who thanked him, collected his tools, and got right to work on the problem.

Thank you to Andrew for all that you did to help and communicate so well and to Jeramie for responding so promptly! Both of you used your special skills to help all of us and we appreciate you both!

We also appreciate Adam and Gary and the rest of the staff who help keep our building clean, safe, and in good condition.



Koa (23 months) gathered his materials from his Mother and began documenting while verbally telling his story to anyone listening.

**We will be closed December 21 through January 1. Classes will resume January 4. Enjoy your Winter Break!**

Nature Explore® Classrooms are part of a national initiative that we are working with in partnership with the Arbor Day Foundation.

Dimensions First-Plymouth Early Education Programs is a non-profit 501(c)3.

Newsletters and Program information can be found on-line [www.dimensionsfoundation.org](http://www.dimensionsfoundation.org) or contact [earlyed@dimensionsfoundation.org](mailto:earlyed@dimensionsfoundation.org)