


POD³ Triangle Regional Symposium
Healthy Early Childhood Outdoor Learning Environments
June 21st, 2013
Creating Affordable Nature Play Settings

NLI
NATURAL LEARNING INITIATIVE
College of Design, NC State University

Creating Affordable Nature Play Settings



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Supported by Blue Cross Blue Shield of North Carolina Foundation

Goals:

- At the end of this presentation we hope you will...
 - Have lots of **ideas** for even the most limited budgets
 - **Feel confident** in your team's abilities & resources
 - Know **where to look** for materials
 - Know **what you can make** out of the materials



How far can your dollar go?

- What's the first question many people ask when they see a plan...
- **"How much will it cost?"**
- There are **many ways to improve** the play area with a diversity of natural settings that are **affordable** (or even free!)



How much do you think this play house costs?

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How much do you think
this play house costs?

- A. \$1,000
- B. \$4,000
- C. \$8,000
- D. \$10,000



How much do you think
this play house costs?

- A. \$1,000
- B. \$4,000
- C. \$8,000
- D. \$10,000**


How much do you think this play
equipment costs?



How much do you think
this preschool play
equipment costs?

- A. \$12,000
- B. \$20,000
- C. \$30,000
- D. \$45,000


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How much do you think this preschool play equipment costs?

A. \$12,000 D. \$45,000
 B. \$20,000
C. \$30,000

Now compare that to this space:



"Under the Oak" at the Minnesota Landscape Arboretum



"Under the Oak" at the Minnesota Landscape Arboretum

All about materials!

In this presentation we will address:

1. Log elements
2. Bamboo elements
3. Planted elements
4. Tire planters
5. Timber/lumber elements
6. Hardscape elements
7. Earth/ mud/ sand
8. Natural loose parts

In all cases, remember:

- **Intentional uses**
- **Appropriate installation**
- **Supervision & maintenance**

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Log Elements

- Where do I get logs?
 - Tree removal companies
 - Local clear-cutting projects (new developments, new roads)
 - Recently fallen trees from storms
 - Your community yards and properties



Log Elements

- More specifics:
 - Hardwoods, not softwood
 - Best kind of wood = red cedar, oak, maple, etc.
 - How long will they last?



1999 – live oak tree logs installed



2007 – still around!



Bright Horizons Childcare Center at GlaxoSmithKline

Log Elements

- How can I use logs?
 - Seats
 - Benches
 - Tree cookies
 - Infant pull-up bars
 - Natural building materials
 - Natural playhouses
 - Balance beams



Loghouse at the NC Zoo

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Log elements idea gallery



KidZone at the North Carolina Zoo

Log elements idea gallery



"Under the Oak" at the Minnesota Landscape Arboretum

Log elements idea gallery



Intermountain Children's Park, Telluride, CO

Building Blocks Learning Center, Charlotte, NC

Log elements idea gallery



"Under the Oak" at the Minnesota Landscape Arboretum

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Log elements play opportunities



Bamboo Elements

- Where do I get bamboo?
 - Find a stand of it, and cut what you need
 - Talk to the owner first, make sure you have permission to cut



Bamboo Elements

- How do I cut bamboo?
 - Aim for thicker bamboo, 1" or more
 - Use serrated saw, cut just above a node (don't leave a hollow segment at the end)
 - Use the saw to cut branches off from the outside
 - Careful of splinters!



Bamboo Elements

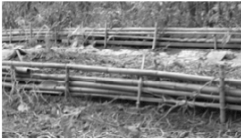
- More specifics:
 - How long will it last?
 - 3-4 years or so, not forever.
 - How do you attach them together?
 - Zip ties are good, but watch out for sharp edges (better to use them out of reach of children)
 - Jute twine also works well, but only lasts a year.



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Bamboo Elements

- How can I use bamboo?
 - Vine teepee
 - Natural building materials
 - Plant protection fencing
 - Vine trellis



Bamboo idea gallery



Bamboo elements play opportunities



Planted Elements

- What are planted elements?
 - Sunflower patch (or maze or house)
 - Wildflower patch
 - Vegetable garden
 - Ornamental grass maze



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Planted Elements

- How do I create them?
 - Pick a sunny site
 - Prepare the soil
 - Plant the seeds
 - Water, weed, let them grow!



Planted Elements

- More specifics: Preparing the soil
 - Different options...
 1. Till/dig
 2. Till & mix in organic
 3. Don't till soil, just overlay with organic
 - What is organic material?
 - Aged manure (cow, chicken, etc)
 - Leaf or wood chip compost
 - Mushroom or garden compost
 - Peat moss



Planted Elements

More specifics: Seeds

- Buy from local garden centers or online
- Wildflowers and Vegetable seeds
 - Look at online seed sources and catalogs
- Follow planting instructions on packets



Planted Elements: Seed Saving



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Planted Elements

More specifics: Plants

- Local garden centers may put perennials and shrubs on end-of-summer clearance
- Look for sales September-early Spring as nurseries clear out last season's plants



Planted Elements

- Ways to **enhance play** with planted settings
 - Place a **winding stepping stone path** through the planted patch
 - Place several log seats for a small sitting nook among the flowers or vegetables
 - Add a bird bath to attract songbirds
 - Plant in a square or circle with an open entryway for a “house” setting



Planted Elements idea gallery



Planted Elements idea gallery



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Planted Elements idea gallery



Planted elements play opportunities



Tire planters

- Where can I get tires?
 - Ask around at tire stores and car repair shops, often they are either free or cost very little.



Tire planters

- More specifics:
 - **Don't use tires for edible plants** (fruits or vegetables), because of the potential for leaching chemicals.
 - If stacking two or three tires, stabilize by attaching adjoining tire walls (using bolts, for example)
 - Painting the tires keeps the plants cooler



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Tire planters

- What can I make with them?
 - Path edging
 - Buffer plantings
 - Surrounding a council circle or setting
 - Mound the tire planters over fill dirt to create a planted hill



Tire planters idea gallery



Tire planters idea gallery



Timber/Lumber Elements

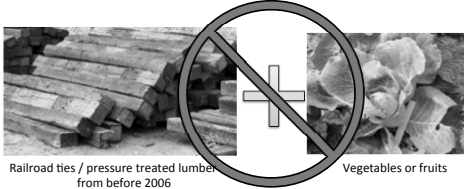
- Where do I get timber/ lumber?
 - It's not a good idea to reuse old lumber
 - Buying it is best



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Timber/Lumber Elements

- **Caution** when building a planting bed where vegetables or fruits may be grown
 - Don't use railroad ties
 - Don't use pressure-treated lumber that may be older than 2006



Timber/Lumber Elements

- What are some basic things can I use it for?
 - Raised planting beds (6" – 18" tall)
 - Timber terraced beds
 - Timber blocks for loose parts



Timber/Lumber idea gallery



Timber/Lumber idea gallery



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Timber/Lumber elements play opportunities



Hardscape Elements

- Stepping stones: pathway or sensory patio
- Recycled concrete
- Stones/ boulders

Hardscape Elements

- Where do I get stepping stones?
 - DIY
 - “Odd lots”: leftovers from local stone yard
 - Local home improvement store

Hardscape Elements idea gallery

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Hardscape Elements idea gallery



Hardscape Elements idea gallery



Hardscape Elements idea gallery



Earth and Mud Play Elements

- What are some easy earth and mud play options?
 - Digging area
 - Mud café
 - Sand play



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Earth and Mud Play Elements Idea
Gallery



Natural Loose Parts



Questions and Discussion

The Natural Learning Initiative • College of Design • NC State University

The Natural Learning Initiative, College of Design, NC State University

Preventing Obesity by Design POD³



www.naturalearning.org

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