Affordable Settings and Elements

Ideas for Cost Effective Solutions

Bringing significant change to a play environment does not require endless resources. With a few easy-to-find materials and willing volunteers, many settings and elements can be created to greatly improve children's spaces. A fallen tree, cut into log segments, can become seats or an edge for a sand play area. Bamboo poles and some green bean seeds can form an almost instant teepee. This document provides examples of how creative problem solving and resourcefulness can provide cost effective ways to enrich early childhood outdoor spaces.

1. Sunflower house, maze, or patch

Sunflower seeds + garden soil + sun = summer playhouse, maze, or secluded path

Sunflowers are easy to grow, they mainly just need water and sun! It's always best to prepare the planting beds first, mixing in some compost or good soil if existing soil is too heavy. Try different sunflower varieties to see how they grow and compare them with the kids.

Once blooming, pick and use for flower arrangements, or let the flowers dry out and hang down on the stalks. Birds will enjoy the food source from the seeds.

2. Log Seats

Sliced segments of logs (8" to 18" thick) = instant gathering space, council circle, or quiet sitting nook.

Talk to tree removal companies to reserve tree segments before they grind them. Usually logs can be found in the community for free.

Logs and stumps don't have the same life span as a stone circle, and will need replacing every five years or so. Red-cedar, oak, maple trees and other hardwoods provide the longest lasting stumps. Pine and the soft woods are not suitable as they decompose too fast. Make sure borders are smooth.

Logs can also serve as a temporary boundary containment for earth and sand play settings

3. Boulders or Stones

Large stones = instant gathering place, council circle, or sitting nook. Smaller stones = a border for sand or earth play, or active science - turn over the rocks to see what lives underneath!

If you live in a rocky region, smooth, rounded stones may be easy to find. If not, they may add some cost to your installation. They last forever, and have many uses, including seating, climbing, loose parts, and path edging.

Make sure they don't have sharp edges. See NLI info sheet "Stones and Boulders" on the website www.naturalearning.org for more information.

4. Tire Planters

Old tires + soil + plants = instant planting bed, path buffer, or border planting

Tires can be found inexpensively at almost any local car repair shop or tire store. If you stack more than one tire, fasten them together so they don't slide apart, using bolts to connect the adjoining tire walls.

Don't plant edibles in tires because as the tires degrade the plants may absorb some of the chemicals from the rubber.

5. Vine Teepee

Bamboo + zip ties + vines = instant playhouse, secret spot, or vegetable trellis

Owners of "escaped bamboo" may be thrilled to have people come cut some down. Just ask around your community, and be sure to ask before you cut. The sturdier the bamboo, the better. Even the hardiest bamboo will need replacing in three or four years. Any kind of vine, from edible peas or beans to annual flowers to perennial vines work well on teepees. See NLI info sheet "Creating a Vine Teepee" on the website www.naturalearning.org more information.

6. Log Benches

Sliced segments of logs = instant bench or low project table

Log benches require a moderate amount of skill and tools to build and keep stable. Talk to tree removal companies to reserve tree segments before they grind them. Logs can often be found in the community for free.

Redcedar, oak, maple trees and other hardwoods provide the longest lasting logs. Pine and the soft woods are not suitable as they decompose too fast. Make sure borders are smooth.

7. Tree Cookies

Sliced segments of logs (3"-6" thick) = instant stepping "stones", informal paths, bug habitats (look underneath!), and natural building materials.

Look around the community for sources of free logs to slice up into tree cookies. Tree cookies are fun and great stop-gaps if stepping stones are not initially affordable. However, their lifespan is short, so they will need replacing within two or three years, so they are not suitable as a permanent path solution. Hardwoods are preferred to soft woods so they will last longer. Red cedar is ideal because it is resistant to decay and the cookies have fun shapes, (shown here).

8. Natural Building

Any assortment of safe natural materials = instant imaginative build-your-own play area.

All you need are the materials, the kids do the rest! Possibilities include: bamboo poles, bark wedges, straw bales, small stones, log stumps, tree cookies, trimmed branches, pine cones, large leaves, ropes or cord, burlap, cardboard boxes, and anything else you can think of. It's good to have this area near some structure to build against, like a wall, fence, a grove of trees, etc. Sticks should not be more than 3 feet long. All materials should be frequently inspected to ensure no sharp edges or pointed ends. Disintegrating objects should be removed.

9. Natural Playhouse

Sturdy logs + branches + zip ties/rope/cording + a little ingenuity and skill = instant playhouse, puppet theater, or dramatic play.

Collaborate with tree removal companies to conserve tree branches before they grind them. Alternatively, work with the landscape crew of a local college campus or botanical garden to get tree donations and plant prunings. The playhouse illustrated here requires a moderate amount of skill and a few hand tools to assemble. The lifespan of a natural playhouse is probably to five years, unless a sturdy timber frame is used to support the natural materials attached to it. Otherwise consider rebuilding the playhouse each year as a fun, active learning project. Use fresh cut branches, not ones partially broken down from the forest floor.

10. Raised Beds

Boards + good soil + effort = instant garden beds

Raised beds can be anywhere from 6" to 30" tall. Much information and instructions are available online; ready-made kits can also be purchased. Railroad ties are not recommended for edible beds, as they may contain too many leaching chemicals. If using pressure treated lumber, add an impervious liner between the boards and the soil to prevent leaching. If you want to improve the soil, check your municipal yard waste center, usually they'll give away or sell leaf mulch compost from street collection. Compost is better than top soil, if you're going to enhance the quality of your soil, make sure you buy compost!

11. Wildflower Patch

Packet of seeds + garden soil + full sun = spontaneous, naturalized flower gardens

Packets of wildflower seeds are easy to find at any local garden center with mixes appropriate to your climate. Use the wildflower patch to replace grass or bare earth, but be sure to kill the grass before seeding. Prepare the beds by first mixing in some compost or good soil. Buy a few different mixes, follow the instructions on the packets, and see what comes up!

12. Timber Terraced Beds

Landscape timber + sloped ground + a little effort = terraced garden beds for those more challenging hillsides

Landscape timbers can be found at a local home improvement center. If using pressure treated lumber, add an impervious liner between the boards and the soil to prevent leaching. Terraces require a moderate amount of skill and effort to build. Figure out how wide and deep the terraces need to be based on the degree of slope. As in the photograph, overlap the corners for stability.

13. Pull-up Bars

Log segments + bamboo/pipe + a little effort = pull-up bars for those little ones just learning to walk.

Pull-up bars require a moderate amount of skill and tools to install. Drill a hole (using a hole saw bit) in the side of each logs so the bamboo pole or pipe can slide in. Bury the log 12"-18" to make it stable. Dig a hole 4" wider than the log and tamp sand in the hole around the log to maximize stability. Use redcedar or other hardwood for maximum life.

14. Plant Protection Boundary

Low boundary along a path or planting bed = protection of healthy plants with the best chance of getting established.

There are many alternative ways to protect plantings from trampling feet. Usually a single rail, rope, or other means 15"-18" high will redirect the flow of traffic. Possibilities include: bamboo poles, pruned sticks lashed together, curved rebar loops, rope with posts (shown here), or prefabricated low fencing purchased from a garden center or home improvement store.

"Under the Oak" nature play area.

Nature play rules creative sign.

A castle made of logs.

A natural playhouse can be many things to a child. Today it was a place for performance.

"Under the Oak" Nature Play

The Minnesota Landscape Arboretum uses the space created by a large oak tree canopy for nature play. The nature play area is a popular spot to play for kids who participate in the programs offered by the Minnesota Landscape Arboretum Learning Center. These simple structures were constructed by Arboretum staff and volunteers using materials available on the grounds.

Such inexpensive, creative interventions can support meaningful play and learning opportunities that last for hours.

"Under the Oak" is at The Minnesota Landscape Arboretum in Chaska, Minnesota.

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Prepared by: The Natural Learning Initiative. Research and development by Julie Murphy (Design Assistant). Edited by Jesse Turner (Staff Landscape Architect), Nilda Cosco, PhD (Education Specialist) and Robin Moore, Dipl. Arch., MCP (Director)

Natural Learning Initiative | College of Design | North Carolina State University

Creating environments for healthy human development and a healthy biosphere for generations to come.

The purpose of the *Natural Learning Initiative* is to promote the importance of the natural environment in the daily experience of all children, through environmental design, action research, education, and dissemination of information.
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919-515-8345

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