



NatureGrounds®

Putting nature into play™

Best Practice Guidelines

Designing Play Environments that Integrate
Manufactured Play Equipment with the Living Landscape



The purpose of *NatureGrounds* is to create a dramatic shift in the standard playground development process by deliberately designing nature back into children's lives, not only to benefit children's play, but also to engage communities in working together to create richer play experiences for all users. PlayCore has partnered with the Natural Learning Initiative, College of Design, NC State University, to offer an educational resource designed to help professional and community activists promote naturalized playgrounds.

NatureGrounds provides best practice guidelines for creating and retrofitting play environments that:

- increase play value, social engagement, and physical activity
- address health promotion, stress reduction, emotional well-being
- expand inclusion
- engage users with nature
- reinforce environmental literacy
- promote creative, exploratory, and cooperative play
- offer community destinations
- support environmental stewardship

Comprehensive program includes:

- ▶ 48 page educational guidebook:
 - Best practice design principles for parks and schools
 - Supportive research and benefits of nature
 - Planting principles and phased naturalization strategies
 - Tips on how to manage, maintain, fund, and support your project
- ▶ NatureGrounds.org offers an online, searchable plant database to choose child-friendly plants based on play value and hardiness zones
- ▶ State-of-the-art computer aided design services and field representative support
- ▶ Professional development training module
- ▶ The *NatureGrounds* National Demonstration Site program, national recognition and press exposure for sites that follow best practice guidelines and establish naturalized playgrounds in their community

Partnership:



A Unique Playground Initiative to “Bring Nature to People”

Research reveals a strong relationship between daily exposure to nature and healthy human development. Now more than ever, it is critical to encourage outdoor play and find way to reconnect children to nature. Natural spaces are often too remotely located for visiting on a regular basis, so it is imperative that nature be deliberately designed back into the everyday spaces of childhood such as school and neighborhood parks. Designers, planners, and other professionals must discover new ways to deliver high-quality outdoor environments for children compelling enough to motivate them to acquire active lifestyle habits outdoors.

NatureGrounds advocates for communities to create innovative play environments that integrate manufactured

play equipment and the living landscape. Naturalization strategies offer a new, alternative paradigm for playgrounds that respond directly to the need for children to be outdoors and engaged with nature. Landscape architects, designers, and park planners are crucial partners and sources of technical knowledge and expertise in these efforts.

Naturalized playgrounds become sought out destinations that provide visual interest, shade, and comfort resulting in sustained repeat visits, a relaxed and playful social atmosphere, and growth of community social capital. Additionally, these well-designed playgrounds offer rich outdoor education and programming opportunities for both schools and parks.

Multiple benefits include:



Play value

Play value recognizes that different types of play environments stimulate different forms and amounts of play. Plants increase the diversity of play and related learning opportunities through discovery, offer sensory stimulation, and increase aesthetic appeal.



Health benefits

Engaging with nature has been linked to reduced attention deficit disorder symptoms and stress, while motivating children to be more physically active, focused, and civil to one another.



Child development

Integrating manufactured play equipment with natural components directly addresses health promotion by extending the range of options for children’s social, physical, and cognitive behaviors while supporting active lifestyles in children. Through exploration and discovery, increased opportunities to stimulate learning, creativity, and imagination occur in more naturalized play environments.



Environmental sustainability

Playground naturalization can provide an important community-based demonstration of environmental stewardship and sustainable site design practices — improving wildlife habitat conditions for local flora and fauna and natural irrigation through well-designed stormwater drainage systems.

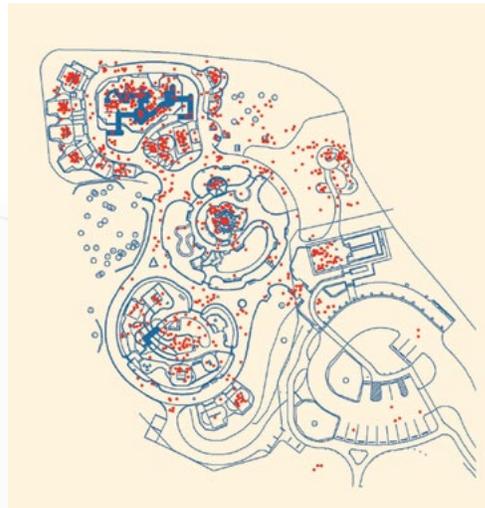
RESEARCH

Research reveals that naturalized playgrounds result in increased play value, higher levels of physical activity, social interaction, and improved environmental sustainability.

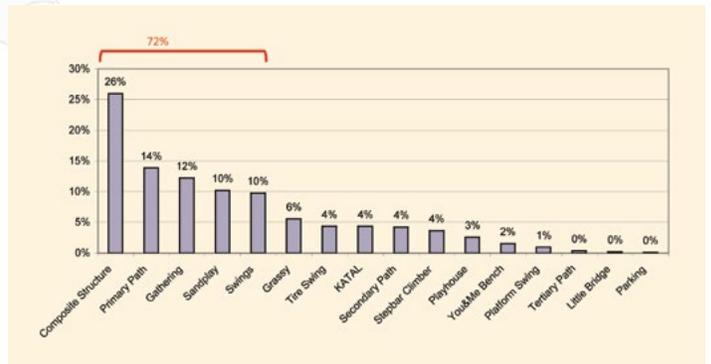
Findings

The Natural Learning Initiative (NLI) has conducted several studies that support the benefits of playground naturalization as cited in the *NatureGrounds* guidebook:

- The Environmental Yard, Washington Elementary School, Berkeley, CA, where study results showed play activity equally divided between community-built play structures, a hard surfaced games area, and a richly diverse, custom-designed nature area. These findings suggest that children enjoy a mix of permanent, anchored play structures, open areas, and natural settings.
- Blanchie Carter Discovery Park, Southern Pines Primary School, NC, which demonstrated the attractiveness of a playground containing a mix of manufactured and natural elements.
- Kids Together Playground (KTP), Cary, NC, where research findings indicate that KTP attracts multigenerational, multicultural users seeking satisfying family recreation experiences. Universally-designed KTP also demonstrates the community value of high quality, compact, diverse, naturalized family playgrounds that not only support child development, but also provide crucial vehicles for inclusion because they can stimulate free flowing, positive interaction among park users of all abilities.
- Research at a variety of childcare centers throughout North Carolina produced findings which showed that higher levels of physical activity are supported by curvy pathways, anchored play structures, open areas, and compact layouts. A further study demonstrated that children were more active in playgrounds where equipment and nature were integrated or "mixed."
- Bay Area Discovery Museum, Sausalito, CA, where study results demonstrated the attractiveness of settings designed for socio-dramatic play.



KTP children's behavior mapping shows the relative attraction of the compact active play area (top left). The area includes swings, an inclusive play structure, and sand and water play, interconnected by a wide, curving, primary pathway. This area accounted for 45% of children's use of the playground.



An analysis of KTP children's behavior mapping shows distribution of use across different types of play settings, clearly showing that almost three-quarters (72%) of use occurred on composite play structures, pathways, social gathering areas, sand play, and swings.

PROGRAM HIGHLIGHTS

Best Practice Considerations

Planting Pockets

Integrating planting pockets into playgrounds is an effective approach to achieving naturalization while providing plants as part of the play experience. Planting pockets integrate plants as closely as possible with manufactured play equipment, while still designing safer play environments that enrich the overall experience of users.

5 best practice design principles:

▼ To stimulate, motivate, and encourage children's play, and to increase the attraction of playgrounds for children and caregivers, the *NatureGrounds* strategy is driven by these factors that lead to a cost-effective, highly valued, well-used resource in the community.

1 Locate naturalized playgrounds in relation to site features and functional surroundings

2 Identify user groups and design to universally support their needs

3 Configure site layout to organize design components and network the play environment

4 Define play settings to maximize active, social, and sensory play opportunities along a developmental continuum

5 Evaluate appropriate ground surfaces for naturalization, safety, accessibility, and play value

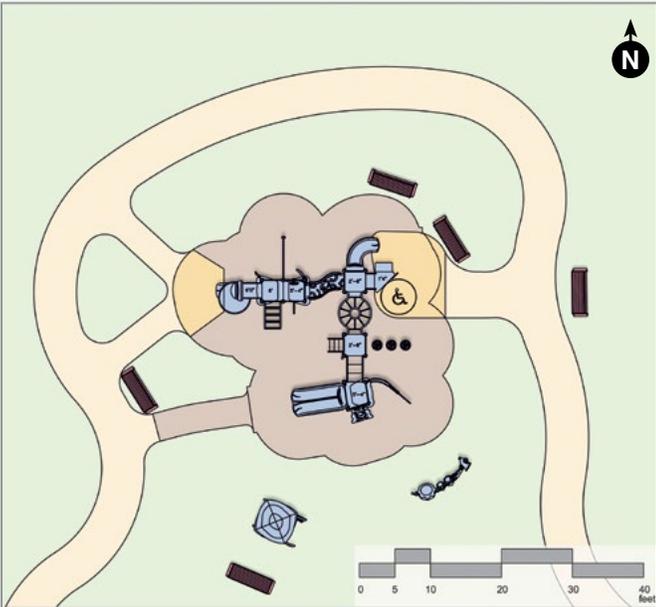
Application of planting pocket criteria and plant location rules:

These layouts show how the planting pocket criteria and plant location rules can be applied to create a richly naturalized playground.

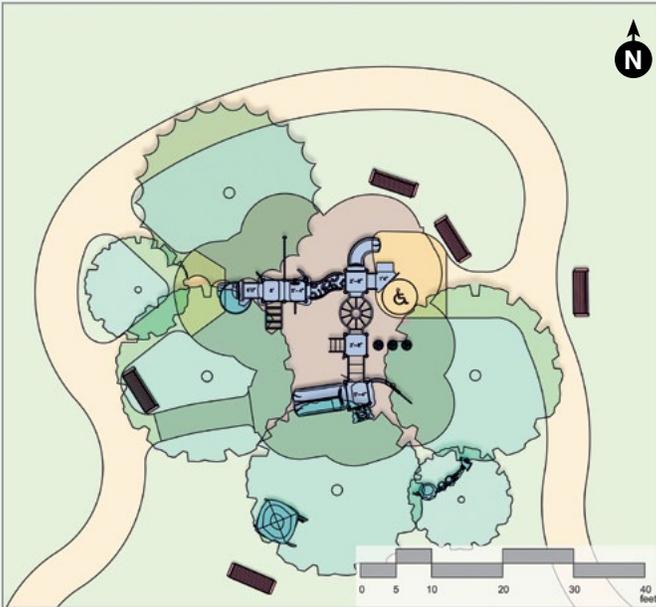


The playground layouts above illustrate application of the planting pocket criteria in a moderately-sized playground. Broad planting pockets are defined by the location of the adjacent pathway connecting the playground to the rest of the park.

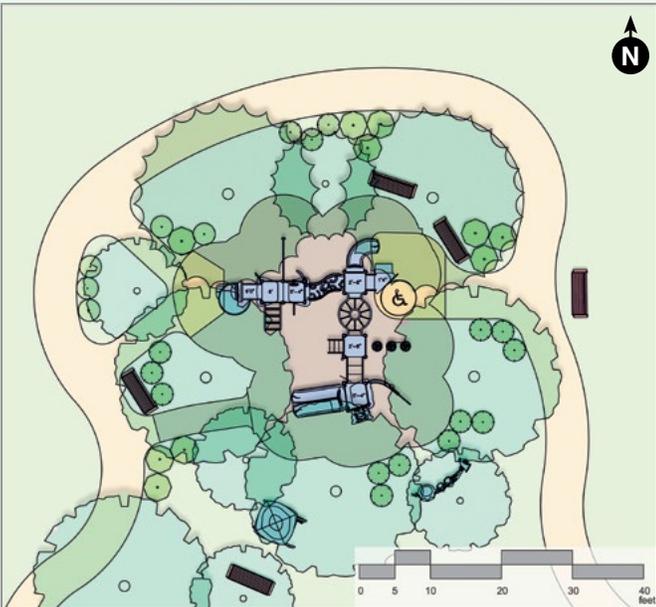
Phased Naturalization



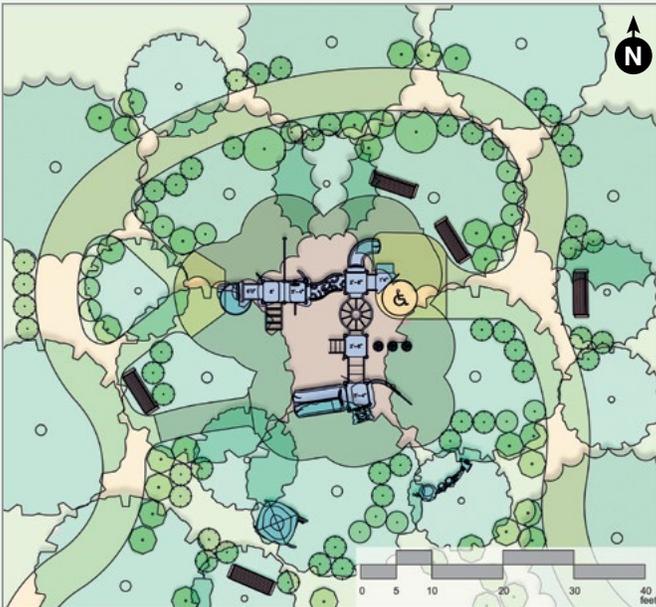
Single Equipment Use Zone



Phase One



Phase Two



Phase Three

large deciduous tree	medium deciduous tree	small deciduous tree	large evergreen tree	medium evergreen tree	small evergreen tree	Large deciduous shrub	medium deciduous shrub	small deciduous shrub	Large evergreen shrub	medium evergreen shrub	small evergreen shrub	vine	ornamental grass	hard surface path	engineered wood fiber	poured-in-place surfacing	sway bench	6 foot bench	vine tunnel



ADVOCACY

Join the Movement!

Become a National Demonstration Site

- **Promote your leadership** through best practice principles that integrate nature into the everyday spaces of childhood (new or retrofit)
- **Collaborate with program partners** and document the process for others to replicate
- Create **positive attention** and attract partners/funds that support healthy lifestyle initiatives
- Gain **national awareness** through various media outlets, press releases, collateral materials, and nationwide presentations
- Receive **letter of recognition and signage** for serving as a model demonstration site

To learn more about creating a naturalized playground in your community, request a full copy of the *NatureGrounds* guidebook, or become a National Demonstration Site, please visit:

playcore.com/solutions/nature-play

"A generation ago playing outdoors in nature was usually taken for granted, but times have changed. Now, nature must be deliberately designed back into children's lives."

- Robin Moore
DiplArch, MCP, Hon. ASLA