

Play Trees, Logs and Wooden Resources For School Grounds



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Learning through Landscapes

We are the leading UK-based charity dedicated to enhancing outdoor learning and play for children of all ages. We help children and young people to connect with nature, become more active, learn outdoors and have fun.

We encourage young people to have a say in the way their grounds are used and improved. As a result, they learn to create and look after something valuable; their self-esteem grows and their behaviour improves, along with their potential to learn and achieve.

We do this through three avenues -

- Advocating the benefits of outdoor learning and play at school and pre-school.
- Inspiring and enabling the design and development of outdoor environments to support children's development.
- Inspiring and enabling teachers and early years practitioners to develop the confidence, ideas and skills they need to make better use of outdoor spaces.

We focus our resources on educational settings, because we believe that this is where children will derive the greatest benefit. The school playground is the one outside space that children have frequent access to. Despite the proven benefits of outdoor learning and play, 8 in 10 teachers believe that their school is failing to make the most of these valuable spaces for children.



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1. Introduction

This advice and support resource focuses on natural wood (in a variety of forms) as a readily available, and cost effective, play and learning resource for schools and nurseries across Scotland. This resource -

- outlines the developmental and educational benefits of interaction with natural wood for children's learning and development.
- highlights examples from schools where fallen trees, logs, stumps and pieces of wood are successfully managed in school playgrounds and nursery outdoor spaces.
- suggests approaches to deal with the common management issues that arise with natural wood in school playgrounds and nursery outdoor spaces.

2. The benefits of wood for children

Fallen trees, large logs, poles, log stumps and wooden discs offer a huge range of possibilities for outdoor play and learning.

Physical literacy – fine and gross motor skills are developed through climbing, jumping, balancing, carrying and rolling.

Creative and imaginative opportunities – natural materials offer more 'affordances' than man made equipment.....that is to say, how children play with and use natural materials is limited only by their creativity and imagination. Compare a gnarled and bumpy piece of wood or stick with a toy car...the toy car will almost always be used as a vehicle, but the piece of wood could be whatever you want it to be (perhaps an old man's cane, a house, a mountain for an ant to climb, a spaceship, an animal and so on).

Promoting child led free play – wooden resources, such as poles, discs, stumps and planks, that are not fixed in one location promote the opportunity for children to lead their own play...to sit where they want to sit, to build and construct in their chosen area, to hide, socialise, be sedentary, be physical and to temporarily adapt the existing environment to suit their needs on a particular day.



Connection with the natural world – natural wood has tactile and sensory properties not associated with traditional plastic toys or metal resources. Mud, moss and lichen growth are all possibilities to be explored.



Biodiversity – as a natural resource, wood is home to a variety of minibeasts and insect life. Enhancing biodiversity in school grounds and nursery outdoor spaces is not only good for the environment, and the flora and fauna it supports, but improving outside spaces in this way has a proven positive impact on children's and staff health and well-being.

Engineering and science – amongst other things this is supported through problem solving, construction, den building, the changing properties of wood as it decays overtime, controlled fire lighting and the effect of heat on different materials (as well as learning to respect and appreciate fire as a tool).

Social and co-operative skills - commonly developed as children work together on joint projects, for example building a fantasy world, creating an obstacle course or a piece of natural art. Wood play offers good opportunities for older and younger children to co-operate together – something that's unusual in many playgrounds.

Language skills are developed – both in terms of words that describe wood and its uses, but also as children discuss what they are doing with adults and with each other.

Opportunities to risk assess and develop resilience – learning the difference between the properties of wet and dry wood when climbing or balancing, learning to correctly handle heavy or awkwardly shaped resources, testing boundaries and taking responsibility for yourself and others around you.....all important life skills that help develop resilience and confidence in children and young people.

Promotion of recycling – making the most of a naturally occurring material in a variety of forms.



3. Examples of use in school grounds

All across the UK, schools and nurseries are making use of existing wood resources in their grounds to enhance play and learning.



The play facilities within the grounds of this primary school are a key part of the school's strategy for supporting learning and child development.

'Children react to space in an instinctive way. I'm amazed to already see the variety of responses to what we've created. Children are exploring, climbing, digging, carrying, jumping. Not only that, they're having to do each of these in a variety of ways, and often in collaboration.'

Head Teacher

Irregular height, vertical, fixed tree logs have been cemented into the ground to create a boundary to the open sand area.....but also provide an opportunity for climbing, jumping, balancing and sitting. The loose materials on offer to the children include wooden discs ('pennies' or 'biscuits'), branches, willow and hazel poles, irregular shaped pieces of wood (off cuts) and log stumps.



'It's been great to see older pupils so motivated to share play space with younger pupils. There's more to P7 play than either football or nothing, and there's some real initiative and creativity in the building with loose materials, for instance, from a number of those non-footballers!'

Playground Supervisor

Offering a wide range of free play opportunities for all children is central to the ethos of this primary school in Glasgow. The public access playground offers a variety of terrain and surfaces, opportunity to engage with nature, quiet corners and busy, physical space. There are a wide variety of natural and loose materials to play with – with much of the wooden resources being chosen as resilient to damage.

The playground is popular with pupils at break and with staff, who utilise the variety on offer for a number of outdoor lessons and learning opportunities.



When we had just the normal playground all we could play was football but now we can play in the sandpit and learn how to build dens and everything.

Pupil



With extensive grounds comprising tarmac and grass, this Primary school in Aberdeen have added a fixed climbing tree on its side and balancing logs as well as loose wooden pennies, log stumps and planks. The wear on the mounds and logs shows the popularity of the items with pupils at break.



Examples from other schools



Photo ref –
www.creativestar.co.uk



4. Sources and dimensions

The table below highlights approximate dimensions of the resources highlighted in this advice sheet

Wood Resource	Approx. Dimensions	Notes
Wooden discs (sometimes called pennies, coins or cookies).	3 to 4 cms thick and 20 to 30 cm in diameter.	A popular resource that will need topping up over time as they can be degrade. They will last longer if made of hardwoods.
Wooden stumps	30 to 45 cms diameter and 30 to 40 cms tall	Choose the species with advice to avoid heavy sap or excessive degradation.
Rods or poles (for den building, for example)	1.5 to 2metres long and 4cms diameter	Hazel or willow are ideal, but any hardwood that is straight(ish) would do. N.B sourcing rods or poles (as opposed to branches of any shape) is limited to a specific season (Nov – Mid March)
Larger logs for erecting vertically into the ground	You should seek advice as to suitable dimensions, but typically 30cm-100cm.	Logs cemented into grounds, in line with good practice and with suitable advice. Heights and fall surfacing should also be in line with appropriate national guidelines and risk assessments.
Larger logs for laying horizontally on the ground	Open ended - depending on what's available and how accessible your grounds are for delivery	You should satisfy yourself that the wood type is suitable to avoid excessive degradation or sap.



5.Introducing, managing and maintaining materials

Loose wooden materials in school grounds need introducing, managing, reviewing and recycling or topping up in the same way that existing loose materials such as balls, hoops and skipping ropes do.

When introducing wooden discs, stumps and rods or poles to children involve them in agreeing a simple code of conduct, so that everyone enjoys the resources whilst looking out for each other and themselves. Examples might include no throwing, safe carrying, not putting anything above head height, rolling heavy logs and carrying poles vertically (keeping one end in contact with the ground) or horizontally (with a child at either end).

In many schools Pupil Council members have shared their ideas in assembly before asking each class to create a poster for their classroom and a laminated version for outdoors. This helps to ensure consistency of communication and is something playground support staff can refer to when outside.



Encourage children to report breakages and involve the Eco Committee and support staff reps in checking and recycling on a timetable that suits you. Heavy tree stumps will last a long time, but wooden discs will eventually dry out, crack and break. Long rods and poles are difficult to snap, but splits and sharp sections should be removed or repaired.

Communicate the value of open ended free play and loose materials with your Parent Council and agree that they will ring fence a small proportion of their annual fundraising budget to support replenishment of loose materials as required.

Vertical logs secured in the ground



Consider the following in terms of management and maintenance –

- Temporarily remove access from use in inclement weather, for example severe frost.
- Agree with support staff not to give children a lift up onto the logs - if the children are not capable of climbing the log themselves, they may well not be able to climb down from height if the member of staff moves away.

- When initially introduced, keep an eye on use and limit overcrowding whilst the children get used to the feature.
- Ensure the surfacing around the log is suitable for the height (see table on page 9). If grass is being eroded away through use, and the ground is becoming compacted, change the surfacing.
- Who inspects them, as well as the rest of your play equipment?

Horizontal logs on the ground



As with any natural resource, a large tree trunk or log will degrade over time – bark will fall off (or be picked off!) and rot will set in. Softwoods will generally degrade more quickly than hardwoods – but this will still take years. Oak logs will last many, many years.

Consider children's learning and play experiences when deciding whether to modify a horizontal log or tree trunk.....friction strips or

grooves in the wood versus the experience of wood in different conditions and learning to modify behaviour.

Experiencing the changing nature of a log over time is one of the many advantages of contact with natural materials. Deadwood is far from dead....providing a habitat for a wide and varied range of species which in turn are a food source for many birds and vertebrates.

Fallen climbing tree

Fallen climbing trees (essentially the main body of a tree minus the crown and the canopy) make fantastic play features in school playgrounds. Seek advice from the



Forestry Commission or local Authority Arboriculture contact with regards to availability and suitability (for example disease free). Install onto grass (some schools

removed fence panels to aid access) and adapt the surfacing to national standards regarding fall heights (See BS EN 1176 and 1177).

Have a look at the London Play info in the useful resources section of this advice sheet ('Fallen Trees as Climbing Structures') and contact other schools that have fallen trees as climbing structures in their playgrounds already, for example Thornlie Primary in North Lanarkshire (Scotland) or Quarryhill Primary in Aberdeen to find out more.

As with everything mentioned in this advice sheet, undertake a participative and collaborative risk benefit assessment (see section 6) involving teaching and non teaching staff and children. Children's involvement is a key learning opportunity – learning about risk, developing risk management skills and developing resilience in a supported environment. Keep the process dynamic – it is impossible to predict every eventuality so use observation and feedback to develop appropriate rules and procedures which can be agreed by all.

Consider how the play feature will be introduced to children, for example through a class time discussion and practical. In one school, children were only allowed to jump from the highest part of the tree once they had demonstrated to playground support staff they could safely do so - and always whilst a staff member was present. Over time this was relaxed as the tree became embedded into playtime and staff confidence developed. Staff observed that children tended to stay at a height they felt comfortable.



6. Managing Risk

Decisions about acceptable levels of risk in play provision should be guided by your head teacher, local authority and 'Managing Risk in Play Provision'. These are guidelines produced by Play England and endorsed by leading national safety agencies, including the Health & Safety Executive, Royal Society for Prevention of Accidents, and Play Scotland. A link to this resource has been included in the 'useful contacts and resources' section.

You should always have suitable risk assessments in place before you allow pupils onto new play equipment or use new materials.

Risk however, should be seen as a positive experience for children:

- That a degree of risk in play and learning is good for children's mental and physical health and wellbeing.
- Decision making needs to weigh 'with equal consideration, the duty to protect children from avoidable serious harm and the duty to provide them with stimulating adventurous play opportunities.'
- 'There is no legal requirement to eliminate or minimise risk, even where children are concerned.'

The guidelines set out a 4 stage approach for making decisions and managing risk in play.

Stage 1: Draft a school play policy.

This should set out the values, understandings, principles and criteria that form the framework for making judgements about play provision. This is the information that should guide decisions about specific play features and resources. Make it colourful and reader friendly and share widely.

- explain why the school thinks play is important and the value to children
- explain why a degree of risk in play is a good thing, what children can do outdoors and the procedures you have in place to manage this.
- state that the school uses 'Managing Risk in Play Provision' as the basis for its decision making or include relevant quotes from the HSE or the Play Strategy for Scotland.
- include quotes from staff and children, images and a direct appeal to parents regarding their role and responsibilities in supporting school

Contact Learning through Landscapes if you would like to see examples of simple play policies developed with schools.



Stage 2: Risk-benefit assessment (RBA)

A risk benefit assessment (RBA) is a risk assessment, as you are required to undertake by law. However, as well as outlining the risks and control measures, an RBA also outlines the benefits to the activity or resource and precedents for taking that risk. This can be very helpful for colleagues or nervous parents.

Undertaking a risk benefit assessment doesn't have to be onerous and is a great chance to include observations and feedback from pupils, teaching staff, playground support staff and SMT.

In summary you need to include –

- The benefits for children.
- The potential risks identified.
- The options identified for managing the risks.
- Any relevant expert views, comparisons and precedents (for example other school contacts that are doing the same thing and relevant resources and publications like the ones included in the 'useful contacts and resources' section of this advice sheet).
- Your final decision (your judgement about whether the benefits outweigh the risks), the fact that you will share the assessment widely and regularly review the contents.

You can find many resources, and example RBA's on our website at <https://www.ltl.org.uk/understanding-risk/>

Stage 3: Maintenance plan

Your Risk Benefit Assessment (RBA) will highlight maintenance as part of risk management, for example recycling and replacing broken wooden discs over time and checking for signs of rot and decay. Your school already will have a maintenance regime for the grounds and any play equipment – new resources should be included into this.

Stage 4: Dynamic risk benefit assessment

Your RBA will have identified issues such as a code of behaviour, rotas, hand washing routines etc. This stage is simply the implementation of these things on the ground, as well as the common sense monitoring and supervising that is already undertaken and making daily decisions about resources based on circumstance.

Examples include temporarily taking resources such as fallen climbing trees and climbing logs out of use because of heavy snow / ice or reducing the amount of loose materials available on a given day because several support staff are off sick.

Recording that your staff are making these judgements and you expect them to, on a daily basis, should be a simple part of your risk management strategy.



7. Example resources and contacts

- **Learning through Landscapes** – www.ltl.org.uk
- **Managing risk in school grounds** (including risk benefit examples)
<https://www.ltl.org.uk/understanding-risk/>
 - **Free Loose materials booklet** – download here
<https://www.ltl.org.uk/publications/>
- **‘This Place is Like a Building Site’** – download booklet and short video here
<https://www.ltl.org.uk/publications/>
- **Play Scotland** - <http://www.playscotland.org/>
- **Fallen Trees as climbing structures**
https://www.londonplay.org.uk/resources/0000/1697/Fallen_trees_low_res.pdf
- **Managing Risk In Play Provision**
<http://www.playengland.org.uk/resource/managing-risk-in-play-provision-implementation-guide/>
- **ROSPA** - <https://www.rospa.com/play-safety/>
- **Play Strategy for Scotland – The Scottish Government**
<https://www2.gov.scot/resource/0042/00425722.pdf>

