



FOREST KINDERGARTEN and OUTDOOR NURSERY

DRAFT GUIDANCE FOR LANDOWNERS

This guidance is for landowners who are approached by early learning and childcare (ELC) centres who wish to use your land to establish Forest Kindergarten sessions or an outdoor nursery. As a woodland owner, you can open up your woods to visiting groups. This guidance provides summary information on the use of woodland for Forest Kindergarten and outdoor nursery purposes.

Think back to your own childhood and how you played outside. It is quite likely you undertook a range of activities such as:

- Digging in soil
- Moving logs
- Collecting, moving and manipulating natural materials like sticks and stones
- Picked and played with common plants, such as making daisy chains
- Built dens
- Created trails and obstacle courses
- Play traditional games
- Observed and handled wildlife
- Damming streams
- Ate blackberries and other known wild food
- Climbed trees
- Balanced or walked along logs, walls and other features

These are the sorts of playful activities that Forest Kindergarten and Outdoor Nurseries encourage. Through these, children learn many different things which give them the best start in life, being outside and actively exploring the world around them. This may be Forest Kindergarten, or similar weekly sessions run by a standard nursery. It may also be outdoor nurseries.

Early Learning and Childcare (ELC) centres need woodland sites where children can play in these ways, safely and happily. Landowners and managers who are interested and up for enabling young children to play on their land are making a huge, positive difference to these children's lives.

WHAT IS FOREST KINDERGARTEN?

Forest kindergartens offer young children frequent, regular play opportunities in woodland and/or a natural setting, throughout the year, in almost all weathers. Most ELC centres adopting this approach begin with a weekly session but this may become more frequent. The learning happens through play. It is child centred and led with freedom to explore using multiple senses. There are clear curriculum links and a high ratio of adults to children.

WHAT IS AN OUTDOOR NURSERY?

Every outdoor nursery is different. It is important to find out more about what is planned. Some outdoor nurseries are nomadic. They have a base, such as a village hall, yet tend to spend most of their time on a walk where they move from site to site. Others have a static site or two which they use all year round. The similarities include:

- The nursery must be registered with the Care Inspectorate. It will have a certificate of registration and you can find the details on the Care Inspectorate website. There are certain conditions attached to registration including having sufficient, suitably qualified early years staff.
- The children and staff will be outside most of the time all-year round. They tend only to go inside when the weather is particularly inclement or a child really needs to be inside.
- The emphasis is on learning through play in nature. The woodland, wildlife and weather are the resources. Research from Scandinavia suggests that there are significant benefits to this type of pre-school provision. Children are more physically active, better co-ordinated, calmer, able to focus for longer periods of time, better able to socialise, show a greater empathy and respect for nature and develop more independence than at a standard nursery.
- The same curriculum and inspection processes apply to an outdoor nursery as to a standard nursery.

What happens at a Forest Kindergarten session or at an outdoor nursery?

Forest Kindergarten aims to foster children's connection to the natural world. By playing and learning about how to be outside, the children develop confidence and independence. Through a child-led approach, staff help children to cherish nature and learn about real life. Typical experiences include:

- Simple investigations and explorations with minimal equipment, using natural materials as the learning resource.
- Playing games, using the woodland for inspiration. Often these involve a lot of physical activity.
- Having snack outside and foraging wild food.
- Listening to stories and participating in songs, rhymes and simple games which help them learn how to be in nature.
- Simple stewardship activities such as planting trees or bulbs or creating habitat piles for minibeasts, in agreement with the land owner or manager.
- Having time to relax and chat with friends.
- Observing simple wonders of the natural world such as discovering a worm emerging from soil or a bird flying overhead.
- Setting up a tarpaulin shelter or adventure tipi.

At an outdoor nursery, the children spend longer on these activities. In addition, some children may need a nap. At a static site, permission may be sought to create a range of temporary structures. Often there will be walks and local visits to other parts of the wood or to explore local amenities such as a shop or a library.

The ELC staff understand that any activity should only take place with the prior agreement of the landowner or manager. Appendix 1 contains a site appraisal form for aiding this process.

If you have any concerns about the intended activities, then discuss this with the ELC manager or group leader. It is very likely that reasonable adaptations to their practice can be made that support your woodland management, or can be avoided or relocated where there is concern.

How do I know my site is suitable?

The minimum required is an outdoor site with natural features including some trees and shelter, whether this is in an urban context or the wider countryside. However, the ideal setting for learning in the woods would have the following features:

- Be a well-managed broadleaved/ mixed woodland, with a diversity of smaller trees, shrubs and open areas.
- Have good mobile phone reception in case of emergencies.
- Be accessible on foot for little children.

- Have a clear access point at the entrance for emergency vehicles and an external parking/drop off point for educational transport if required.
- Have easy access within it plus opportunities to explore off the main paths.
- Have minimal public access, and no accessible open deep water nearby.

An ideal site may not exist but you can work with the leader to find the best site. Sometimes there needs to be some site maintenance work to make it suitable.

PRACTICAL ASPECTS

What is the environmental impact of Forest Kindergarten or Outdoor Nursery use?

The Forest Kindergarten training emphasises the importance of ELC staff ensuring:

- The group adheres to the Scottish Outdoor Access Code
- A sustainable and rights-based approach is taken to help children learn about caring for nature.
- Collection codes and best practice advice followed, e.g. Moss Collection Code

The occasional visiting group will most likely have a minimal impact on the chosen site. A small outdoor nursery group that adopts nomadic practices and a “Leave Less Trace” approach where they are moving from site to site during the day, is unlikely to create significant site damage.

When an outdoor nursery or forest kindergarten has a fixed or static site, then the disturbance is likely to be significant in the main area of use especially with regular, prolonged use by many children. Appendix 2 provides suggestions to consider the potential issues which arise.

LEGAL ASPECTS

Liability and Insurance

The legal position on liability is largely based on the Occupiers’ Liability (Scotland) Act 1960 and common law, where an ‘occupier’ of land has a duty of care towards people on that land. The landowner must ensure the property is kept in a condition that is not likely to cause injury or damage to people on that land, whether or not they have permission to be there. The landowner is not liable for willingly accepted risks taken by visitors pursuing activities on the land.

Woodland owners are advised to have public liability insurance cover. The ELC centre should have public liability insurance cover for off-site visits and their Forest Kindergarten or outdoor activities. In addition, if a charge is made for use of your property, you will need commercial liability insurance. If there is no charge, you should ask to see a copy of the ELC centre’s current public liability insurance cover certificate. For local authority run ELC establishments, this should automatically be in place.

Risk Assessment

Risk assessment involves checking what potentially might cause harm (hazards) and setting precautions to minimise any associated risk. As a landowner, you should notify any visiting groups of any known hazards on your land. This might include – any open water, old rubbish dumps, disused wells/mine shafts, abandoned buildings, forestry operations and so on.

A woodland site used for education activities must be assessed by the outdoor nursery manager or Forest Kindergarten leaders in order to evaluate the hazards and risks they pose. Risk cannot be eliminated, and learning how to manage risk safely is part of the learning experience. There is no additional requirement

on the landowner to manage the risk associated with outdoor nursery or Forest Kindergarten since a risk assessment will be undertaken by their staff to assess and manage the identified and foreseeable risks.

Safety

The Forest Kindergarten or outdoor nursery staff have ultimate responsibility for their children. They must have health and safety policies, accident and emergency procedures and routines which help their children develop appropriate behaviours in natural spaces. They are responsible for carrying out a site risk assessment for the health and safety of their group undertaking any planned activities on site. ELC centres should operate under their local authority guidelines, the SSSC statutory framework, the Health & Safety at Work Act 1974, and the Management of Health and Safety at Work Regulations 1999, the regulations which introduce the principle of risk assessment.

Access

Guidance provided by the Outdoor Access Code (under the Land Reform (Scotland) Act, 2003) makes clear that the outdoors cannot be made risk-free and that people accessing land must act with care for their safety and that of others. In Scotland, everyone has the right to be on most land and inland water providing they act responsibly and do not take motorised vehicles on site. Whether you are in the outdoors or managing the outdoors, the key things are to:

- Take responsibility for your own actions
- Respect the interests of other people
- Care for the environment.

As a landowner, you can ask people to avoid routes while work is going on or to avoid particular activities if this causes serious or less obvious risks to arise. Otherwise you have a responsibility to respect access rights, to act reasonably when asking people to avoid certain working areas, and to work with the local authority and other bodies to help integrate access and land management.

Responsibilities

Forest Kindergarten and Outdoor Nursery groups have a responsibility to treat the environment with care and respect. As the site landowner or manager, you should inform groups about whether any part of the site is designated for its natural heritage, landscape or cultural interest, or has any other special features that they should be aware of.

Those seeking to establish a Forest Kindergarten or Outdoor Nursery must discuss their plans well in advance with the site landowner or manager and seek permission for use of the site. This is particularly important to avoid any conflict with any other planned activities on the land. Examples include:

- Timber operations and tree maintenance or felling work
- Spraying of crops. The wind can carry the chemicals or slurry into areas used by the group.
- Movement of livestock that impacts on the group's normal access
- Hunting, shooting or similar estate work.
- Work or situations where a water supply used by the children for play becomes contaminated
- Archaeological excavations

It is important that you and the nursery manager set up a communication system to minimise impact to both parties.

SOURCES OF ADDITIONAL ADVICE AND FUNDING

Scottish Forestry, Scottish Natural Heritage or Historic Environment Scotland may be willing to help to set up local agreements between site landowners/managers and those looking for a site for Forest Kindergarten or an outdoor nursery. They can also offer advice on issues such as site location, safety, management, natural and cultural heritage designations and felling permissions.

Scottish Forestry education staff can help access grants, training and advice on project development. A list of potential funding sources is available on the Outdoor Access Code website (link below)

REFERENCE SOURCES AND FURTHER INFORMATION

- Outdoor & Woodland Learning Scotland web pages provide links to Forest School and other resources <https://bit.ly/2tGGRIT>
- Scottish Forestry <https://forestry.gov.scot>
- Education Scotland support for professional development in outdoor learning <https://bit.ly/2T2NWCt>
- Paths for All: a partnership of more than twenty national organisations committed to promoting walking for health and the development of multi-use path networks in Scotland. <https://bit.ly/2ROwpZ7>
- Scottish Outdoor Access Code – provides additional advice to landowners/ managers <https://bit.ly/2EpnMxl>
- SNH 'A Brief Guide to Occupiers' Legal Liabilities in Scotland in relation to Public Outdoor Access' <https://bit.ly/2NuypWb>
- The Health and Safety Executive offers guidance on how to carry out risk assessments <https://bit.ly/1WXx4EY>
- The Royal Highland Education Trust (RHET) provides advice and information on rural issues, and good practice guidelines for working with children in the countryside <https://bit.ly/2D43utv>
- Woodland Initiatives Network hosted by Small Woods provides a useful handbook (see Chapter 6 Liability insurance) <https://bit.ly/2UdvC6c>
- Care Inspectorate (2016) *My World Outdoors* provides advice and information about outdoor provision for ELC groups. <https://bit.ly/2pOQTW1>
- Scottish Government (2013) *Play Strategy for Scotland: A Vision* outlines the need for children to have daily play experiences outside in a natural setting <https://bit.ly/2EBXQIN>
- Scottish Government (2018) *Out to Play: Practical Guidance for Creating Outdoor Play Experiences in Early Learning and Childcare* <https://bit.ly/2tH2TLI>

APPENDIX 1: FOREST KINDERGARTEN and OUTDOOR NURSERY

A CHECKLIST FOR LANDOWNERS and ELC STAFF

The aim of this checklist is to provide a shared discussion of all that may need to be considered when establishing an outdoor nursery. For Forest Kindergarten sessions where the site is used less frequently, then not all the questions and statements may apply.

Name of Woodland:

Grid Reference:

Site manager:

What size of group (adults and children) is anticipated?	
How often does the group wish to use the woodland site?	
Is the group size or frequency of use likely to change in the foreseeable future?	
What additional support needs or specific considerations need to be taken into account including age and developmental ability of children.	

Has a specific impact resistant area been identified through a site appraisal process?	
Has the land owner/manager been involved in the site appraisal process?	
Has the land owner/manager been provided with a copy of the completed site appraisal form?	
Does the land owner/manager have sufficient and appropriate insurance?	
Does the ELC centre and/or local authority have sufficient and appropriate insurance?	
What site maintenance work is needed to make the proposed site fit for purpose? (attach action plan)	
Do you have a written agreement in place which clarifies remits and responsibilities? (attach)	

Is there a date agreed for beginning the use of the woodland site?	
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ENVIRONMENTAL IMPACT and SITE ROBUSTNESS

Is there an agreed system for monitoring the environmental impact throughout the year, if needed?	
<p>Has the environmental impact of the Forest Kindergarten or outdoor nursery on neighbouring land use has been considered, e.g. noise, disruption to wildlife?</p> <p>Have neighbouring landowners have been consulted or informed?</p>	
<p>Have any “No go” areas have been identified by landowner/manager and discussed with ELC lead practitioner such as:</p> <ul style="list-style-type: none"> • Safety • Wildlife protection • Private property • High risk of environmental impact in a sensitive area • Other use? <p>Map attached with areas highlighted?</p> <p>ELC staff have procedures in place to ensure “no go” areas are respected.</p>	
<p>Are there any seasonal or site management factors which may impact on the group using the woods? Examples include:</p> <ul style="list-style-type: none"> • Timber operations and tree maintenance or felling work • Spraying of crops. The wind can carry the chemicals or slurry into areas used by the group. • Movement of livestock that impacts on the group’s normal access • Hunting, shooting or similar estate work. • Work or situations where a water supply used by the children for play becomes contaminated • Archaeological excavations 	
<p>Have you adapted your site management plan to support children’s presence and to include measures that help balance environmental impact with children’s health and wellbeing and societal benefits?</p>	

<p>Have the ELC group indicated how their actions and behaviours will help mitigate environmental impact, e.g.</p> <ul style="list-style-type: none"> • The creation of simple pathways to make the site more accessible • Regular checks of the trees in the main site • Use different areas in rotation or at different times of the year • Agreeing to abide by a “Leave Less Trace Nature Play Principles”? 	
<p>Have the ELC group and their community undertake agreed environmental stewardship tasks to support the site management?</p>	
<p>Are invasive species actively managed particularly those which are potentially harmful?</p>	

SITE ACCESS

CONSIDERATION	Comment
<p>Is the site within walking distance from the ELC or homes of most children?</p> <p>Are there access issues such as locked gates or fences to be overcome?</p> <p>Is it necessary to request that parents drop off and pick up children from the woodland? Or will the group meet elsewhere and walk in?</p>	
<p>Is there sufficient parking for staff?</p> <p>Is there sufficient safe space for picking up and dropping off children nearby?</p> <p>Is signage needed to indicate the presence of the nursery, or not?</p> <p>Do neighbouring landowners need to be consulted regarding access arrangement?</p>	
<p>Network of paths – does this exist? If not, how easy is it to walk across the area, especially for pre-school children?</p> <p>Will pathways need creating? How many and in particular, ones that need to be accessible for buggies or wheelchairs?</p> <p>Are there natural or fixed boundary features, e.g. a line of trees, a hedge, path, fence etc?</p>	
<p>Ground cover – leaves, grass, needles, heather. Or is it very boggy, or have too many “inhibitor” plants such as brambles and nettles? Remember this will change with the season. Will thinning be needed in the summer?</p>	

Think about the terrain – you want safe but with options for challenge. Ideally a mix of flat and sloped spaces. Think about its aspect (north or south facing) and when the sun reaches the slope or whether it is in shade during the session times.	
Is there a safe assembly point within or just out with the woodland site? Think about a designated place of safety in the event of a serious incident. Is there a nearby facility?	
Nearby attractions and land use suitable for nursery use? <ul style="list-style-type: none"> • Parks • Shops and services • Contrasting natural habitat • Public transport, e.g. a bus stop What would be advantageous to have nearby?	

STRUCTURES AND SHELTERS

Has due consideration been given to the need for shelter in relation to the age and size of the group? Is there a public building nearby that would suffice in severe weather? Are there outer buildings in a good state which can help provide shelter? Is there sufficient level ground and space for temporary shelter?	
Will the ELC use a temporary shelter which is put up and down daily, e.g. <ul style="list-style-type: none"> • Use of a parachute between two trees. • An adventure tipi • A tarp shelter • A tent Is the terrain and space suitable for these types of shelter?	
Is there a heat source within the shelter such as a wood burning stove? Will measures be put in place to manage the risk that meet regulatory guidance, such as signage and a carbon monoxide alarm device?	
Will temporary structures be created on site, that are taken down at the end of each session e.g.	

<ul style="list-style-type: none"> • Rope swings • Rope bridges • Rope ladders • Hammocks and nets <p>Is a risk benefit assessment in place to manage the erection and use of these structures?</p> <p>Or will the above be left overnight and at weekends?</p>	
<p>Will semi-permanent structures be created on site, that are left there e.g.</p> <ul style="list-style-type: none"> • Gathering circles, e.g. with stumps or logs • Pallet play structures, e.g. mud kitchen, water walls? <p>Are risk benefit assessments in place to manage the erection and use of these structures including by after hours visitors?</p>	
<p>Is planning permission or professional advice needed for any aspect of shelter or structural provision?</p>	
<p>Does the ELC require on-site storage and what will this be?</p>	
<p>Does the ELC have plans to have farm or domestic animals on-site such as chickens, guinea pigs, etc?</p> <ul style="list-style-type: none"> • Have the impact of these animals been considered on the site? • What systems need to be in place to ensure health, safety, and wellbeing of the animals, children and the land? • Has due account being taken of the RSPCA's guidance on the welfare of animals in education settings? https://bit.ly/2H4tbPz 	

NAPPING

<p>Does the ELC require a system that enables children to nap in line with their home routines?</p>	
<p>Will the napping provision temporary, e.g. tents, hammocks and prams, or a permanent structure such as a shack or lean-to?</p>	
<p>Is this able to be located within the main area but out of the hubbub of children's play spaces?</p>	

FIRE

<p>Does the landowner/manager give permission to light a controlled fire which may include:</p> <ul style="list-style-type: none"> • A raised fire, e.g. in a fire bowl • A wood burning stove • A kelly kettle • A traditional campfire at ground level • A camping stove? 	
<p>Is there a suitable place lighting a controlled camp fire</p> <ul style="list-style-type: none"> • High or no tree canopy • Sheltered from wind (or are wind reduction measures needed) • Level ground • Permanent or leave no trace system or half way, e.g. turf removal/hidden fire spot • Secluded, away from the public eye • Space for seating and moving safely around the fire • Any site preparations needed 	
<p>Will fire procedures follow Scottish Outdoor Access Code?</p>	
<p>Will the OWLS Scotland fire advice be followed?</p>	
<p>Are staff are competent to light fires and supervise children around their use?</p>	
<p>Are systems and risk benefit assessment in place to ensure fire use is managed?</p>	
<p>Is the use of fire part of a holistic, well-thought out approach and ethos that is developmentally appropriate to the needs and interests of the children?</p>	

TOILETING

<p>Are there nearby public facilities which could be used by the group?</p>	
<p>Is there a mains water system on site? If so, could flush toilets, handwashing and other facilities be installed?</p>	
<p>Could the site cope with wild toileting, given the group size and frequency of use?</p> <p>Does the ground cover and soil type suit rapid decomposition of human waste?</p>	

<p>Is a system in place for rotating the toilet site?</p> <p>Will all the children manage this method? Do you need an alternative (e.g. a potty?) <i>(NB no pee tree, everyone must pee into the ground)</i></p> <p>How will the dignity of the children be maintained when toileting?</p> <ul style="list-style-type: none"> • Tarp or tent • Walk seven bushes • Natural features <p>Are procedures and protocol for adults in place – privacy, sanitary products, staff deployment?</p> <p>Scottish Outdoor Access Code advice adhered to?</p> <p>Are hand hygiene facilities nearby?</p>	
<p>Is the site suitable for a compost toilet?</p> <p>Will it be suitable for all developmental stages of children? Is there an adult facility too?</p> <p>Minimum odour and flies? Good ventilation? Cleaning system in place?</p> <p>System for managing all parts of the composting system including the management and storage of secondary processing?</p> <p>Does this enable waste to decompose safely without contaminating land, water or posing a public health threat?</p>	
<p>Does the waste need to be removed from site?</p> <p>Biobag method?</p> <p>Chemical toilet and process in place for uplift and disposal?</p> <p>Off-site facility to dispose of waste?</p> <p>Off-site facility and procedures in place for cleaning potties, buckets and other toileting paraphernalia in line with HPS Infection Control advice?</p>	
<p>Do you need to consider nappy changing?</p> <p>Are clear routines in place to ensure</p> <ul style="list-style-type: none"> • The dignity and privacy of the child? • Health and safety considerations for the adult and child? • Infection control? 	

Is there a risk benefit assessment in place for toileting, hand hygiene, nappy changing procedures and other infection control matters?	
Are parents aware of the toilet system and have they had an opportunity to ask questions, visit the site?	
Has the local environmental health officer being consulted about the approach to toileting and waste management?	

SITE CHARACTER - This is how the place feels. Ideally it should have a feeling of “wildness” about it. Do remember that even small places can feel wild and isolated for a young child.

CONSIDERATION	Comment
Traffic noise, including that from air or rail transport or industrial operations	
Mix of trees: young, mature, different species	
Mature trees, especially those with limbs suitable for low level tree climbing and for rope swings and structures	
Young trees for coppicing and shelter building	
Shrubs for hiding, den building, hanging things on	
Stumps for standing on, using as a table, mixing potions in	
Fallen trees for climbing on, walking along	
Open canopy and cover – glades of light	
Variety of plants and fungi	
Availability of sticks and other loose materials on the ground	
Presence of stones, rock outcrops	
Multi-sensory variety: sights, sounds, smells, shapes, colours	
A variety of places: enclosed, open, to hide, roll, sit, have physical challenge, be quiet, a good view, etc	
Evidence of wildlife. Opportunities to watch wildlife.	
Presence of water, e.g. stream, river, loch, bog/wetland, ditches, sea, etc. and safe access to it.	
Terrain– ideally a mix of flat and sloped areas with dips and hollows.	

Think about the site aspect (north or south facing) and when the sun reaches the slope or whether it is in shade during your session.	
Are there historical or archaeological remains on the site or nearby, e.g. old walls, buildings, ditches, tracks. Are there any restrictions around these places?	
Ability of the site to cope with the frequency of your visits and numbers in your group so that environmental impact is minimised.	

POTENTIAL HAZARDS

Think about whether these are manageable and the level of risk posed. What can be done to enable visits to go ahead? Bear in mind the risks may also be seasonal. Think about “heads, shoulders, knees and toes” when looking for hazards at different levels in the woodland canopy.

CONSIDERATION	Comment
<ul style="list-style-type: none"> Litter – including drug paraphernalia and sharp objects 	
<ul style="list-style-type: none"> Standing dead trees or dead wood in trees. Do you need an arboriculturalist to check your trees and provide advice? 	
<ul style="list-style-type: none"> Water - location, feature, ease of access. Will this require measures to prevent young children from accessing unsupervised? 	
<ul style="list-style-type: none"> Steep drops 	
<ul style="list-style-type: none"> Animals, e.g. excessive midges, ticks, livestock, dogs and dog mess, nesting birds, use of wood by ponies and riders 	
<ul style="list-style-type: none"> Quantity and type of potentially harmful plants – ask environmental professional for advice here, if needed. Consider seasonal variation. 	
<ul style="list-style-type: none"> Security of the area – think about whether structures and children’s creations are likely to remain or be removed/destroyed. How important is this? Are crime prevention measures in place, if needed? 	
<p>The amount and type of</p> <ul style="list-style-type: none"> passers-by other users – who else uses the site and is it appropriate for children to be playing there? degree of seclusion needed – consult your local crime prevention officer, if necessary 	
<ul style="list-style-type: none"> Ongoing site work: tree felling, footpath improvement, grass cutting, spraying, timber operations and their aftermath. How frequently are these likely to occur? 	
<ul style="list-style-type: none"> Nearby industry or land use which may create pollution (noise, air, land, water, etc.) 	
<ul style="list-style-type: none"> Power lines and electricity substations: location and possible ease of access by children 	

<ul style="list-style-type: none">• Is there wifi and mobile phone coverage? Are there any known blackspots?	
<ul style="list-style-type: none">• Location of nearest GP surgery and hospital	

APPENDIX 2: MANAGEMENT OF ENVIRONMENTAL IMPACT AT FOREST KINDERGARTEN AND OUTDOOR NURSERY SITES

This advice has been collated from practical experience and by adapting the recommendations made by Browning, Marion and Gregoire (2013)¹ and Browning (2012)² in their research papers. The aim is to help ELC staff and landowners and managers think more comprehensively about their objectives for developing Forest Kindergarten and Outdoor Nurseries and how they will sustainably manage the areas affected.

Long-term success is based on extensive planning. In the medium to long term concentrated traffic on well-established and managed sites has little additional effect but traces of children's play will always be found. It is clear evidence of a landowner being an advocate for children's play and the societal benefits of enabling children to play in natural spaces.

Summary

1. **Select impact-resistant sites** for Forest Kindergarten and Outdoor Nursery activity. Avoid environmentally sensitive sites.
2. **Involve children** in practical approaches to caring for the site and engage in shared sustained thinking based upon their understanding and experience of playing in these sites. The FCS Forest Kindergarten approach encourages ELC staff to use age-appropriate strategies to ensure children adopt and remember how to be outside.
3. **Improve site resistance through informal management techniques** that the group of children and staff can also assist with. Manage adaptively and informally. See the suggestions in the table below.
4. Groups should **adopt low impact activities in a sensitive way** which does not overly constrain children's free play. In some sites, this will be a 'Leave no trace' approach. In others it may be more appropriate for 'Leave less trace' practices to be adopted to enable children to play without constantly having to consider the environmental impact. See Appendix 3.

Site management plan considerations

- The management of sites will need to include use by very young children. Children perceive the landscape differently to adults. A balance may need to be struck between needs of children and environmental impact.
- Keeping the overall appearance of the site informal but cared for (rather than derelict). Children find this safer and more welcoming.
- A diversity of native grasses, herbaceous groundcover, flowers, shrubs, and trees could be planted or introduced. A biodiverse space is often a child-friendly space.
- Potentially harmful plants such as giant hogweed are actively managed and children prevented from inadvertent contact.
- The use of your land by ELC centres does not conflict with other uses, particularly those which may affect any land use grants you receive.

¹ Browning, M; Marion, J; Gregoire, T. (2013) *Sustainably connecting children with nature – An exploratory study of nature play areas visitor impacts and their management*. Landscape and Urban Planning 119 (2013) 104-112

² Browning, M. (2012) *Final Grant Report: Advancing Sustainable Land Management to Connect Children with Nature* American Swedish Institute Scholarships Program

Static outdoor nurseries may also need more facilities which also impacts on site use and management:

- Structures and shelters to be established. These are usually semi-permanent and do not require planning permission. However do check out the specific details.
- A place to garden and grow fruit and vegetables.
- Space for animals such as hens or guinea pigs.
- Storage facilities such as a shed for resources.
- Space and ability to organise and host family and community events such as a Christmas party or fund raiser.
- A fire pit.
- A clear boundary such as fencing to prevent access to roadways or open water.

Selecting impact-resistant sites for Forest Kindergarten and Outdoor Nurseries

- Grasses display the greatest resistance to foot traffic.
- Some plants are particularly beneficial for play, e.g. dandelions, clover, daisies and species commonly found on school playing fields when the grass is left to grow. They are designed to be tough and resistant to eradication.
- Non-vegetated rock, cobble, and exposed mineral soil are inherently durable and can sustain heavy traffic with little to no impact.
- Gentle slopes with an incline of less than 10% are better able to sustain high use.
- If climbable boulders and trees are common on steep slopes, unstable sites and slope-aligned trails are likely to be formed. These are prone to erosion, difficult to stabilize, and demand regular maintenance.
- Topographic or vegetative barriers may naturally contain and concentrate traffic to a limited area. Sites without these barriers may need to consider fencing or other preventative measures to stop continued site expansion over time.
- Natural buffering from other land use. This could be a thick hedge to reduce wind and noise from human activities, especially in urban areas.
- Soil erosion or muddiness can be minimized by carefully selecting sustainable site locations.
- The ability to create paths which invite exploration rather than leaving children to create their own informal paths.
- The size and shape of the site and where the group can concentrate its activity.

Involve children in site maintenance and management

With the right to use a site, comes the responsibility of caring for it. The children and ELC staff benefit from having active involvement in simple jobs that help maintain the site, which can be backlinked to the curriculum to emphasise this is also real-life learning opportunity. This may include:

- Learning songs, games, rhymes and stories about how to behave at the site.
- Working alongside an adult who is modelling the skills and techniques.
- Practical tasks such as planting, seeding, watering, etc. Some tasks such as coppicing can provide foliage and wood for children to use in their play.
- Creating positive signage to remind others about what is happening on site.
- Monitoring site for environmental impact of their own and the presence of others. ELC staff and children to report and even take first actions to improve site resistance to impact.
- Keeping a journal or floorbook about the seasonal changes to the site and what they are doing.

Environmental impacts from children’s free play in a woodland

The occasional visiting group will most likely have a minimal impact on the chosen site, particularly if it is a well-used area by the public. If the ELC setting is looking to adopt nomadic practices and a “Leave No Trace” approach where they are moving from site to site during the day, then the site damage is also unlikely to be significant, especially if the group numbers are low.

A fixed or static site will suffer wear and tear, particularly with regular, prolonged use by many children. Below are examples of the impact of nature play and some suggested strategies to manage the impact. It is evident from lists that this is a shared, partnership between the landowner/manager and the ELC centre.

Impact	Strategies to manage impact
Vegetation loss (most likely severe impact)	<ul style="list-style-type: none"> • Rotation of designated sites in a cycle that enables recovery. • Choice of sites used depends upon season, weather or ground conditions to reduce impact. • Creation of paths and trails that match children’s patterns of play. • Encourage mindful use of natural materials, e.g. 1 in 20 rule for picking common wildflowers, berries, leaves, etc.
Loss of biodiversity through children’s use of moveable natural materials, e.g. collecting or picking wildflowers, berries, lichen, moss and fungi.	<ul style="list-style-type: none"> • Select sites with a good level of biodiversity to begin with. • Rotate sites if needed to allow recovery • Adults need to be patient with little children as they learn what is okay to pick and what isn’t and in what quantities. This skill and knowledge is only acquired through experience. Eventually the culture of the group will be one that fosters care.
Groundcover vegetation trampling	<ul style="list-style-type: none"> • Group to be aware of seasonal changes. Certain areas may be “no go” in spring time to allow new herbaceous growth. • Creation of paths and trails that match children’s patterns of play, e.g. through strimming or mowing, use of logs as informal path sides.
Removal of organic litter and deadwood Soil exposure and loss Soil compaction Soil erosion	<ul style="list-style-type: none"> • Minimise soil erosion, muddiness, and maintenance needs by thinking about where children are likely to play. Factor this in when selecting a suitable site • Bring in firewood from a sustainably managed source rather than overcollect dead wood. • Define boundary of eroded areas so that further expansion is limited. • Add brushings, bark chip or leaf litter to soften the surface in key areas if needed.
Development of mud patches NB Providing the mud is contained and the patch doesn’t expand, this will be a source of interest and fascination for young children.	<ul style="list-style-type: none"> • Factor this in when selecting a suitable site • In areas of high flow of people such as a site entrance, dig up and put down free draining material such as sand overlain with gravel. (check) or overlay mud with lots of bark chip, brushings or similar and keep topped up. (check)
Tree and shrub damage including root exposure, foliage stripping and branch breaking,	<ul style="list-style-type: none"> • Do not collect bark from living trees. • Tree climbing on species which can tolerate this type of play • Children encouraged to climb using limbs that are the same thickness as their wrists or larger.

<p>soil compaction around tree base, cuts into tree bark</p>	<ul style="list-style-type: none"> • Scarves used to protect tree bark rubbing when rope structures are created. • Tree swings created on limbs that are strong enough to withstand the stress. See https://bit.ly/2XtUgc3 • Ensure regular health checks undertaken of trees in high use areas. Tree maintenance needs to be a priority in this space.
<p>Site expansion</p>	<ul style="list-style-type: none"> • Ensure that the group is naturally concentrated in a limited or defined area to prevent site expansion over time. • ELC staff can establish temporary boundaries through use of scarves and other indicators about where children may play in any designated area.
<p>Foot traffic creating informal paths and trail braiding</p>	<ul style="list-style-type: none"> • Create paths which invite exploration rather than leaving children to create their own informal paths • Develop simple trails by observing where children play and their movement patterns within a site. Children and staff can often create these informally using brushings or logs to mark the edges and to direct the flow of people. • Strim or mow paths through meadows and long grass • Close or rehabilitate unneeded trails and those that are particularly susceptible to unsustainable use. • Stabilize remaining trails with gravel, mulch or stepping stones or logs, water drainage features, and downslope barriers.
<p>Air, land and water pollution, e.g.</p> <ul style="list-style-type: none"> • Eroded soil is redeposited where it may smother plants, impair aquatic habitats, and pollute waterways • Inappropriate toileting procedures can contaminate the land and water on site and in surrounding areas • Previous land use 	<ul style="list-style-type: none"> • Hose down or remove mud when entering shallow streams and other water bodies. • See Appendix 1, toileting section. Agree approach to toileting and monitor carefully the impact. • Soils and waterways could be tested for pollution levels. • Areas of high lead or agricultural run-off must be avoided. • Check previous land use prior to using site. • Consult your local environmental health officer, if public safety may be at risk
<p>Invasive species dispersal</p>	<ul style="list-style-type: none"> • Avoid moving invasive species off-site but encourage use in play on-site of suitable plant species to help reduce on-site spread. • Seek advice about gardening methods that prevent the spread of invasive species, e.g. New Zealand flatworm
<p>Wildlife displacement</p>	<ul style="list-style-type: none"> • Encourage children to consider behaviour in quieter parts of the site. • Undertake habitat restoration measures, e.g. log piles and habitat piles with children • Adults model an active interest in wildlife • Certain areas may be “no go” in spring time to allow birds and other wildlife to nest, breed and rear young.

	<ul style="list-style-type: none"> • Consider whole site in the context of wildlife corridors. Create features and put in measures to enable wildlife to move through the site safely and return during quieter times.
Human food waste may attract animals to the site or increase numbers of certain species, potentially leading to adverse changes in biodiversity.	<ul style="list-style-type: none"> • ELC staff can teach children to put their uneaten food back in their containers or into a bag provided for this purpose to be removed from site. • Careful choice and management of composters on static sites.
Changes in soil chemistry (increase in pH levels, carbon and phosphorous, depletion of other nutrients, fire travel underground to roots) owing to continuous use of campfire site with fires on ground surface. Burns and scorch marks on ground.	<ul style="list-style-type: none"> • See Fire section in Appendix 1
Vandalism or arson by out of hours visitors Unintentional damage to nearby archaeological or heritage sites	<ul style="list-style-type: none"> • Artificial lighting should be installed for periods of reduced sunlight, particularly in northern latitudes. This allows for increased winter use by group and deters unwanted visitors. • Invite crime prevention officer to survey site OR architectural liaison officer when establishing a static outdoor nursery • Ensure ELC staff know location and expectations around access and use. • Seek advice from Historic Scotland or local archaeologist about heritage sites.

APPENDIX 3: Leave Less Trace Nature Play Principles

(adapted from Matthew Browning's work)

Prepare to Play

- Play in small groups – avoid large numbers on a site or break into smaller groups.
- Wear sensible outdoor clothes.
- Avoid littering – go for litter free snacks and take home all scraps of food waste.
- Go to the toilet in the designated space and follow The Code.

Build and Dig with Care

- Build dens in places that aren't really fragile - for example, in sand, rock, gravel, grass, and snow.
- Build with sticks found on the ground - not on trees.
Dig holes - but fill them in afterwards.
Remember that trees are alive - hugs are great but cuts and breaks are painful!

Respect Things you Find in Nature

- Ask adults what's safe to handle.
- Start a small nature collection - bring a favourite object home and leave the rest. Not everything is okay to take.
- Build a large "virtual" collection - take photos of lots of objects!
- Climb trees branches bigger than your wrist.
- Let plants stay home - avoid moving them and their seeds from one area to another.
- Find which trees are okay to climb. Some are more fragile than others.
- Try to only pick common wildflowers, berries and fungi. Only pick one or two even if there is a lot around.
- Find out if there are any invasive plant species which are safe to pick and play with.
- Find out if there's any plants you can help grow.

Be Nice to Animals

- Gently catch minibeasts, frogs and toads with hands or nets.
- Keep hands wet when handling toads and other amphibians.
- Return captured animals to where you found them.
- Remember that people food is not good for animals.
- Make homes for wildlife and then leave them in peace so the animals move in.

Remember You're Playing in A Special Place

- Treat others as you would like to be treated.
- Return rocks, logs, and moss to where you found them – they are plant and animal homes!
- Remove any mud clods from wellies before paddling in a stream.
- Use scarves other protection to minimise bark damage from use of ropes or hammocks.
- Agree the boundary of the main area to be used.