

---



**LEVEL 2 CERTIFICATE FOR FOREST SCHOOL ASSISTANTS  
PORTFOLIO**

**6th October 2023**

---

*I confirm that this portfolio was written by me and in my own words, except for quotations from published and unpublished sources which are clearly indicated and acknowledged as such. I am conscious that the incorporation of material from other works or a paraphrase of such material without acknowledgement will be treated as plagiarism, subject to the custom and usage of the subject, according to the OCNWM Regulations on Conduct of Examinations. The source of any picture, map or other illustration is also indicated, as is the source, published or unpublished, of any material not resulting from my own experimentation, observation or specimen-collecting.*

---

# UNIT 1 - SUPPORTING A FOREST SCHOOL PROGRAMME: LEARNING AND DEVELOPMENT

Q1. Describe the Forest School ethos, principles and approach to learning and development.

## 1. Long Term

Where regular sessions take place and participants can develop over time. The reflections and observations made by practitioners regarding the growth, experience and learning gained throughout students' time at Forest School are integral to the practice.

## 2. In the woodland

Set outdoors in a woodland environment, the participants adapt to a less conventional classroom setting. Here, they can utilise and learn from natural forms and materials, as well as allowing more space for discovery, experiencing seasonal changes and being more in touch with the natural world.

## 3. Holistic

Rather than the traditional focus on academic attainment, Forest Schools take into account a deeper and broader perspective, enriching the development and overall experience of students. This includes the social, physical, intellectual, communication, emotional and spiritual facets of all participants.

## 4. Risky

Forest School creates a space of mutual trust amongst the practitioners, participants and parents, whereby students are given the freedom to roam, explore and play within surrounding areas and to potentially engage with tools and fires. This encourages participants to feel confidence, motivated and accomplished. All activities are determined by the developmental stage of the student and are safely assisted and carried out along with a dynamic risk assessment.

## 5. Practitioner-led

Forest Schools are run by a responsible qualified level 3 leader who has obtained certified first aid and safeguarding training to assure students are safe. The practitioner is prepared to develop their professional practice, maintaining reflection and learning themselves too.

## 6. Learner-centered

Forest Schools have a pedagogical approach to learning, wherein the individuals' preferences and interests are considered and where they are empowered to use freedom of choice. This enables student-initiated activities that are suited to the individual and which offers a more supportive and stimulating community of learning. Observation and reflection is fundamental to the functioning of each session in order to assess future activities and each participant's individual development.

The Forest School's approach to learning creates a unique environment for students to develop rootedness in nature and to access holistic development. The outdoors offers opportunities of exploration, and enables curiosity and independence. Many group activities and play inspire social development, such as learning to communicate and understanding one another better. Students are physically engaged by running, balancing, climbing and are intellectually stimulated by problem solving and inquisitiveness. The natural environment also sparks an emotional and spiritual connection through its therapeutic, calming attributes and by engagement with it generates a sense of stewardship and a deep sense of custodianship for the physical environment.

Q2. Explain how Forest School experiences can support learning and development

The notion of 'play' is integral to the forest school experience and is a dominant factor in participants' learning. Bob Hughes explores different elements of play, suggesting social, creative, imaginative, cognitive and physical methods of play that assist with a wider understanding of the world and its complexities. For example, 'Recapitulative Play' encourages a historical and educational exploration through ritual, hand building and ancient ways of life, significantly focusing on to the dynamism of nature. This play would enlighten a learner of new capabilities and skills whilst forming that connection with the natural environment and history.

Establishing and developing a community of learning is necessary to form an inclusive and welcoming environment for participants. This is achieved by considering the unique needs of all participant and planning sessions to cater to differing developmental stages and abilities. One way of doing this is by introducing 'choice' in daily activities so students can take independent pathways of learning, and to allow everyone to feel comfortable and accepted. Mihaly Csikszentmihalyi's flow theory touches on this balance of challenge and skill and the gratification and satisfaction the

individual possess. For example, I noticed during my Forest School experience that the younger learners were stimulated by playing in the mud kitchen, whilst older children were more engaged with building shelters and swings. Community of learning is also at play with the shelter building, forming shared memories, and working as a team; so guiding one another for their collective benefit. Integrating whole group activities within daily sessions also helps to promote peer support and teamwork. This synchrony of activity creates a harmonious and tailored learning experience for all participants. Additionally, maintaining clear and open communication with learners, colleagues and guardians ensures a mutual understanding of expectations at Forest School. Communication is key to keeping participants safe, for example, guidelines and rules were put in place before the campfire.



Mud kitchen and shelter building  
- photograph taken by me on one of my FS training days

Q3. Explain the role of Assistant at a Forest School in relation to the Forest School ethos and principles

As a Forest School assistant, it is your role to support the Forest School leader in facilitating each session and ensuring a safe and enriching space for all participants. A key aspect is helping with risk assessments and planning and organising of activities, whilst offering support and encouragement, and keeping in line with the Forest School principles and the requirements of any risk assessment.

During my Forest School experience I assisted with the planning and delivery of various tasks. We planned an arts day where I suggested flower and plant printing on fabric, and my leader brought in cyanotype paper so we could make natural marks on paper from the UV light. The site was organised by setting up different activities in stations, these would often be separated, to provide students with options, and the freedom to take ownership of their diverse learning experiences. For example, the mud kitchen, natural printing, cyanotypes, wood stick men and tool-work station (supervised by a FS leader) where they were making mallets all took place at the same time.

Another way I assisted was by showing them a docile hornet underneath a magnifying glass and talking about it with them, this facilitates a space of observation and discovery as well as developing connections with the natural world.

Maintaining a safe environment is essential, I assisted with marking out the boundaries and walking behind the group to ensure everyone stayed together whilst changing locations. Participants would often ask for help with building shelters and swings. I was asked to build a swing but the participants suggested using a loose branch. I guided them to use a much stronger branch and I encouraged them to build the swing themselves with my assistance. This experience taught the students to assess risk themselves and also gave them more confidence.

After each session the practitioners and participants would gather in a circle to reflect on the day and what everyone enjoyed. This provided an opportunity to observe what was successful, and could determine what future sessions would entail.

Some examples of this:

- The cyanotypes were really fun and interesting but we concluded that the cyanotypes work better with hard edged objects and pinned down as the wind would move lighter materials.
- The wooden men were an intricate challenge but all the participants needed assistance and sometimes got impatient, perhaps more preparation is needed to simplify steps.
- I thought the woodland mindfulness walk was really successful because it allowed everyone to explore beyond base camp together, and immersed ourselves under the canopy of trees. It was also the ideal moment to collect firewood which the students really enjoyed gathering as many as they could hold, scavenging for the perfect sticks.



**Wooden men and cyanotypes**  
- photograph taken by me on one of my FS training days



**Mindfulness walk and collecting fire wood**  
- photograph taken by me on one of my FS training days

Encouraging participants is rewarding for them and for us: On Day One of my forest school assistant days, I observed one participant that seemed to struggle to get involved with activities, and would often stray away from the group. They would lag behind when travelling back and forth from places so I decided to encourage them through imaginative play, pretending to be different animals and walking like the animal would walk. They would quietly observe what other participants engaging in activity. I then asked the participant to help me with building the shelter along with the others to make them feel included and helpful. When I left them there, they continued engaging with the other participants and helping them build their shelter. Over the course of the three consecutive sessions, the participant became more vocal and sociable, more enthusiastic to take part in the sessions. On reflection, the participant seemed to be taking in the environment and others and needed time to settle. The team work based activities including shelter building allowed the participant to develop confidence and social engagement.

#### Q4. Reflect on your own Forest School training



- photograph taken by me on one of my FS training days



Fairy house made using natural materials

- photograph taken by me on one of my FS training days

First and foremost, I learned about the importance of carrying out risk assessments before each activity. I felt that I developed my ability to judge any potential risk and how to mitigate them, preparing me for future sessions. For example, when setting up the fires, we formed boundaries with logs with designated entry points and fire exits, made sure there were no hanging branches, used appropriate PPE and equipment and applied the respect position when tending a fire.

I learned different dynamic knots which was really rewarding but applying specific knots practically, ie. building shelters was a little more challenging for me and I sought guidance from my peers. This has left me with something to improve on and has taught the deep-rooted significance of team work which Forest School fosters. Teamwork was ever-present when building our woodland fairy houses: we relied on one another's strengths and got to work like fairies ourselves. Many activities channelled the inner child, sparking creativity and initiative. I learned how to apply these activities in a child-friendly way, introducing song and imaginative play. For example, when exhibiting how to do the timber hitch, it was suggested to tell the story of "Sammy the Snake" to make it more fun and memorable for the children.



- photograph taken by me  
on one of my FS training  
days



- photograph taken by me  
on one of my FS training  
days



Mallet making set up  
- photograph taken by me on  
one of my FS training days



## UNIT 2 - SUPPORTING A FOREST SCHOOL PROGRAMME: PRACTICAL SKILLS

Q1. Define and compare the structure and biodiversity of native broadleaf and coniferous woodland ecosystems

Vertical ecological structure of British broadleaf woodlands	
Below Ground:	<ul style="list-style-type: none"> <li>• Underground, roots stretch anchoring trees and plants and absorbing water and nutrients from the soil whilst providing habitats for invertebrates and mycorrhizal fungi that work in symbiosis with one another to maintain the healthy soil.</li> </ul>
Ground:	<ul style="list-style-type: none"> <li>• The ground layer of a broadleaf woodland provides habitat and feeding ground to many woodland mammals like foxes, rabbits and squirrels, as well as soil-dwelling organisms, like ants. This layer is the ideal environment for a vast array of herbaceous plants, this may include mosses, flowers, grasses, ferns and fungi. It plays a crucial role in supporting biodiversity and promoting nutrient cycling.</li> </ul>
Field:	<ul style="list-style-type: none"> <li>• Within the field layer, younger trees and shrubs, including dog rose and hawthorn tend to convene and accommodate small birds, mammals and insects whilst provide valuable nutrients, like fruits and seeds. This layer is an essential part of regeneration and succession of the woodland.</li> </ul>
Understory	<ul style="list-style-type: none"> <li>• The understorey layer is characterized by shrubs, small trees, and shade-tolerant plants. This layer offers additional habitat diversity and foraging opportunities for wildlife, including various bird species, butterflies, and understory-dwelling mammals.</li> </ul>

<b>Vertical ecological structure of British broadleaf woodlands</b>	
<b>Canopy</b>	<ul style="list-style-type: none"> <li>At the peak of broadleaf ecological structure lies the canopy. The canopy encompasses the oldest trees like oak, birch, ash and maple. These trees are enormous and will umbrella the life below and protecting it from intense sunlight and weather conditions whilst preserving moisture within the woodland. Squirrels and larger birds will reside here and make nests. The bark of these trees also provide home and nutrients to lots of invertebrates species.</li> </ul>

<b>Horizontal ecological structure of British broadleaf woodlands</b>	
<b>Rides:</b>	<ul style="list-style-type: none"> <li>A ride is a central track or clearing within broadleaf woodlands. They allowing light to pass through, allowing plants to receive more sunlight. These pathways can act as wildlife corridors which in turn, supports biodiversity. Certain plant species thrive in this environment owing to expanded space and sunlight. This entices butterflies, bees, and other insects.</li> </ul>
<b>Banks:</b>	<ul style="list-style-type: none"> <li>Banks refer to sloped areas within woodlands. Banks can host a variety of plant species adapted to different microclimates. These areas may also provide shelter for burrowing animals like rabbits or foxes.</li> </ul>
<b>Hedges:</b>	<ul style="list-style-type: none"> <li>Hedges are linear features formed by rows of shrubs or trees. Hedges within broadleaf woodlands consist of various plant species and provide important nesting sites for birds. They also serve as wildlife corridors and sources of food for many species.</li> </ul>

<p><b>Horizontal ecological structure of British broadleaf woodlands</b></p>	
<p>Edges:</p>	<ul style="list-style-type: none"> <li>Edges are transitional zones where broadleaf woodlands meet other habitats, such as grasslands or wetlands. Edges support a unique mix of species adapted to both woodland and neighbouring ecosystems. Broadleaf woodland edges are highly biodiverse, as the increase of light infiltration opens up opportunities for a greater number of low-lying plant species, such as primrose and foxed-gloves, which are loved by pollinators.</li> </ul>
<p>Glades and Water:</p>	<ul style="list-style-type: none"> <li>Glades, open clearings within a woodland, and water bodies can be found within or near broadleaf woodlands. Glades and water features provide essential resources, such as water, as well as safety from predation, for many woodland species. They are highly biodiverse; supporting various species of amphibians, waterfowl, dragonflies, and other aquatic or semi-aquatic life.</li> </ul>
<p>Aspect and Topography:</p>	<ul style="list-style-type: none"> <li>The slope and orientation of the land, aspect and topography influence microclimates within broadleaf woodlands, creating variations in soil moisture and temperature that affect the distribution of plant and animal species.</li> </ul>

<b>Vertical ecological structure of British coniferous woodlands</b>	
<b>Below Ground:</b>	<p>The below-ground layer in British coniferous woodlands includes the root systems of coniferous trees, such as Scots pine, and, to a lesser extent, other plants. These roots help stabilise the soil, extract nutrients, and provide habitat for soil organisms.</p>
<b>Ground:</b>	<p>The ground layer in coniferous woodlands is often dominated by litter, made up of fallen needles and cones from the conifer trees. These needles create acidic and nutrient-poor soils, which may limit the diversity of ground vegetation relative to broadleaf woodlands.</p>
<b>Field:</b>	<p>In coniferous woodlands, the field layer is relatively sparse and may consist of small conifer saplings or other shade-tolerant plants. The dominance of conifer trees can restrict the growth of larger field-layer vegetation.</p>
<b>Shrub:</b>	<p>The shrub layer in coniferous woodlands typically includes shade-tolerant shrubs such as the highly invasive rhododendron, heathers, and bilberries. These shrubs provide some habitat diversity for birds, insects, and small mammals.</p>
<b>Understory:</b>	<p>The understory in coniferous woodlands is often low in biodiversity compared to broadleaf woodlands. It mainly consists of shade-tolerant plants, mosses, and lichens. The dense conifer canopy reduces light availability, restricting the growth of many understory species.</p>
<b>Canopy:</b>	<p>The canopy layer in coniferous woodlands is dominated by conifer trees. In the UK, our three native species are Scots Pine, Juniper and Yew, though most of our coniferous woodland is made up of introduced species. Evergreen trees, such as these, create a relatively uniform and dense canopy that provides habitat for species adapted to coniferous environments, such as the common crossbill.</p>

<b>Horizontal ecological structure of British coniferous woodlands</b>	
<b>Rides:</b>	Rides in coniferous woodlands serve as corridors for wildlife movement, which is important for deer, and can provide access to sunlight for some understory plants.
<b>Banks:</b>	Banks in coniferous woodlands may have limited vegetation due to the acidic and nutrient-poor soils created by fallen needles and cones.
<b>Hedges:</b>	Hedges are less common in coniferous woodlands compared to broadleaf woodlands. Coniferous woodlands generally have fewer hedges due to the dominance of conifer trees and the limited diversity of field-layer vegetation.
<b>Edges:</b>	Edges support species adapted to the transition between coniferous woodland and adjacent habitats, such as heathlands.
<b>Glades and Water:</b>	Glades and water bodies can be found in or near coniferous woodlands. Glades and water features provide essential resources for many species, including amphibians, waterfowl, and certain insects, though glades in coniferous woodland are often less species rich than within broadleaved woodland. However, there are certain species which are exclusively found in coniferous woodland water bodies, such as the pine hoverfly, which is one of the rarest pollinators in Britain. The pine overfly lays its eggs within the acidic pools of coniferous forests.
<b>Aspect and Topography:</b>	Aspect and topography influence microclimates within coniferous woodlands and can affect the distribution of plant and animal species. Coniferous woodland can often be found on slopes, such as hillsides, providing essential cover for a variety of plants and animals.

Q2. Identify 10 woodland flora and fauna for your own site, detailing the characteristics for each species

# 10 Woodland flora & fauna



## Grey Alder

*Alnus incana*

This resilient tree has dark oval leaves with serrated edges, a pointed tip and a light underside. Yellow catkins hang in winter and early spring. The Grey Alder is happiest in damp soil.



## Hawthorn

*Crataegus x Schraderiana*

Shrub or small tree, the Hawthorn is distinguishable by its snowy bloom in summer and deep red haws in winter which are a tasty snack for birds and the occasional human. The leaves are small and lobed and the twigs are thin and thorny



## Foxglove

*Digitalis purpurea*

The foxglove has distinctive pink tubular drops for flowers where dark freckles crowd near the centre. The leaves are hairy and oval with toothed margins and when the seeds are ripe they transform from green to black. The plant contains a poisonous chemical called digitalis.



## Bramble

*Rubus fruticosus*

The bramble is an adaptable and powerful plant that can flourish in most environments but favours acidic soils. It has spiky thorns that run across its stem, white and pink flowers that bloom in June-July and leaves that divide into three-five serrated, oval leaflets. The juicy purple blackberries ripen in late July and provide a valuable source of food for many wildlife species.



## Honey Bee

*Apis mellifera*

This insect is noticeable from its soft yellow and brown stripes, its delicate layered wings and loud buzz. Honey bees will spend a lot of their time foraging for nectar and pollen to provide food for their hive/nest. Honey bees live in colonies of around 50,000 in summer months and 20,000 in winter. They communicate through chemicals and dance.



## Robin

*Erithacus rubecula*

Size: 14cm, weight: 18g  
The robin has a brown back and head, a white underbelly and an infamous red breast. A territorial bird who won't be shy to serenade you. Resides in woods, hedges, and shrubs and survives on fruits, seeds, worms and other invertebrates.



## Peacock Butterfly

*Inachis io*

The Peacock butterfly has a bright ruby body with four surrealist false eyes on each wing to scare off any predators. The caterpillar is usually spotted on a nettle leaf with gold speckles. The butterfly can be caught eating garden flowers or hibernating on your garden shed in winter.



## Blue Tit

*Cyanistes caeruleus*

Size: 11.5cm, weight: 11g  
Yellow bodied, blue capped bird who lives in woods and hedgerows and often travels in a foraging party of small birds. Feeds on insects, berries, nuts and relies largely on woodland caterpillars in the winter.



## Fox

*Vulpes Vulpes*

Size: 40cm, weight: 5-8kg  
The fox is recognisable by its pointy ears and nose, fiery red fur and bushy tail. They can be identified in woods, countryside and city environments, usually at dawn or dusk as they are crepuscular beings. They are considered at the top of the woodland food chain and have a broad diet, consisting of birds, insects and they'll often be the cause of ransacked food bins.



## Grey Squirrel

*Sciurus carolinensis*

A non-native, grey, bushy tailed Sciuridae. They eat mostly acorns, nuts and seeds which they bury for the colder months. Occupying woodland areas where they build nests up high, they have excellent climbing abilities and balance.

Illustrations by me using photographs sourced in bibliography.

Q3. Describe how you would manage the ecological impact of running a Forest School programme on your own site

Managing the ecological impact of a Forest School site is really important to secure the well being and sustainability of the natural environment. Regular Forest School sessions can potentially have a detrimental impact on the site, including soil compaction, habitat disturbance, and changes in plant and wildlife populations. To minimise the effect of Forest School sessions I would first determine the areas of sensitivity and define clear boundaries to protect them using ropes or signs. Rotating activity areas can relieve stress on soil and avoid compaction, as well as outlaying pathways and activity areas with logs or mulch to prevent soil erosion. Removing all litter from the site after sessions and educating participants on wildlife habitats, emphasising the importance of not disturbing them or interfere with nests, especially during breeding seasons is essential. Planting native vegetation and extracting any invasive species to give native plants a chance to thrive and support surrounding wildlife will enhance the environment as will placing insect hotels, bird boxes, bee banks and bee hotels to encourage a variety of bees. These thoughtful additions could be done with Forest School participants to inculcate a sense of responsibility and care for the site



Photograph of Forest School Site  
- photograph taken by me on one of my FS  
Assistant days

#### Q4. Summarise the role of risk assessment at Forest School

The role of risk assessment at Forest School is designed to identify any risks that may put participants and practitioners at harm. It is a legal and ethical obligation and following regular and thorough assessments, continuously reviewing and adapting assessments where needed is necessary to warrant the safety of everyone on site. Whilst safety is always the priority, preserving the six principles of forest school simultaneously enables a fulfilling experience of outdoor, nature-based learning.

#### **Hazard**

A hazard is the source that could possibly pose a danger to someone. With regard to Forest School, the natural environment can often feature countless potential hazards and these can be difficult to control due to the ever-changing landscape. Notable hazards include; slippery surfaces, uneven terrain, wildlife, stray branches fires and tools.

#### **Risk**

Risk is the likelihood that a particular hazard can arise, and needs to be combined with an appraisal of the potential harmful consequences which may follow. A risk assessment must consider both of these aspects and must direct actions which mitigate them. Risk plays an important role in the development and growth of the students so rather than eliminating all risk, it's important to carefully monitor the site and keep hazards under control.

#### Q5. Describe the risk assessment process for a Forest School site

The risk assessment process at forest schools is in place to raise awareness of any potential hazards and risks. The process firstly involves becoming familiar with the site and surveying the environment for any hazards. Once the hazards are determined, consider the likeliness and severity of harm and evaluate whether the risk is low, medium or high. The specific needs of vulnerable participants with medical conditions and additional needs must be considered throughout the risk assessment. Implement appropriate control measures to reduce risk and continue to monitor the site for any changes or further risk.



## Forest School Risk Assessment/Risk Benefit Assessment

Activity	How will young people <b>BENEFIT</b> from this activity?	Possible Hazards	Who is at <b>RISK?</b>	<b>PRECAUTIONS</b> in place to reduce the risk of injury	<b>Risk RATING</b> L/M/H
<p><b>Making a Mallet</b></p> <p><b>Using a billhook and a mallet (in this case the pieces of wood were already cut)</b></p>	<ul style="list-style-type: none"> <li>- This activity will teach the student to assess risk themselves .</li> <li>- Learning how to safely work with tools</li> <li>- Offer a feeling of independence, confidence and achievement.</li> </ul>	<p>Cuts and abrasions from billhook</p> <p>Bashes, bruises from mallet</p>	<p><b>Learners and tutors</b></p>	<ul style="list-style-type: none"> <li>- Clear communication between all parties - with eye contact asking “are you ready?” and waiting for “I’m ready” in response.</li> <li>- Efficiently sharpened tools.</li> <li>- Wearing the correct PPE</li> <li>- Holding the tools correctly</li> <li>- Maintaining a “blood bubble” (two arm lengths) away from anyone that isn’t your partner when using the billhook</li> <li>- Putting the cover on the billhook when not in use.</li> </ul>	<p><b>M</b></p>



A young learner carefully making a mallet with a billhook.  
- photograph taken by me on one of my FS Assistant days



This photographs depicts the boundaries created for the mallet workshop  
-photograph taken by me on one of my FS Assistant days

Q6. Summarise the process and safety considerations involved in applying the following practical skills with a FS group

<b>Process</b>	<b>Safety Considerations</b>
<p>Using appropriate personal protective equipment (PPE) and clothing</p> <ul style="list-style-type: none"> <li>- Cut protection gloves</li> <li>- rigger gloves</li> <li>- Fireproof gloves</li> <li>- Appropriate footwear for different activities</li> </ul> <p>Winter</p> <ul style="list-style-type: none"> <li>- thick waterproof coat</li> <li>- thermals (leggings, vest)</li> <li>- Waterproof jacket and trousers</li> <li>- Hat</li> <li>- Gloves</li> <li>- Long thick trousers</li> <li>- Fleece</li> <li>- Thick socks</li> </ul> <p>Summer</p> <ul style="list-style-type: none"> <li>- Suncream</li> <li>- Cap or sun hat</li> <li>- Sunglasses</li> <li>- Waterproof jacket and trousers</li> <li>- Light summer wear</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Make sure the gloves are appropriate to the task and they are being worn the correct way- Cut gloves for handling certain tools on helping hand, rigger gloves for moving logs, fireproof gloves when assisting with the fire.</li> <li>- shoes must be appropriate to the activity and the weather, e.g., flip flops are unsafe whilst being active, around tools and the fire and on cold days. Wellies are impractical and unsafe to climb in.</li> <li>- Weather conditions must be considered. Wearing light clothing in the winter could lead to hypothermia. Similarly, skipping suncream and a cap during summer could lead to sun burn or heat stroke.</li> <li>- Wearing long sleeve tops and trousers if important to protect participants from UV light, cuts and grazes and fires.</li> </ul>

Process	Safety Considerations
<p>Checking, cleaning, maintaining and storing tools and ropes</p> <p>Ropes</p> <ul style="list-style-type: none"> <li>- Inspect the rope for any wear and tear, bumps, fraying and damage</li> <li>- Cut ends off ropes if they're frayed and possibly burn ends</li> <li>- Clean ropes regularly with water to wash off mud and leave to air dry</li> <li>- Loosely fold and wrap rope together, avoiding tight knots and store somewhere dry</li> </ul> <p>Tools</p> <ul style="list-style-type: none"> <li>- Check for loose, worn, splintering handles or damaged blades and sand if needed.</li> <li>- Replace damaged covers/sheaths</li> <li>- Regular oil maintenance on blades and wooden parts</li> <li>- Sharpen blades</li> <li>- Tools must be stored somewhere dry with necessary tool covers/sheaths in place.</li> </ul>	<ul style="list-style-type: none"> <li>- Ropes and tools are locked away so unsupervised children can't access them.</li> <li>- Tools are numbered and tracked to avoid losing them or a participant taking them home</li> <li>- The participants are instructed on how to safely handle the ropes and tools. Participants are given the 'tool talk' to ensure they act responsibly using or around them.</li> <li>- Damaged ropes or tools are labeled and clearly separated and stored away from safe ropes and tools</li> </ul>

Process	Safety Considerations
<p>Using different hand tools for Forest School</p> <p><b>Hand tool 1: Palm drills</b>            Demonstrate the parts, e.g., “this is the handle”, “this is it’s drill” and how to correctly hold it.            Explain the functionality of the tool: To indent small holes in wood.</p> <p><b>Hand tool 2: Sheath knife</b>            Demonstrate the parts, e.g., “this is the sheath”, “this is the blade” and how to correctly hold it.            Explain the functionality of the tool: Wood whittling, cutting string</p>	<ul style="list-style-type: none"> <li>- The drill could slip whilst applying pressure and scratch or cut participant or others if the ‘blood bubble’ rule hasn’t been followed.</li> <li>- Could cut someone’s hand if passed drill end first.</li> <li>- Someone could trip on the palm drill if it hasn’t been put away safely.</li>   <li>- Could cause cuts if handled incorrectly, if glove isn’t worn on helping hand when cutting string or whittling or if the sheath hasn’t been put back on after use.</li> <li>- Check it has been efficiently sharpened</li> <li>- Could cause harm to other individuals if the ‘blood bubble’ rule hasn’t been followed or if the knife has been passed to someone blade first (without the sheath on)</li> </ul>

Process	Safety Considerations
<p>Using a range of knots for different applications</p> <p><b>Knot 1: Timber hitch</b> Towing a log</p> <ul style="list-style-type: none"> <li>- tie one end of the rope around the log</li> <li>- Wrap the working end around the standing part</li> <li>- Thread the working part through the centre twice</li> <li>- Apply tension to secure the log</li> </ul> <p><b>Knot 2: Taut tarp hitch</b> Securing tarp to a tree</p> <ul style="list-style-type: none"> <li>- Bring the working part around the tree</li> <li>- Lead it over the standing part and loop it under</li> <li>- Bring it back around the tree and form a triangle with both ends</li> <li>- form a loop with the working end and thread it through the triangle</li> <li>- Pull it up and tight to secure in place</li> </ul>	<p>Knot could slip, especially when lugging heavy objects, this could make it difficult to untie as well.</p> <p>Knot could come undone during use and cause shelter to collapse (potentially with water run off too if it's been raining)</p>
<p>Making craft items using woodland materials</p> <p>Natural pigment printing</p> <ul style="list-style-type: none"> <li>- Find on site plants or flowers</li> <li>- Arrange the foraged items on half of a piece of fabric</li> <li>- Fold empty half on top of the other</li> <li>- Use a wooden mallet or stone to bash pigment onto the fabrics</li> </ul>	<p>Some plants and flowers are toxic so there is a danger of student coming into contact with harmful toxins.</p> <p>Risk of students getting lost or straying whilst foraging so there must be clear boundaries.</p> <p>Students could accidentally bash their hands or others with the stone/mallet</p>

Process	Safety Considerations
<p>Erect temporary group shelters using tarpaulin/natural woodland materials</p> <p>Lean to Shelter The lean to shelter in a three walled, free standing structure made using natural materials- an effective camouflaged hide out for wildlife spotting.</p> <ul style="list-style-type: none"> <li>- Collect three branches with ‘Y’ shape at the end and saw to make the equal in length</li> <li>- Whittle the opposing ends of all three to create a sharp point to bury in the ground at equal distances apart</li> <li>- Place another branch along the top of the three standing branches, between the ‘Y’ shapes</li> <li>- Secure the shelter by leaning smaller branches diagonally across the end branches</li> <li>- On the other side, assemble lots of branches and rest them along the horizontal branch</li> <li>- Fill in gaps with moss, plant litter and twigs</li> </ul>	<ul style="list-style-type: none"> <li>- damaging wildlife habitats when collecting materials</li> <li>- Spiky sharp twigs sticking out could cause scratches</li> <li>- Picking up stinging insects like ants</li> <li>- Potential risk of heavy branches falling on someone if unreliably fixed in place.</li> <li>- Check for overhanging dead branches that could fall and injure someone</li> </ul>

Process	Safety Considerations
<p>Building, lighting and managing a campfire fire</p> <ul style="list-style-type: none"> <li>- Gather firewood on site of large, medium and small and organise in size order along with kindlings</li> <li>- Arrange the larger pieces of firewood on the bottom layer, equal lengths apart.</li> <li>- Working upwards from large to small, in a pyramid structure continue to build 3-4 layers</li> <li>- On the top of the pyramid add Vaseline dipped cotton wool.</li> <li>- Strike flint and steel towards the cotton wool and ignite the fire.</li> </ul>	<ul style="list-style-type: none"> <li>- Make sure fire is located in a wide open space and keep the area as clear as possible</li> <li>- The surface is even, soil is dense and non-porous</li> <li>- Create boundaries with sticks to guide participants to stay at a safe distance and establish entry and exit points.</li> <li>- No over hanging branches or trees</li> <li>- Have fire proof gloves handy and fire blanket close by, along with a large, very full bucket of water</li> <li>- The fire must be supervised at all times</li> <li>- Consider the smoke and keep buildings, roads and railways at least 10 metres away.</li> </ul>
<p>Extinguishing a fire and leaving a site safe.</p> <ul style="list-style-type: none"> <li>- Once the fire has exhausted it's fuel and has settled, remove the heat by gently pouring water over the fire.</li> <li>- Rescue any surviving kindling and larger pieces of wood</li> <li>- Disperse the ashes around the site to conserve the natural environment and to limit impact.</li> <li>- Smother the embers and ashes in soil to remove the oxygen.</li> </ul>	<ul style="list-style-type: none"> <li>- If the water is poured too quickly, it can provoke flames and potentially causing burns.</li> <li>- Thoroughly check for any burning embers and add more water if needed.</li> <li>- Clean up fire pit to leave no trace.</li> <li>-</li> </ul>



---

## Bibliography

---

Bramble, Woodland Trust. Available at: <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/plants/wild-flowers/bramble/>

Broadleaved Woodlands, Woodland Trust. Available at: [https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/habitats/broadleaved-woodland/#:~:text=Broadleaf woodland wildlife&text=Specialist species are associated with,leaf litter in native beechwoods.](https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/habitats/broadleaved-woodland/#:~:text=Broadleaf%20woodland%20wildlife&text=Specialist%20species%20are%20associated%20with,leaf%20litter%20in%20native%20beechwoods.)

Caledonian Forest and Native Conifer Woods, Woodland Trust. Available at: <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/habitats/caledonian-forest-and-native-conifer-woods/>

Crump, E. (2023) *Broadleaf Autumn issue: crunch time*, Woodland trust. Available at: <https://www.woodlandtrust.org.uk/blog/2023/09/autumn-broadleaf/>

Csikszentmihalyi, M. (1990) *Flow*, HarperCollins

Fires: extinguishing a fire, Muddy Faces. Available at: [https://muddyfaces.co.uk/activities/bushcraft-survival/fires-extinguishing-a-fire#:~:text=Check that the ground temperature,carefully scrape off the embers.](https://muddyfaces.co.uk/activities/bushcraft-survival/fires-extinguishing-a-fire#:~:text=Check%20that%20the%20ground%20temperature,carefully%20scrape%20off%20the%20embers.)

Foxglove, Woodland Trust. Available at: <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/plants/wild-flowers/foxglove/>

Fox, Woodland Trust. Available at: <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/animals/mammals/fox/>

Full principles and criteria for good practice, Forest School Association. Available at: <https://forestschoolassociation.org/full-principles-and-criteria-for-good-practice/>

Grey Squirrel, Woodland Trust. Available at: <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/animals/mammals/grey-squirrel/>.

Holden, P., Gregory, R. (2021) *RSPB Handbook of British Birds*, Bloomsbury Publishing Plc, pp. 215, 257.

Else, P. (1996) *Making Sense of Play*, Open University Press

Lancaster, R. (1995) *What Plant Why*, Dorling Kindersley Limited, pp. 162, 202.

Little Acorns Forest School Ltd, How to build a shelter. Available at: <https://youtu.be/JJ5fDtHioYk?feature=shared>

Tautz, J. (2008) *The Buzz about Bees*, Springer-Verlag Berlin Heidelberg, pp.12-22.

The Reader's Digest. (1984) *Field Guide to the Butterflies and Other Insects of Britain*, The Reader's Digest Association Limited, pp.64.

Woodland management: rides, glades and coppice, Kent Wildlife Trust. Available at: [https://www.kentwildlifetrust.org.uk/sites/default/files/2018-06/KWT%20Land%20Mgt%20Advice Sheet%2010%20-%20Woodland%20management%20-ride%20and%20coppice.pdf](https://www.kentwildlifetrust.org.uk/sites/default/files/2018-06/KWT%20Land%20Mgt%20Advice%20Sheet%2010%20-%20Woodland%20management%20-ride%20and%20coppice.pdf)