Guidance for qualified Forest School practitioners using Temporary Rope Structures for play at Forest School.

Scope of the guidance

This guidance deals with elements constructed from ropes, nets and webbing - including slacklines - with the possible addition of climbing or sailing hardware such as ratchets, carabiners, cable, pulleys, etc.

Disclaimer: The information provided in this article, the Forest School Association's guidance on creating and maintaining low ropes courses, is intended for general informational purposes only. It is not intended as legal, safety or professional advice. Forest School leaders and other individuals should use their discretion and seek professional advice where necessary. The Forest School Association accepts no liability for any actions taken based on the information provided in this guidance document.

Background

A play audit of a woodland area will reveal many natural elements that lend themselves to physical play and movement such as balancing, bouncing, jumping, sliding, swinging, etc. An observant Forest School practitioner might identify a play interest or need that could be enhanced by the addition or construction of elements that are not already present in the woodland.

Ropes and poles have long been used by youth organisations such as the Scouts (pioneering) and outdoor adventurous activity providers to improvise play and challenge equipment and as a tool for personal development and group problem solving. Techniques and equipment have improved over the decades, with low and high courses becoming standard in many outdoor education centres, leading to the current trend for high ropes courses, treetop trails and zip wires as consumer recreational experiences.

Definitions and legal considerations

1. Low rope elements are rarely more than a metre above the ground. High ropes activities generally require significant PPE, climbing equipment and belays.
2. Many of these structures and activities have become standardised under European Standard EN 15567-2, which covers high and low rope courses, both permanent and temporary. A detailed guide for the UK is available from the European Ropes Course Association (ERCA) https://www.erca.uk/index.php/en/publications/documents?download=172:aaiac-uk-ropes-course-guide-2021

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Under these European Standards:

- A permanent ropes course is a facility installed for more than seven days on the same site
- A temporary ropes course is a facility that is not a mobile ropes course and is installed for a maximum of 7 days

3. The above European standards are not legal requirements in the UK but it is likely that they would be referred to as current best practice, in any court case following an accident within their scope.
4. Permanent structures will require formal inspection by a competent person. While temporary structures are not / cannot be subject to the same process, seeking input/training from a competent person may ensure 'un-qualified' practitioners do not make mistakes when constructing rope play elements.
5. If practitioners are unsure of their own competence in using equipment such as ropes, karabiners, pulleys, etc. they should seek guidance from a suitably competent person acting as a technical advisor. An appropriate award for a Technical Adviser would be an ERCA Instructor, a Mountaineering & Climbing Instructor (previously known as Mountain Instructor Award), a Winter Mountaineering & Climbing Instructor (previously known as Mountain Instructor Certificate) or an Arboricultural Association Approved contractor with Level 6 Professional Diploma in Arboriculture (or equivalent) who has necessary climbing and aerial rescue qualifications from City and Guilds/Lantra.
   - Members of the Association of Climbing Instructors can be found here: https://www.mountain-training.org/membership/ami/find-an-instructor (search for *Mountaineering and Climbing Instructor*).
   - Suitably qualified arborists can be found via the Arboricultural Association Approved contractor directory https://www.trees.org.uk/ARB-Approved-Contractor-Directory
   - Those offering their services as a Technical Adviser should hold the appropriate Personal Liability and Professional Indemnity Insurances.
6. Ropes courses are not currently in the scope of the Adventure Activities Licensing Scheme. There is no legal requirement In the UK for an adult supervising low ropes elements to have instructor training or a qualification, though an employer should ensure that anyone supervising has had an induction and is suitably skilled and experienced to supervise the equipment / activity.
7. Although not mandatory, training in the construction and use of low ropes courses is available in the UK from ERCA trainers such as www.technicaloutdoorsolutions.co.uk, www.vertex-training.co.uk and www.positiveventure.co.uk.
8. If the installation of any elements involves climbing higher than 2 metres above ground, the installer would need to work in accordance with HSE working at heights guidance and the Work

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at Height Regulations 2005. www.hse.gov.uk/work-at-height. [As an aside – if you permit participants to free climb trees to over a height of 2 metres and you needed to climb to rescue / assure a child above this height, then this would definitely apply and may require the use of Arboricultural industry standard safety equipment. It may be much more straightforward to use a long ladder in this situation.]

9. Other relevant European standards are those relating to Playground equipment (EN 1176 and 1177). Although not stated, it is likely that this guidance only applies to permanently fixed equipment. If rope and net elements remain in place for more than 7 days, it is worth being familiar with the above documents and their Code of good practice for play areas.

   "*Playground standards are not retrospective or, currently, a legal requirement but represent good practice in the event of an accident claim. Their limitations should be recognised: mere compliance will not automatically create a safe playground. Like previous playground standards they are intended to be used intelligently.*" (ROSPA)

Application to the Forest School context

Forest School Practitioners setting up improvised, temporary rope play or challenge structures at Forest School therefore need to make their own judgements in terms of safety, good practice and compliance with health and safety law.

What might be seen as necessary / reasonable in an outdoor centre may well be different from improvised structures at Forest School, especially if constructed by young people engaged in play.

The type of materials used will depend on intended use and availability especially when construction is spontaneous in response to an idea from a group. Practitioners will need to consider:

1. Ropes and Knots

- Load rating of any ropes / cord used and how these ratings change with modifications such as knots and angles between anchor points. eg. For swings and bottom ropes to be walked on this should be a minimum load bearing capacity of 22kn (2243 kg) static/semi-static rope.
- Suitability, load rating and condition of any hardware used. Personal knowledge and competence is key with such equipment.
- Whether static or dynamic rope is most appropriate for the element being constructed.
- Condition of ropes through visual examination and known history of the rope (use of a log book to record checks is advisable) especially if mud and grit could have penetrated the sheath and be abrading the core and if UV degradation may have taken place.
- Integrity of any anchor points used and whether they can withstand loads upon them. Include all trees used in your regular tree inspections.
- Minimising rope on rope friction by use of carabiners.
- Avoiding false loops in loose ends of ropes (stopper knots should be tight to the main knot).
- Double checking (four eyes) structural knots tied by staff and participants.
- Appropriate knots and fixings used to secure ropes under tension when loaded.

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2. PPE

- If it is judged that there is an overly high risk of head injury then helmets may be needed to reduce risk.
- A procedure for storing, checking, maintaining, record keeping and replacing helmets, by a competent person will be needed in this case.
- It is assumed that this is not likely to be the case in most Forest School practice and that other mitigations such as choice of surfacing, use of spotters, clear instructions will be sufficient to reduce the risk of head injury in a fall.

3. Other considerations

- Fall zone (ground) and risk of impaling injuries. Also falling into other obstacles (off ground).
- Use of bark protectors on living trees, especially smooth barked trees in spring/early summer.
- Levels of supervision and ratios required. This may change over time in a Forest School programme as familiarity, individual competence and trust develop.
- Guidelines for users – e.g. number of people on one element at a time, avoiding rope burn, etc.
- Entanglement in nets or crossing ropes as well as entrapment of body parts, hair and clothing especially in moving components.
- Whether practitioner insurance explicitly excludes or includes the proposed activity.

Zip lines are now also covered under the European standards mentioned above. It is possible to create temporary, improvised zip lines in Forest School sessions, however, they are likely to involve higher risks of injury due to speed of movement, use of rollers, wear on rope and sudden braking. A good understanding of tensioning rope / cable, use of hardware and need for passive braking as well as a thorough Risk Benefit Assessment is needed before setting up a zip line at Forest School.

The advantages of taking down all rope structures at the end of each day or week include:

- The ability to check all ropes and equipment for wear.
- The opportunity to extend rope life by washing out abrasive mud and grit.
- Staying within accepted definitions of 'temporary'.
- The chance to rotate ropes and avoid repeated wear on the same areas.
- The chance to choose different anchor points and avoid damage to living trees.
- Creating opportunities for participants to be involved in design and construction of rope play elements that can evolve according to play needs.
- Minimising risk of danger to wildlife, e.g. through entanglement, synthetic materials, etc.
- Limiting the chance of harm through unauthorised use by a member of the public, even if on private land.
- Emphasising an ethos of 'nature play' as opposed to 'play in nature'.

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