

# Rope swings, dens, treehouses and fires

A risk based approach for managers facilitating self-built play structures and activities in woodland settings.

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# Introduction

The Forestry Commission in England is committed to providing opportunities for outdoor play and growing adventure for children and young people. One issue confronting our managers is the need to respond to children and young people making their own play spaces. Woodlands are great places for children to make their own choices about play and to create their own play environments without the intervention of adults. Provision of spaces where children are allowed to make their own choices in a natural setting helps to deepen their engagement with, and understanding and appreciation of, those settings. It is also beneficial to mental wellbeing and counteracts the commodification of childhood.

Care needs to be taken when intervening in den building or other 'creative' activities as the secret, no adult control, aspects of the activity may well be as important as the output, the den, swing or fire.

The most common form of structures and facilities developed by children are:

- Dens and tree houses
- Rope swings
- Fires

The guidance set out in this document aims to support management of these types of play structure and facility whilst minimising any unnecessary or undesirable risks.

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# Dens and tree houses

## What are the risks?

### Construction

- Construction of the shelter may be hazardous due to the tools being used.
- The shelter may be made from hazardous material that could injure the builder, somebody using the shelter or a passer by.
- The shelter may collapse harming the occupants.

### Location and use

- The location of the shelter may be in an unsuitable location that attracts children to their hazards such as a busy road, a steep cliff or dangerous water features.
- The shelter may be in an inappropriate location that will attract other less desirable use such as drug abuse.
- Use may disturb other forest visitors or neighbours.
- Location may be in a sensitive conservation area likely to cause disturbance or damage.

Table 1 overleaf gives guidance for assessing and managing risks associated with dens and tree houses.



## Managing risks associated with dens and tree houses

Table 1: Managing risks associated with dens

Construction				
	First of all identify the level of risk associated with the structure then the required action.	<b>Low Risk</b> Dens made from natural materials found on site such as branches, bracken, leaves and other vegetation. No tools being used to create the shelters. Little risk of collapse causing injury.	<b>Medium Risk</b> Some materials being brought to site such as old kitchen units, pallets etc but no harmful materials. Some evidence of hand tools being used. Minor excavations to create hollows or partial caves. Little risk of collapse causing injury.	<b>High Risk</b> Hazardous materials being used such as sharp metal and asbestos or old cars. Evidence of power tools being used. Deep excavations creating tunnels.
Location and use	<b>Low Risk</b> Den is in a good location away from any quarries or busy roads and deep-water bodies. Little evidence of anti social behaviour such as drugs, graffiti and litter. Little disturbance to neighbours or other forest users. No impact on sensitive nature conservation areas.	Informal monitoring of the site when staff are nearby. Record any inspections in diaries.	Take pictures of the den and carry out quarterly inspections of the area to check on changes.	Take pictures of the den and carry out monthly inspections of the area to check on changes. Remove hazardous materials and litter. Collapse any tunnels.
	<b>Medium Risk</b> Den is in a reasonable location may be close to busy roads but away from any quarries or deep-water bodies. Some evidence of anti social behaviour such as, graffiti and litter but no serious issues such as drug abuse. Potential for some disturbance to neighbours or other forest users due to proximity to other use. Little impact on sensitive nature conservation areas.	Take pictures of the den and carry out quarterly inspections of the area to check on changes. Remove litter during inspections.	Take pictures of the den and carry out quarterly inspections of the area to check on changes. Remove litter during inspections. Consider making contact with kids providing safe materials or running shelter building days.	Take pictures of the den and carry out monthly inspections of the area to check on changes. Remove hazardous materials and litter. Collapse any tunnels. Make contact with kids and consider providing safe materials or running shelter building days.
	<b>High Risk</b> Den is in poor location may be close to busy roads, quarries or deep-water bodies. Evidence of serious anti-social behaviour such as drug abuse. Complaints about disturbance from neighbours or other forest users. Serious impact on nature conservation areas.	Take pictures of the den and carry out quarterly inspections of the area to check on changes. Remove litter during inspections. Make contact with kids and try to identify a better location. If progress cannot be made remove den.	Take pictures of the den and carry out quarterly inspections of the area to check on changes. Remove litter during inspections. Make contact with kids and consider providing safe materials or running shelter building days. If progress cannot be made remove den.	Remove den. Make contact with kids and try to identify a safer site. Consider providing safe materials or running shelter building days in another location.



**Tree houses** – are dens on legs. In addition to Table 1 above the following risks need to be considered with tree houses:

- **Fall height** – The fall height from the tree house should not be greater than two metres 2m unless the structure has good protection against falls such as railings or other edge protection (see Table 2 opposite).
- **Fall zone** – The fall zone around the tree house should be free of any pointed stumps, sharp or large rocks or dangerous waste such as sharp metal. Normal vegetation cover, saplings and bushes are not a problem.
- **Access** – Access to the tree house needs to be checked. If a rope or rope ladder is provided then weight-bearing capacity should be checked by giving the rope a ‘good pull’ with feet firmly on the ground.
- **Structure** – Structure should be checked to ensure that collapse is not likely. This should be done in a safe manner from outside the structure wearing safety helmet. If ladders are used to access the structure then working at height regulations should be followed.

Table 2. Managing risks associated with tree houses



## Rope swings



### What are the risks?

#### Swing

- The branch or other support could collapse.
- The rope could snap or come undone from the support.
- The fall height may be too high.
- The risk of crashing into the tree or support.

#### Environment

- The swing may be above water with the risk of drowning.
- The area around the swing may be hazardous due to debris or likelihood of collision with obstacles.
- Trees around the swing present a hazard due to dead branches or windblow.

#### Water

General ROSPA guidance about rope swings over water is to remove the swing to prevent drowning but ROSPA tend to suggest avoiding swimming in any unsupervised water. For example a 2005 press release stated 'Peter Cornall, RoSPA Water Safety Manager, said: "The drownings this week are a terrible reminder to everyone not to risk their lives in unsupervised water.'" However this view is not held by all organisations and official rope swings do exist at some sites eg: <http://www.stowfordmanorfarm.co.uk/swimming.htm>.

The Forestry Commission are already 'permitting' jumping off bridges into pools at certain sites and rope swings over water can be safe. To ensure swings are as safe as possible the following points should be considered:

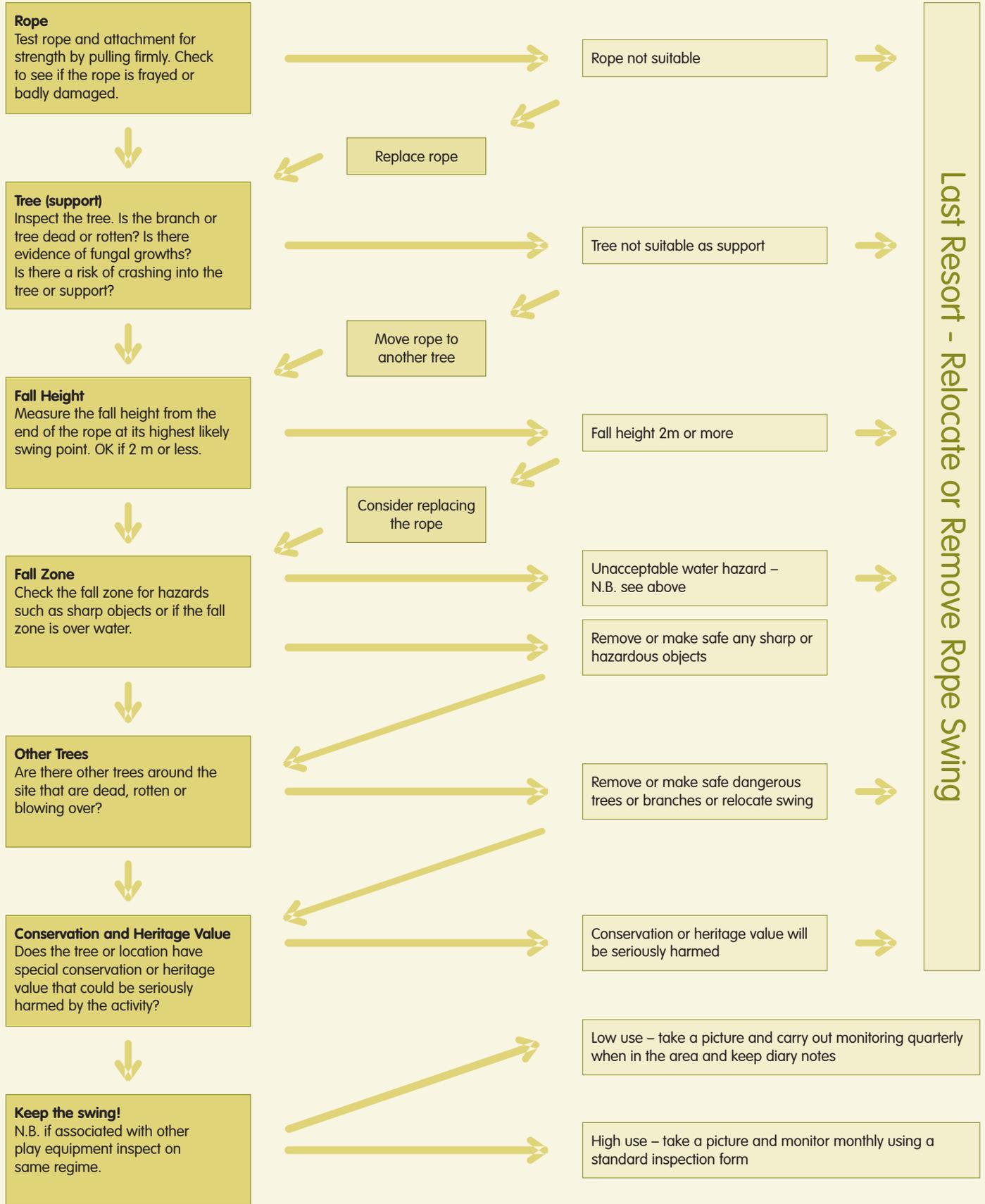
1. Is the depth of the water obvious from the bank?
2. Is the bed of the river free from hazards such as sharp rocks, logs, branches or other hazardous material?
3. Is there an obvious clear exit from the river?
4. Is the river/pool free from adverse currents?

Signage may also be helpful in reducing the risk of drowning. A simple sign stating that the water level varies in the pool/river and not to use the swing unless you can swim may help to warn visitors. It may also be worth recommending that visitors check the depth of the water before they use it and never to use the swing unless there is another good swimmer in the group. It is difficult to state a maximum and minimum permissible depth.

The decision tree overleaf is intended to help make decisions about managing rope swings installed by children. In most cases there will not be a need to intervene.

Rope swing decision tree

# Start Here!



## Fire Sites



Building fires is a great learning activity for children and learning about fire can help to prevent the anti-social aspects of arson and fire raising. Learning how to build a fire properly can also be a real achievement for a child or young person and is firmly embedded in the forest school programme.

Unfortunately fires also have risks:

- destruction of forests and natural habitats
- destruction of property
- injury and possibly death to fire raisers and people caught up in the fire
- unsightly burn sites

Fire pits can help to reduce the chance of accidental or unauthorised fires but are most likely to be appropriate where there is a led programme or strong community use and involvement in a site. Sites where fires are regularly lit may benefit from some provision or programme led activities at weekend and during school holidays to help reduce risks and make fire sites safer.

Remember we regularly provide BBQ sites for adults.



*active***woods**  
naturally good for you

 **Forestry Commission**  
England

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## Contacts

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### **Forest Enterprise**

340 Bristol Business Park Coldharbour Lane Bristol BS16 1EJ  
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For more information on this guidance note go to:  
[www.forestry.gov.uk/england-play](http://www.forestry.gov.uk/england-play)

For more information on the Forestry Commission look up [www.forestry.gov.uk/england](http://www.forestry.gov.uk/england)