

## Appendix 1: Standard cost items

### Purpose

This document is an Appendix to the [England Woodland Creation Offer \(EWCO\) Grant Manual](#). It describes the standard cost items that are available through EWCO. These items can be selected in the [EWCO Application Form](#).

### Payment rates and item descriptions

#### Planting

Capital items for use in woodland creation	Payment Rate	Description
Supply and plant tree	£1.72 per tree	To supply, plant and weed young trees and, where appropriate and stated in the woodland creation plan, protect them with a 0.6 metre (m) spiral guard and cane.
Supplement for use of individual tree wraps	£1.23	<p>Individual tree protection unit, with a vertical slit, that expands as the tree grows, designed to be used with a cane. Available as 0.6m or 0.75m tree wrap, height specification to be agreed with Woodland Officer. Use with a minimum of a 0.9m cane of the 12/14lbs category.</p> <p>This supplement can be used for vine wraps for use with shrubs such as holly (or where extra space is required) and conifers. Plastic netting products marketed as tree wraps, as well as 'eco' wraps, are not eligible for funding.</p>
Supplement for use of individual tree shelters	£2.43 per tree shelter	<p>To protect young trees with a tree shelter (note that spirals are not eligible for this funding). The tree shelters will protect trees from grazing animals and the height of the animal determines which shelter to use. For example:</p> <ul style="list-style-type: none"> <li>• for roe, muntjac or Chinese water deer use 1.2m shelters</li> <li>• for fallow, red or sika deer use 1.8m shelters</li> <li>• for hares and rabbits use 1.2m shelters or smaller if available</li> </ul> <p>For further details please see <a href="#">Forestry Commission guidance on the use of tree shelters and guards</a>.</p>

<b>Capital items for use in woodland creation</b>	<b>Payment Rate</b>	<b>Description</b>
		<p>If you use this item, you must remove and dispose of the tree shelters in line with waste disposal regulations by the end of the EWCO Agreement's Obligation Period.</p> <p>If using any purpose-built tree shelters made from biodegradable materials, we recommend that you seek assurance from the manufacturer or supplier that the shelter will remain serviceable for the recommended minimum 5-year period (or until the trees are established successfully). You must replace, at your own expense, any shelters that fail before this and the resultant dead trees.</p>
Scarification for natural colonisation	£121.85 per hectare	To create a suitable seed bed for natural colonisation, through exposure of mineral soil and reducing weed competition.
Mulch mats	£1.79 each	To suppress weed competition. Lay biodegradable mulch mat at least 50cm x 50cm, pegged down with five non-plastic pegs. We will support the use of mulch mat rolls as an alternative method. Pegs are to be collected and recycled or reused once the mulch mats have degraded.

## Boundary management

Boundary management capital items installed under a EWCO Agreement should conform with the [UKFS Technical Guide: Forest Fencing](#).

<b>Capital items for use in woodland creation</b>	<b>Payment Rate</b>	<b>Description</b>
Stone wall top wiring or netting	£5.54 per metre	Where there is already a wall protecting a site, this item can be used to provide additional height for protection from deer or large mammals.
Dry stone wall repair	£31.91 per metre	To repair an existing stone wall that will help to control livestock and conserve traditional landscapes.
Post and wire fencing	£7.92 per metre	To erect a post and wire fence to control stock, to help habitat management, or to protect environmental features. The fence should be at least 1.05 metres high, use strands of galvanised 4 millimetres (mm) mild plain steel wire or 2.5mm barbed wire and use enough strands to control the livestock. Metal fence posts can be substituted for wooden fence posts where the Forestry Commission agrees this is necessary.
Sheep netting	£9.34 per metre	Exclude sheep to protect the new woodland. Sheep netting should be steel wire mesh fence at least 1.05m high.  Metal fence posts can be substituted for wooden fence posts where the Forestry Commission agrees this is necessary.

<b>Capital items for use in woodland creation</b>	<b>Payment Rate</b>	<b>Description</b>
Deer fencing	£10.27 per metre	<p>To protect newly created woodland from deer browsing. You should <u>contact the Forestry Commission Deer Officer for your area</u> to agree appropriate specifications for deer fencing.</p> <p>Where a deer fence is used additional payments will not normally be available for tree shelters within the fenced area.</p> <p>Metal fence posts can be substituted for wooden fence posts where the Forestry Commission agrees this is necessary.</p>
Rabbit netting supplement	£5.65 per metre	<p><i>Eligible for use in conjunction with stock and deer fencing items only, or where these are already in place and will serve for the whole of the agreement period.</i></p> <p>To be used where additional fencing is required to exclude rabbits to help protect environmental features. Rabbit fencing should be standard 18-gauge netting and the bottom edge should be buried to a depth of 150 mm, or else lap the netting on the surface of the ground towards the rabbit threat.</p>
Difficult site fencing supplement	£3.98 per metre	<p><i>Eligible for use with stock, deer and post and wire fencing items.</i></p> <p>To help control livestock, protect environmental features and help to manage habitats on difficult sites. A site is considered to be difficult if the terrain prevents a post knocker being transported to site.</p>

<b>Capital items for use in woodland creation</b>	<b>Payment Rate</b>	<b>Description</b>
Temporary Electrical Fencing	£6.38 per metre	To be used where there is existing low to moderate deer risk, but deer are considered to have an impact on leader growth, and where deer specific tree shelters are not being used.  Note: in areas where hares and rabbits are present and pose an identified risk this item may not be suitable, without additional use of 70cm tree shelters. Specification and guidance should be in line with <a href="#">Forest Fencing Technical Guide</a> .
Strike markers	£0.93 per metre	To install fence markers to reduce the risk of black grouse mortality resulting from collision with fence wire. Fence markers are available in many forms, for example metal plates or chestnut palings. More details can be found in <a href="#">UKFS Technical Guide: Forest Fencing</a> .
Badger gate	£61.81 per gate	To provide badgers with unrestricted access either side of a newly erected fence that crosses known badger routes.
Badger tubes	£58.49	To be placed on existing badger runs where new fence lines are being erected, or where badgers are pushing through existing fence lines. Used as an alternative to traditional badger gates, particularly where muntjac are present.  Note: badger tubes may not be appropriate in areas with high rabbit numbers.  Specification: 225mm perforated twinwall pipe x 1.5m (4 cut from 1 x 6m pipe length)
Metal field gate	£340.00 per gate	To provide access to facilitate maintenance of the new woodland. Advice on the specification for such gates can be found in <a href="#">UKFS Technical Guide: Forest Fencing</a> .
Wooden field gate	£612.00 per gate	To provide access to facilitate maintenance of the new woodland. Advice on the specification for such gates can be found in <a href="#">UKFS Technical Guide: Forest Fencing</a> .

<b>Capital items for use in woodland creation</b>	<b>Payment Rate</b>	<b>Description</b>
Vehicle deer gate	£749.63 per gate	To install a deer proof vehicle gate within the deer fence. Advice on the specification for such gates can be found in <a href="#">UKFS Technical Guide: Forest Fencing</a> . Where a deer fence is used, additional payments will not normally be available for tree shelters within the fenced area.
Pedestrian gate, bridle gate or kissing gate	£447.60 per gate	To facilitate access where there is an existing Public Right of Way or where permissive access is being provided.
Pedestrian deer gate	£475.44 per gate	To install a deer-proof pedestrian gate within the deer fence. Advice on the specification for such gates can be found in <a href="#">UKFS Technical Guide: Forest Fencing</a> .
Water gates	£532.80 per gate	To install water gates across streams in areas targeted for the reduction of water pollution caused by farming. Available for use on fence lines across streams where other stock control items such as stock fencing are applied for.

## Deer management

<b>Capital items for use in woodland creation</b>	<b>Payment Rate</b>	<b>Description</b>
Deer enclosure plots	£212.56 each	To erect a deer enclosure plot at least 1.5 metres high and approximately 16 square metres in size, to protect areas of woodland from deer browsing. This will allow monitoring of the area's regeneration potential and the impact of browsing. More details can be found <a href="#">UKFS Technical Guide: Forest Fencing</a> .
Deer high seat (lean-to)	£265.00 each	To supply a galvanized, portable, lean-to deer high seat that provides a safe, temporary vantage point from which to cull deer, reducing the impact their browsing has on the land.

Deer high seat supplement (free-standing)	£180.00 each	To supplement the rate for a deer high seat when a free-standing seat is required.
Shooting mounds	£250.00 each	To provide a permanent 360° viewing site for deer culling. The cost covers excavation work to create a mound three metres wide and two metres high.
Deer repellent	£0.27 per tree	To provide effective control for up to 6 months and ensure that young plantations have undisturbed growth from rubbing and/or debarking. To be applied to the shoots of stems or trunks of trees or shrubs.

## Vegetation management

<b>Capital items for use in woodland creation</b>	<b>Payment Rate</b>	<b>Description</b>
Chemical bracken control	£270.90 per hectare	<p>This item is for chemically controlling bracken, prior to planting using, a chemical product that is approved at its time of use, and to a specification agreed by the Forestry Commission.</p> <p>All herbicide applications (including aerial application) must follow the law and relevant codes of practice. <a href="#">Natural England's bracken control guidelines</a> should also be followed.</p> <p>Make sure any relevant consents are in place before carrying out the work. This includes <a href="#">consent from the Environment Agency to spray near a watercourse</a>.</p>
Mechanical bracken control	£190.90 per hectare	<p>This item is for mechanically controlling bracken, prior to planting, to a specification agreed by the Forestry Commission.</p> <p>In general, mechanical control may cause more disturbance to archaeological sites, ground nesting birds and invertebrates than chemical control. During the</p>

<b>Capital items for use in woodland creation</b>	<b>Payment Rate</b>	<b>Description</b>
		<p>nesting season make sure that birds are not nesting in the treated area.</p> <p>The site should be treated twice in year 1 prior to planting.</p>
Bracken control supplement for follow up treatment	£191.25 per hectare	To control the spread of, or remove, existing dense stands of bracken prior to planting. To be used in the year following initial chemical or mechanical bracken control. If using this item, you will still need to plan to complete planting and claim within two years and three months of the agreement start date. Note that once the final capital claim has been made under a EWCO Agreement and it moves into its 10-year Maintenance period, the annual Maintenance Payment pays for the control of competing vegetation and this supplement is no longer available.

### Drinking water for livestock

<b>Capital items for use in woodland creation</b>	<b>Payment Rate</b>	<b>Description</b>
Hard base for livestock drinkers	£179.15 each	<p>Only available when woodland creation along water courses prevents livestock accessing their usual water source.</p> <p>You should apply for a pump, base, pipework and trough collectively. These items cannot be applied for independently.</p>
Pasture pump and associated pipework	£295.90 each	The length of pipework funded will not exceed the distance, in a straight line, from the bank of the watercourse being buffered to the outer boundary of the new woodland. This limit will apply independently to each pump or trough required. If an alternative water source is



<p>Ram pump and associated pipework</p>	<p>£1,861.00 each</p>	<p>used, the lesser distance will apply to piping being funded.</p> <p>You should ensure that you have any consents required for abstraction of water.</p> <p>Contact Catchment Sensitive Farming (CSF) for advice to farmers on improving water and air quality and reducing flood risk:  <a href="https://www.gov.uk/guidance/catchment-sensitive-farming-reduce-agricultural-water-pollution">https://www.gov.uk/guidance/catchment-sensitive-farming-reduce-agricultural-water-pollution</a></p>
<p>Livestock trough</p>	<p>£152.92 each</p>	<p>Check if you need an Environmental Permit for flood risk or water abstraction licence from the Environment Agency:  <a href="https://www.gov.uk/topic/environmental-management/environmental-permits">https://www.gov.uk/topic/environmental-management/environmental-permits</a></p>
<p>Pipework associated with livestock troughs</p>	<p>£3.31 per metre</p>	<p>Apply for a water abstraction or impounding licence:  <a href="https://www.gov.uk/guidance/water-management-apply-for-a-water-abstraction-or-impoundment-licence">https://www.gov.uk/guidance/water-management-apply-for-a-water-abstraction-or-impoundment-licence</a></p>

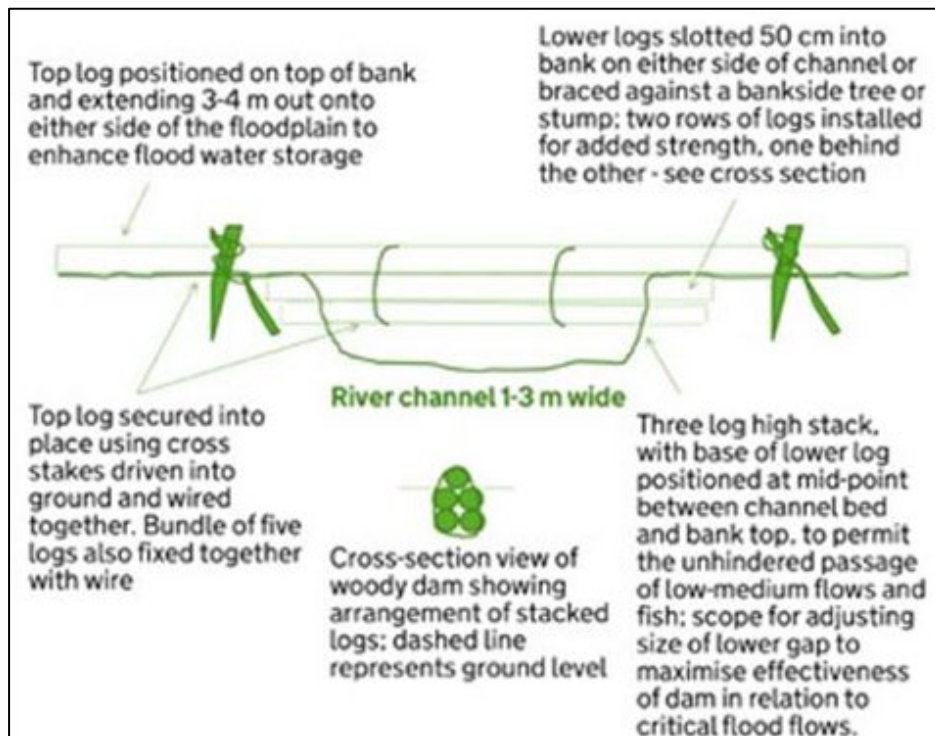
## Flood management

<b>Capital items for use in woodland creation</b>	<b>Payment Rate</b>	<b>Description</b>
Small leaky woody dam (1 to 2.99 metres)	£461.39 each	<p>Leaky woody dams (LWD) should:</p> <ul style="list-style-type: none"> <li>• be sited on slow flowing reaches of the water course that on average have at least two metres of floodplain on either side</li> <li>• include branch wood as necessary to help hold water back above the level of low flows</li> </ul>
Large leaky woody dam (3 to 5 metres)	£764.42 each	<ul style="list-style-type: none"> <li>• be built to a height sufficient to encourage water to come out of bank and on to the floodplain upstream of the LWD</li> <li>• be built in series (minimum number of three dams) at a spacing of approximately five to seven times the width of the channel between LWDs</li> </ul> <p>You should install enough LWDs to exert a significant reduction in flood flows for the size of the catchment and nature of the downstream flood risk, or to contribute to this goal as part of a longer-term plan, in combination with the action of other landowners.</p> <p>Please refer to detail on the design of LWDs in the next section of this Appendix. You will need approval from the <a href="#">Environment Agency</a> or <a href="#">Lead Local Flood Authority</a> to install LWDs.</p>
Culvert	£376.23 each	<p>To install a new culvert or to replace an existing collapsed structure to provide a watercourse crossing. New culverts will require appropriate consents from the Environment Agency (EA) or flood defence consenting authority.</p> <p>Specification: concrete or rigid plastic twin-wall pipe at least 450mm in diameter</p> <p>Installation must comply with the <a href="#">Culvert design and operation guide</a>. (See <a href="#">CIRIA C786F</a>)</p>

## Indicative designs for leaky woody dams

### Small leaky woody dam: 1 to 2.99 metres wide

**Figure 1: Indicative design for 1 to 2.99 metres wide leaky woody dam**



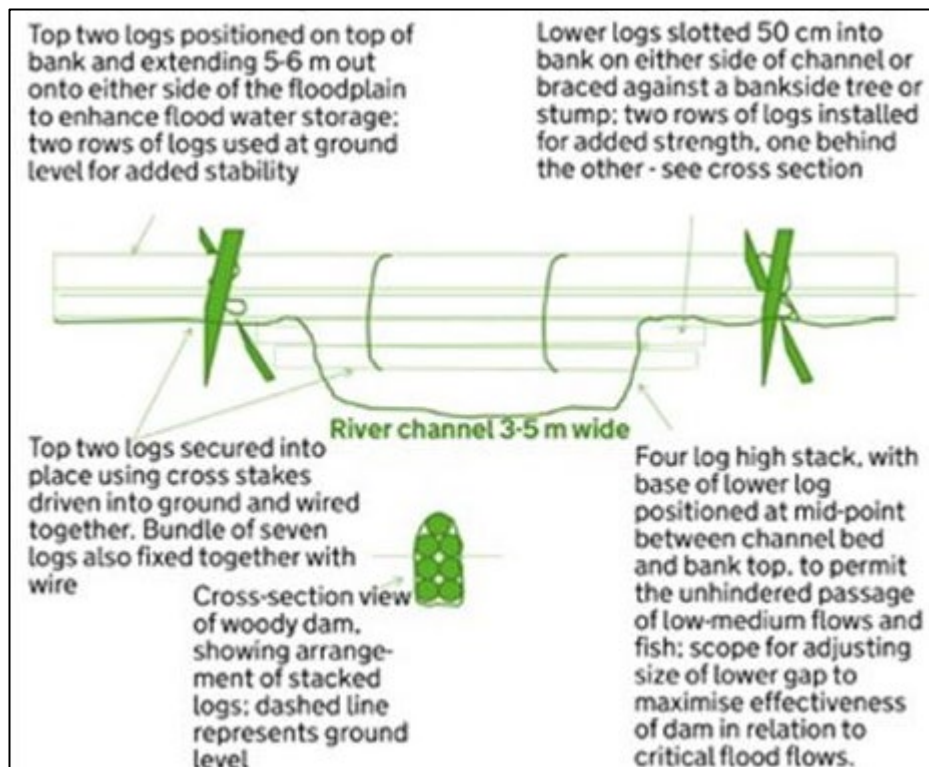
#### Description

1. A cross section view of a 3-log-high woody dam shows the arrangement of the stacked logs: 2 logs at the base with another 2 logs directly on top of them. The final log is at the top of the log stack, positioned in the dip between the 2 logs below it. Ground level is shown as being between the second row of logs from the bottom and the top log.
2. The base of the lower logs is positioned at the mid-point between the channel bed and bank top, to permit the unhindered passage of low-medium flows and fish. There is scope for adjusting the size of the lower gap to maximise the effectiveness of the dam in relation to critical flood flows.
3. The lower logs are slotted 50cm into the bank on either side of the channel or braced against a bankside tree or stump. There are 2 rows of logs installed for added strength, one behind the other.

4. The top log is positioned on top of the bank and extends 3 to 4 metres out onto either side of the floodplain, to enhance flood water storage.
5. The top log is secured into place using cross stakes driven into the ground and wired together. Bundles of 5 logs are also fixed together with wire.

## Large leaky woody dam: 3 to 5 meters wide

**Figure 2: Indicative design for 3 to 5 metres wide leaky woody dam**



### Description

1. A cross section view of a 4-log-high woody dam shows the arrangement of the stacked logs: 2 logs at the base with another 2 logs directly on top of them, then another 2 logs directly on top of those. The final log is at the top of the log stack, positioned in the dip between the two logs below it. Ground level is shown as being between the second and third row of logs from the bottom.
2. The base of the lower logs is positioned at the mid-point between the channel bed and bank top, to permit the unhindered passage of low-medium flows and fish. There is scope for adjusting the size of the lower gap to maximise the effectiveness of the dam in relation to critical flood flows.

3. The lower logs are slotted 50cm into the bank on either side of the channel or braced against a bankside tree or stump. There are two rows of logs installed for added strength, one behind the other.
4. The top 2 logs are positioned on top of the bank and extend 5 to 6 metres out onto either side of the floodplain to enhance flood water storage. There are 2 rows of logs used at ground level for added stability.
5. The top 2 logs are secured into place using cross stakes driven into the ground and wired together. Bundles of seven logs also fixed together with wire.