



Acorn Antics – An essential guide to acorn collecting

Introduction

‘Mighty oaks from little acorns grow.’

This guide is intended for education group leaders and gives guidance on how to organise an acorn collection.

Trees grown from local seed stock are often referred to as *local provenance trees*. These trees are well suited to local conditions i.e. the soil, climate and seasonal patterns. Their growth rate and ability to survive and resist diseases should be higher than trees grown and imported from further afield. Imported trees tend to be more susceptible to pests and diseases.



A young oak sapling

By growing native trees from the seed of healthy, local, tree stock, Natural Resources Wales can ensure that the trees it plants will be the best suited to local conditions, ensuring the greatest benefit to local wildlife and woodlands. To ensure plentiful stocks of native, local provenance trees, Natural Resources Wales is asking education and learning groups to harvest acorns in their local area. Collecting acorns is a great way to enthuse and educate children about the importance of the sustainable management of our natural resources, whilst raising funds for your setting.

Acorn Collections 2017

Did you know that out of approximately 600 global species of oak tree there are two native species of oak in Wales; the sessile oak and the pedunculate oak?

Natural Resources Wales needs acorns from **both** pedunculate and sessile oak, although sessile is the preferred species. Not sure what species your oak tree is? Use our *‘How to ID your oak tree’* guide.

If you have any doubts as to the species of your oak tree, please forward a photo of some example leaves and acorns to the email address listed on the last page, and one of our experts will confirm which type of oak it is.

Thinking of running an acorn collection? The process in a nutshell.



1. Identify a suitable tree and read through the guidance... decide whether or not you wish to proceed.

2. Plan and organise your collection and ensure you have permission from the landowner.

3. Contact NRW to inform them of your collection and receive free collection sacks and labels.

4. Run the acorn collection and complete the necessary paperwork to register your collection. Deliver your acorns to the nearest NRW office.

5. Once received at acorn HQ, NRW will confirm the weight of your collection and the payment due. Your acorns will be sent to the tree nursery for planting before being returned to a Welsh woodland or forest sometime in the future.



6. Providing you have completed and returned the relevant paperwork we aim to pay for all collections by the end of November.

Step 1: Planning your collection:

Find a suitable tree

- Is there an oak tree within your settings' grounds?
- Do any of your learners have relatives with an oak tree growing in their garden that would allow you to collect the acorns?
- Is there a tree on public land that you could collect from?

Ideally, a site should be sought that is within walking distance of your setting to minimise the cost of transport.

For your group's safety, don't collect anything from trees beside busy roads or from old industrial sites.

Who is going to help and manage your collection?

This programme is to benefit formal and informal education and learning settings e.g. local school, Cylch Meithrin group, Scout group, Parents and Teacher Association. Acorns could be collected as part of a school lesson or Brownies session.

Nominate someone to be the main contact for the collection. This person will need to liaise with Natural Resources Wales and ensure all the necessary information is gathered.

Either way, remember, many hands make light work – make sure your group are aware of when the collection will be happening. You may wish to market your collection through the local press, social media etc.

Get permission

Acorns are the property of the landowner.

To receive payment for your acorns, evidence of written permission to collect, remove and sell acorns from site needs to be sought from the landowner and submitted to Natural Resources Wales. This could be a copy of an email or letter.

Nets – if the landowner is willing, you may be able to strategically place nets under the branches of your selected oak tree a few weeks before the date of your actual collection, to catch falling acorns. Nets offer a more productive method of acorn collecting in comparison to hand picking them but are not a viable option in all locations.

Insurance

Whether you are collecting on private or public land, consider if there is public liability insurance in place to cover the group should anybody injure themselves?

When is the best time to organise a collection?

The best time to collect acorns is when they begin falling. Ripening dates vary from year to year and from county to county by as much as three to four weeks, making it difficult to advise on actual dates. Prime picking tends to be late September through to the first week

in November. Keep a watchful eye on your trees - once the cold air sets in that is the time acorns will begin to drop. The first fall acorns should be discarded as they are not fully ripe – these often fall with the first autumn winds. The main fall is approximately 2 weeks later. Harvesting should take place as soon as possible after the main fall as acorns will quickly begin to decay.

Want to add education value to your session?

We have a range of curriculum linked, interactive games and activities detailing how seeds disperse and germinate. Why not try running a few of them with your group to give your session context and extend your learners' understanding and awareness of these natural processes? See our '*Seed Dispersal Education Activities*' document for further details.

Before you start... contact us

Once you have read and digested the contents of this pack, please contact Natural Resources Wales so we can send you some collection sacks and labels.

- Green sacks – sessile acorns
- Red/orange sacks – pedunculate acorns
- Double bag your sacks

Please allow a couple of days for delivery.

education@naturalresourceswales.gov.uk

Step 2: On the day of your collection

Risk assessment

Ensure a risk assessment of the site and activity have been completed and that everyone involved is aware of their contents. Consider the health and wellbeing of your group.

Acorn collecting resources

Essential	Optional
<p>Collecting tubs – e.g. old ice cream tubs, yoghurt pots. Best to have many mobile tubs coming back to a central pot to pour collected acorns into main sack rather than having to move the sack from place to place.</p>	<p>Kneeling pads – acorn collecting does involve spending time down on your hands and knees. You may wish to bring a kneeling pad with you for the comfort of your knees, or plastic bags, especially if the ground is wet.</p>
<p>Pedunculate vs. sessile oak ID guide – make sure you've successfully identified the tree(s) you are collecting from.</p>	<p>Refreshments – although acorn collecting is invigorating and rewarding, perhaps a hot drink and snack will be required to sustain your acorn hunters.</p>
<p>Warm clothes and suitable footwear - cold or wet hands and feet can soon lead to demotivation and a drop-in acorn gathering rates. To ensure your group is motivated and productive, advise they wrap up warm with plenty of layers.</p>	
<p>First aid kit – in case anyone sustains an injury whilst rummaging for acorns.</p>	
<p>Suitable acorn collecting sacks and labels – contact NRW to receive these for free.</p>	
<p>Wipes or hand-gel - so hands can be cleaned once the collection has finished to avoid the spread of germs.</p>	
<p>Camera – take plenty of photos of your group in action to raise awareness of your group or your fundraising goal. Don't forget to share your experience and tag your photos via #acornantics if you have got permission to take and share photos.</p>	
<p>Risk assessment – make sure you've got a copy of your risk assessment with you in case conditions change on the day.</p>	
<p>Education activities – don't forget to print off and take our suggested seed dispersal and seed germination activities with you.</p>	
<p>Helpers – many hands make light work. Make sure you enlist as many helpers as you can.</p>	

Acorn collecting rules to be observed:

- **Collect big** - The bigger the acorn, the larger its food reserve therefore it will grow into a bigger tree more quickly.
- **Check viability** - The longer acorns are on the floor, the quicker they lose their viability. A quick and simple way of checking viability is to put them in a bucket of water. If they float – they are not viable.
- **Observe distance** - If the site has a mix of sessile and pedunculate trees, you need to have 20 metres between each tree to be able to collect the fallen acorns.
- **Avoid green acorns** - First fall acorns should be discarded as they are not fully ripe – these often fall with the first autumn winds. The main fall is approximately 2 weeks later and will be brown in colour.
- **No to nibbling or eating** - If there is any evidence that the acorns have been nibbled by wildlife or have holes in them, don't collect them.
- **Leave some acorns for wildlife** - Some foresters argue that years of lean acorn production keep predator populations low, so there are fewer animals to eat all the seeds in a mast year. Squirrels, jays, mice, deer and badgers will eat acorns. Ensure you leave some behind as a food source to help these animals survive the trying winter months. Some acorns that manage not to get picked or eaten by wildlife may grow on to become seedlings.
- **Handle with care** - Most acorns appear lacklustre and inert however they are living organisms. Handled with care they will fulfil their potential to germinate, grow and develop into healthy plants, whereas mishandling will damage or kill them.
- **And breathe** – Acorns are highly perishable. Once picked, acorns need to be stored in breathable sacks such as hessian or onion sacks, preferably double bagged. Get in touch and NRW will supply you with sacks. Don't overfill bags as they may split.
- **Separation** - If collecting pedunculate and sessile oak acorns ensure that collections are kept separate i.e. each sack needs to be filled with either 100% pedunculate (red or orange sack) or 100% sessile acorns (green sack). Contact us to receive free collection sacks.
- **Biosecurity** – Whenever you leave site remember to '*keep it clean – don't give pests and diseases an easy ride.*' For further information, download our '*Keep it clean*' poster.

Step 3: After your collection

Log and record

There are strict rules and regulations to ensure that acorns are traceable from collection, to being grown on in a tree nursery to their final growing place in the natural environment. This allows those who buy oak trees from tree nurseries to have sufficient information about the material being bought, such as provenance and origin. So that Natural Resources Wales can register collections and pay you, you will need to complete and return the '**Acorn Registration Form**' to satisfy these regulations.

Caring for your acorns whilst in storage

- **Acorns are highly perishable** - Handle them with care, mishandling will damage or kill them.
- **Keep them cool** – Storing acorns at a low temperature (2°C - 5°C) will slow the rate of deterioration and minimise fungal growth.
- **High humidity** – A room with high humidity is preferable to reduce possibility of drying out. Keep them away from the perils of central heating and artificial heat.
- **Beware of rodents** – Ensure wherever the acorns are being stored is rodent proof.
- **And breathe** – Ensure acorns are kept in their breathable sacks and not in sealed containers or plastic bags. Contact us at the Education, Learning and Skills team on the contact details below for suitable collection sacks. The acorns need to be able to respire. Turn the acorn sacks daily to ensure aeration.

Preparing your acorns for delivery

A waterproof label (provided by NRW) needs to be completed using a permanent marker for **each** sack collected noting:

- the name of your setting in capital letters
- the species of acorn: SOK (sessile oak) or POK (pedunculate oak)
- how many sacks are there? e.g. 1 of 3

NRW's '**Acorn Registration Form**' needs to be completed and emailed to:

education@naturalresourceswales.gov.uk

Without this document, it will not be possible for NRW to accept and pay for your acorns.

Getting your acorns to Natural Resources Wales

Your collected acorns need to be delivered to one of the listed NRW offices between the **16th October** and the **3rd November 2017** – this is to reduce the risk of them perishing and so they can get sent to the tree nursery as soon as possible. **Acorns delivered after these dates will not be accepted.**

Once you have dropped your acorns off, please send us an email to confirm that your acorns have arrived. We will then organise their transportation to 'Acorn HQ' – where all acorns are gathered in and weighed before going on the tree nursery.

education@naturalresourceswales.gov.uk

You will need to organise delivery of your acorns to your nearest Natural Resources Wales office. Office locations are:

Denbighshire		Conwy	Flintshire
Clawdd Newydd Ruthin Denbighshire LL15 2NL		Gwydr Uchaf Office, Llanrwst LL26 0PN	Chester Rd Buckley Flintshire CH7 3AJ
Gwynedd			
Trem Tryweryn Office, Bala Enterprise Park, Bala , Gwynedd, LL23 7NL		Government Buildings, Arran Road, Dolgellau , Gwynedd, LL40 1LW	Maes y Ffynnon, Penrhosgarnedd, Bangor , Gwynedd, LL57 2DW
Powys		Ceredigion	
Powells Place Powells Lane Welshpool Powys SY21 7JY		Welsh Government Building, Rhodfa Padarn, Aberystwyth , Ceredigion, SY23 3UR	Barley Mow, Lampeter , Ceredigion, SA48 7BY
Carmarthenshire		Pembrokeshire	
Llanfair Road, Llandovery , Carmarthenshire, SA20 0AL		Plas Gwendraeth, Heol Parc Mawr, Cross Hands Business Park, Cross Hands , Llanelli, Carmarthenshire, SA14 6RE	Llys Afon, Hawthorn Rise, Haverfordwest , Pembrokeshire, SA61 2BQ
Neath Port Talbot		Cardiff	
Resolven , Neath, Neath Port Talbot, SA11 4DR		Maes Newydd, Brittanic Way West, Llandarcy , Neath, Port Talbot, SA10 6JQ	Rivers House St. Mellons Business Park, Fortran Road, St. Mellons, Cardiff , CF3 0EY
Monmouth			
Hadnock Road, Monmouth , Monmouthshire, NP5 3NQ			

Payment for your acorns

NRW pays £4.10 per kg of acorns. Once your acorns have reached Acorn HQ, they will be weighed on spring scales and you will be emailed confirmation of the value of your acorns.

To receive payment, settings will need to complete the payee bank details section on the '*Acorn Registration Form*' and email it to:

education@naturalresourceswales.gov.uk

Are you acorn ready for dispatch?

Complete the following checklist:

Acorn ready for dispatch checklist	✓
Have you been in touch with NRW for free collection sacks and labels? <ul style="list-style-type: none">• Green sacks – sessile acorns• Red/orange sacks – pedunculate acorns• Double bag your sacks	
Have you put labels around each of your sacks – labels need to note: <ul style="list-style-type: none">• the name of your setting in capital letters• the species of acorn: SOK (sessile oak) or POK (pedunculate oak)• how many sacks are there? e.g. 1 of 3	
Have you completed an ' <i>Acorn Registration Form</i> '? This needs to be emailed to: education@naturalresourceswales.gov.uk	
Have you sought the landowner's permission to collect, remove and sell the acorns from site? A copy of your permission will need to be emailed to: education@naturalresourceswales.gov.uk	
Drop off your acorns at your local NRW office and notify us via email at: education@naturalresourceswales.gov.uk . We will then organise their transportation to 'Acorn HQ'.	

Step 4: Growing on to become a majesty of oaks

Once gathered in at Acorn HQ, the 2017 acorns will be transported in their sacks to Forestry Commission England's Delamere Tree Nursery, Cheshire. On arrival at the nursery the acorns are graded and sorted according to their species. Any substandard acorns will be discarded.



Below left, acorns awaiting sowing into newly prepared beds (below right).



Below left, young oak saplings in their beds. Below right: 3-4 year old oak saplings ready to be lifted and returned to the Welsh woodlands and forests from where they came. The cycle begins again...



Oak Factfile

There are two native species of oak in the UK; the sessile oak (*Quercus petraea*) and pedunculate oak (*Quercus robur*).

- Oaks belong to the beech family (*Fagaceae*).
- They are long-lived trees which can live for up to 500 years growing quite slowly, but can reach a height of up to 40 metres.
- Old trees can have a circumference measuring from 10 to 12 metres.
- Both species have excellent wildlife value, and outrank all other UK native trees when it comes to providing food and shelter for wildlife.
- Pedunculate oak prefers 'better' soils. Sessile oak can tolerate thin, poorer soil but - unlike the pedunculate - does not tolerate flooding.
- Timber from oak trees is used commercially to make furniture, gates, fencing, flooring and for smoking foods and structural work.
- Neither species produces acorns until the tree is at least 40 years old. Peak acorn production usually occurs around 80 – 120 years, with one tree producing up to 90,000 acorns.
- Young acorns are green, maturing to brown before they fall.
- Acorn production is erratic with a bumper crop, a 'mast year' happening every 3-4 years. This inconsistent seed production probably reflects annual variations in weather.

Contact us:

If you have any queries about conducting an acorn collection, please don't hesitate to get in touch:

education@naturalresourceswales.gov.uk

Education, Learning and Skills

Tel: 03000 065 3000

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