**Hedgerow Jelly** - a study in biodiversity and responsible foraging

**First plant your hedge:**

A hedge is a beautiful living boundary - a windbreak, a shelter for livestock or for horticulture, a haven for wildlife, a rich source of biodiversity and a great place for foraging...

You will find six native fruiting hedgerow species in your pack:

| 15 blackthorn | 5 rowan | 5 crabapple | 5 hawthorn | 5 dogrose | 5 elder |

**Add bramble** found locally, for the seventh fruit in the recipe. It is not available as part of the pack. There is wide variation in wild brambles – try and select rooted suckers from plants you know produce good quality fruit.

**You can also add willow:** Prepare cuttings from branches about 1.5 cm thick and 20 – 30 cm long, making sure that you cut the base just below a bud.

Make a hole in the ground with a dibber. Plant 7-8 cm deep. The willow is harvested from December to March to make baskets for gathering fruit.

**Planting ~ if you need help or advice on planting please contact Eleanor Garty at the Woodland Trust** - EleanorGarty@woodlandtrust.org.uk

First choose the site for your hedge:

- **Length** – the pack contains enough to plant 8 metres of hedge – this could be one or two sides of a boundary or even two or more different sites with smaller hedges or clusters of plants, preferably mixed species.
- **Position** – the hedge needs light and space to grow – it’s best to plant it near an existing fence to protect it. *Some of the plants have thorns, so you will need to choose a site where children do not run fast near the hedge.*
- **Orientation** – will your hedge run from north to south, or east to west, or somewhere in between?
- **Mark out the two lines** of the hedge with string, 55 cm apart.
- **Prepare soil** for planting – is it well-draining? If the soil is very poor - e.g. near building work - does it need compost or extra soil? These are all robust native species, but they may need help to get established.
- **Plant seedlings** 60cm apart diagonally, or five plants per metre, so you have a double row of plants. see photo of planting above.
- **Water in** seedlings and check moisture for first few days if the weather is dry.
- **Mulching** – optional: cover the base of the plants with a bottom layer of cardboard a bit wider than the double row, then mulch with old straw, hay or leaf mould up to 12 cm deep to discourage weed growth around the new plants.
- **Protect seedlings** from being nibbled by small animals (e.g. voles) and large animals (e.g. sheep) with tree guards and fencing – see photo above. Make sure the guards are pushed into the ground at the base to prevent nibbling by voles.

**Plant identification - the first step to safe and responsible foraging**

Learn the common names of the plants in English and Gaelic and the scientific names in Latin - see table on Page 4.

Do you know any local names for these plants? If we don’t use the names of our plants, they will disappear from our languages and dialects – see The Lost Words in reading list on Page 4.

- Write a poem or story to celebrate the plants in your hedgerow.
- Find out more about each species through the seasons, starting with the links to further information from the Woodland Trust website – see table on Page 4.
- Observe and draw the hedgerow plants through the seasons.

Gaelic guide to responsible foraging – see Page 4.
As the hedge grows, make sure the plants have space to develop and thrive, free from overpowering weeds, but also encouraging an undergrowth of wildflowers for biodiversity. The hedgerow will gradually grow and thicken, providing roosting and nesting sites for birds and sustenance to a range of wildlife. You can also keep domestic poultry under the hedge. Hedgerows provide vital corridors for birds, insects and small mammals to move through the countryside or town. The mature hedge will grow up to 6 metres high. The willow can be used for baskets or coppiced for firewood. Blackthorn, bramble and dogrose suckers can be controlled by mowing, strimming or cutting with secateurs.

Observing the hedge through the seasons:

The species all flower at different times of the year, giving a wonderful succession of blossom over four months, vital for bees and other pollinating insects. The first is blackthorn blossom, which provides much needed nourishment at the end of the winter, starting in early March. It is followed by hawthorn, crabapple and rowan blossom in April and May, and ending with elder, dogrose and bramble in early summer – June and July. Rose petals can be crystallised or used fresh in desserts and drinks. Elderflowers can be used in cordial, champagne and pancakes. The very young leaves of the hawthorn are edible - their common name is “bread and butter”.

The blossom season lasts over 4 months, from March to July, but the seven fruits all ripen around the same time in the early autumn, over 4 weeks from late September to early October.

Biodiversity, native plants and pollinating insects:

For more information on biodiversity and native plant species: see reading list on Page 4 below, including Flora Celtica and A Natural History of the Hedgerow.

For more information on pollinating insects: see weblinks on Page 4 below, including Polli:Nation, Bumblebee Conservation Trust and Butterfly Conservation Scotland.

• Make an in-depth study of one of species in the pack and how it contributes to the wider environment.
**Hedgerow Jelly Teaching Resources**

**Now for the jelly:**

It’s a long wait till your hedge is mature enough to harvest all seven fruits, but meanwhile you could look for the hedgerow jelly ingredients locally – a lesson in plant identification and responsible and safe foraging.

**Harvesting:** Pick carefully from all seven fruits, aiming for twice as many soft fruits (brambles, crabapples and elderberries) as the harder ones, but try not to over-pick - leave lots for the birds and other creatures.

**Sorting the fruit:** Put the leaves and stalks on the compost heap and take care to release any creatures such as spiders and beetles back into the hedge. Can you see the hawthorn shieldbug among the rowan leaves and berries in the photo above? - [http://www.naturespot.org.uk/species/hawthorn-shieldbug](http://www.naturespot.org.uk/species/hawthorn-shieldbug)

### Recipe

**Ingredients:**
- 250g rowan berries
- 250g sloes
- 250g rosehips
- 250g haws.
- 500g brambles,
- 500g elderberries
- 500g crabapples.
- Sugar – 1 kg per litre of juice.

**Method:**
- Remove stalks and leaves from the fruits, running clusters of elderberries and rows through a fork to do this.
- Clean and weigh each of the fruits, removing any which are overripe or mouldy.
- Wash in cold running water.
- Roughly chop the crabapples, leaving in pips and skin to help produce pectin to set the jelly.
- Put the fruits into a large preserving pan, with water two thirds up the level of the fruit.
- Cook over a low heat, till fruit is soft, stirring gently to ensure even cooking and taking care not to let the fruit catch at the base of the pan.
- When fruit is cooked, place it in a jelly bag and hang for several hours to extract the deep red juice.
- Shake the bag from time to time, then squeeze gently extract the remaining juice from the fruit, but do not be tempted to squeeze too hard, as your jelly will become cloudy.
- Now measure the juice and add sugar at the rate of 1 kilo per litre of juice.
- Boil rapidly till set. This will not take very long as there is a lot of pectin in the fruit.
- **Pot into jars, label and store in a cool place.**
  **Enjoy with scones or bannocks and butter or crowdie, as a special treat.**

**Serving the Jelly:**
For bannock recipes, see Processing and Cooking on the Crofting Connections website: [http://croftingconnections.com/schools/resources](http://croftingconnections.com/schools/resources).
For scone recipes, ask your family and other members of the community. Many families have a traditional recipe in the family.
**Teach the Bains to Bake** – see Page 4.
For information about the history of sugar in the Scottish diet, see **The Good Scots Diet** on Page 4.
For instructions on making butter and crowdie – see Page 4

**Nothing need be wasted:** The contents of the jelly bag can be fed to hens or birds; put onto the compost heap; or boiled up again to produce a pink or mauve dye for wool, preparing the yarn with a mordant (alum) to fix the colour.
Further Activities and Study

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<thead>
<tr>
<th>English name</th>
<th>Gaelic name</th>
<th>Latin name</th>
<th>Links to further information from Woodland Trust website:</th>
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Further reading - in print:
A Natural History of the Hedgerow and ditches, dykes and drystone walls – John Wright, pub 2016, Profile Books – a field guide to hedges and much more...
The Lost Words – John MacFarlane and Jackie Morris, pub 2017, Hamish Hamilton – a book of poems and illustrations written as spells to conjure up wild things, inspired by the plight of once-common words associated with the natural world which have been excised from the Oxford Junior Dictionary – they include bramble and willow from our hedgerow list, and also several other plants found in hedgerows. Jane Beaton, a schoolbus driver from Strathyre in Perthshire, has raised funds to distribute this beautiful book to every school in Scotland.
Rùrachd Lusan Fiadhain Scotland’s Natural Larder’s Gaelic guide to responsible foraging, Scottish Natural Heritage.
The Good Scots Diet - Maisie Steven, revised edition pub 2013, Argyll Publishing
Teach the Barns to Bake, Traditional Scottish Baking for Beginners, Liz Ashworth, pub 1996, Scottish Children’s Press

Further reading - Links to websites:
Polli:Nation - http://www.polli-nation.co.uk/ – A Heritage Lottery-funded biodiversity and education project for schools and communities in the UK.
Bumblebee Conservation Trust - https://www.bumblebeeconservation.org/ - creative ways to make sure our future countryside is buzzing with bumblebees again.
Basket Making from homegrown willow: find a local hand-made basket-maker, or visit the Croft 7 online book - http://m.croft7.com/upload/HEDGEROW%20BASKET%20WORKBOOK%20FINAL%20COPY.pdf by Jane Wilkinson
Crofting Connections resources - http://croftingconnections.com/schools/resources.
For bannock recipes, see Processing and Cooking - http://croftingconnections.com/schools/resources.
Scottish Natural Heritage – Scotland’s Natural Larder - www.scottlandsnaturallarder.org
Rùrachd Lusan Fiadhain, Scotland’s Natural Larder’s Gaelic guide to responsible foraging, Scottish Natural Heritage online version https://www.nature.scot/rurachd-lusan-fiadhain

For more resources linked to each of these topics see the Projects and Partners page on the Scottish Crofting Federation website – http://www.crofting.org/initiatives

For more information and help with the Hedgerow Jelly Project, including help and advice with planting contact Eleanor Garty at the Woodland Trust: EleanorGarty@woodlandtrust.org.uk