



No.52 SUMMER 2019

# Living Woods

MAGAZINE

**WEAVING  
WILLOW**  
meet the maker

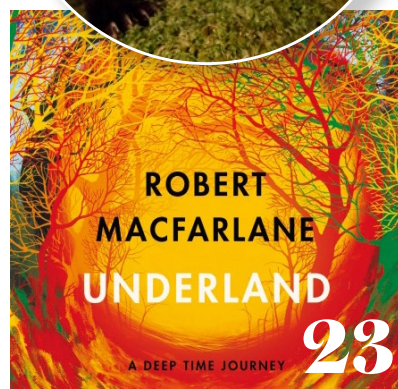
**Plus**  
**THE SURVIVAL  
OF THE FITTEST**  
Chief Plant Health Officer  
advises on pests and diseases



# CONTENTS

**T**rees are in the news more than ever, from the mycorrhizal networks in their roots to their leafy canopies, often threatened by climate change or pathogens. At Living Woods we believe in celebrating the best in the arboreal world and preparing owners for the future, so we were delighted to meet Nicola Spence, the Chief Plant Health Officer, and to hear her views on how to protect British trees. Pine martens show promise as another weapon in the armoury against grey squirrels, while Gillian Hatcher writes about red squirrels, which are flourishing in the Highlands.

**Judith Millidge** Editor  
judith@livingwoodsmagazine.co.uk



COVER PHOTO  
SYMBIOT/SHUTTERSTOCK.COM

- 3 **News and updates from the woodland world**
- 5 **View through the trees** Julia Goodfellow-Smith
- 6 **Ensuring the survival of the fittest** Judith Millidge
- 9 **Woodlands Awards 2019**
- 10 **Saving Scotland's red squirrels** Gillian Hatcher
- 13 **Meet the maker – interview with basketmaker Rachel Bower**
- 16 **Timber framing at Orchard Barn** Sarah Partridge
- 19 **Pine martens on the march** Hilary Macmillan
- 21 **Woodnote** Clare Gibson cautiously assesses the prickly hawthorn
- 22 **Book reviews**
- 27 **Events round-up 2019**
- 28 **Courses, workshops and acknowledgements**

**LivingWoodsMagazine.co.uk**



Published by Living Woods Magazine Ltd, 19 Half Moon Lane, London, SE24 9JU



# @Woodland News

## COST OF ASH DIEBACK RUNS INTO BILLIONS

A team of researchers from the University of Oxford, Fera Science, Sylva Foundation and the Woodland Trust has calculated the true economic cost of ash dieback – and the predictions, published in the journal *Current Biology*, are staggering.

- The total cost of ash dieback to the UK is estimated to be £15 billion.
- Half of this (£7 billion) will be over the next 10 years.
- The total cost is 50 times larger than the annual value of trade in live plants to and from Britain, which is the most important route by which invasive plant diseases enter the country.
- There are 47 other known tree pests

and diseases that could arrive in Britain and which may cost an additional £1 billion or more.

The predicted costs arise from clearing up dead and dying trees and in lost benefits provided by trees, such as water and air purification and carbon sequestration. The loss of these services is expected to be the biggest cost to society, while millions of ash trees also line Britain's roads and urban areas, and clearing up dangerous trees will cost billions of pounds.

Lead author, Dr Louise Hill, said: 'The numbers of invasive tree pests and diseases are increasing rapidly, and this is mostly driven by human activities, such as trade in live plants and climate change. Nobody has estimated the total cost of a tree disease before,

and we were quite shocked at the magnitude of the cost to society. We estimate the total may be £15 billion – that's a third more than the reported cost of the foot-and-mouth disease outbreak in 2001.'

Curing or halting the disease is now impossible, but scientists have made a number of recommendations in an attempt to mitigate some of the costs. This includes a nationwide replanting scheme that could reduce the overall cost by £2.5 billion, by ensuring that lost ecosystem services are replaced. There should be a greater focus on biosecurity and the sourcing of plant material to keep diseases at bay. Finally, stricter controls should be introduced on the importation of all plant material.

The whole paper is available to read on the **Current Biology website**.



Barry Deakin is engulfed in a pollen cloud while clearing up a dead birch.

## NEW HORIZONS FOR ELM TREES

It is unlikely that many people under the age of 60 can remember seeing stands of elm trees in the British countryside. When Dutch elm disease struck in the late 1960s, few realised that it would have such a devastating effect, wiping out more than 30 million trees across the country.

Specialist tree breeders have recently unveiled a disease-resistant elm species which has been derived from American and Japanese varieties. *Ulmus New Horizon* has been grown in Hampshire by Hillier Trees and has been planted out in sites across Europe and in the UK for the last 30 years. It has proven to be resistant to Dutch elm disease and Hillier now intend to plant a number of elm stands across the country, beginning with a stand of 20 trees at the National Memorial Arboretum in Staffordshire this autumn.



The campaign to re-elm the British countryside fulfils more than just a nostalgic memory, however. The revival of the elm is likely to provide significant environmental benefit to the insects and butterflies that once relied on it, notably the white-letter hairstreak butterfly that breeds in elm trees.

### THE CUSTODY CODE – NEW FILM REVEALS THE UNSEEN LIFE OF A WORKING FOREST

Visitors to Alice Holt Forest in Hampshire will be able to view *The Custody Code*, a new film and installation produced as part of the Forestry Commission's centenary celebrations.

The film charts the life cycle of the forest, from the planting of a seed to the sale of timber, with the story told through the eyes of the people who work in the industry.

Alice Holt Forest, one of the largest ancient woodlands in the south of England, is the home of the Forestry

Commission's seed laboratories and it is where the story begins.

'We supply the Forestry Commission nurseries with sufficient seed to grow between 25 and 30 million trees a year, every year. We also supply the private trade with seed: they grow as much again, if not more than we do. Without seeds there are no forests: we are the starting point,' said Corinne Baker, Seed Trading Manager at Alice Holt. *The Custody Code* will be shown at Alice Holt, Hampshire, from 10 June to 2 September 2019, and at Kielder, Northumberland, from 16 September to 16 December.



The Seed Store at Alice Holt Forest. (Photo © Amanda Loomes/Forestry Commission)

### TEACHING TREES LAUNCHES JUNIOR FORESTER AWARD

The Royal Forestry Society (RFS) has launched a free, six-week programme, the Junior Forester Award, aimed at schools, home education and out of school groups.

Participants complete practical tasks to enhance their knowledge of woodlands and forestry and complete work books to demonstrate their learning during a six-week course. Schools can opt to deliver the programme themselves, or, subject to availability, it can be led by RFS Teaching Trees officers.

Becky Wilkinson, Teaching Trees Co-ordinator, says: 'We want young people to have fun and to feel a sense of pride and achievement in learning about the skills required to keep forests and woodland healthy and thriving.'

'The award has been designed to make outdoor learning accessible for all, whether you are in an urban or a rural environment, and we hope it will inspire some young people to consider careers in forestry and the countryside.'

The programme can be run over six consecutive weeks or over a longer time frame. Designed to be as accessible as possible, the course requires sight of at least six different tree species but these do not have to be in a woodland – they can be in hedgerows or parks.

The programme is aimed at Key Stage 1 and above, with links to Science and DT in the National Curriculum. Programme Leader information and participant workbooks are free to download from the **RFS website here**.

**FORESTRY  
FACT**  
*Only China  
imports more  
wood than the  
UK.*



# VIEW THROUGH THE TREES

**JULIA GOODFELLOW-SMITH** looks at planting for the future and considers the genetic provenance of replacement trees in her woodland.

**M**ike and I are both northern Europeans, but we couldn't be more different when it comes to temperature. I bask in the warmth of sunny days. Mike, on the other hand, loves cool evenings and finds the heat difficult.

And yet, when planning for what trees to plant in our woodland, we had both assumed that stock grown from local seeds would struggle to cope with the temperature increases associated with climate change. If people from the same place can be so different in their comfort levels, why not trees?

A new report from the Forestry Commission ([Genetic considerations for provenance choice of native trees under climate change in England](#)) gave us food for thought. It advises on provenance of native trees under climate change in England and makes for interesting, if rather lengthy, reading.

Trees are immobile and have long generation times, so they have developed other characteristics that enable adaptation to change. Genetic variation is also higher within populations than between populations. This means that, as for humans, different trees within a population will be better adapted to different situations. Using stock grown from seeds from further south, as we had been planning, will not necessarily mean that the trees are better able to cope with warmer temperatures.

Perhaps more of a challenge is the need for anything we plant now to be able to withstand both drier summers

and wetter winters. Using seed from further south will not necessarily address those issues at all, and it certainly won't be adapted to our patterns of daylight and occasional late frosts.

The Forestry Commission recommends a varied approach. Upland forests tend to have harsher conditions, so it is best to stick to local provenance. For lowland forests like ours, use of southern seed is less risky.

Seed from further south tends to have a higher growth rate, so if you want quick results and the risk of frost is low, it could be a good choice. If you are working over short rotations and can monitor your trees well – and replace them if need be – then southern stock is worth considering. Note that the report refers to trees grown in the UK by nurseries using seed from further south.

Production is not a primary motive for our woodland, although we do plan to harvest it. As no-one is quite sure what is best, we are aiming for variety. In the main body of our woodland, we will allow natural regeneration and grow from seeds collected from our own trees. Hopefully, they will have enough genetic diversity to cope. Just in case they don't, we plan to replant one area with a wider variety of species, including some non-natives from more southerly climes, such as holm oak and walnut. We no longer plan to find native trees grown from more seeds cultivated in warmer southern climates.

Later this year, our woodland will start to change as we implement our management plan. Having been reluctant to fell anything at all, I am now excited by the possibility of taking action to protect the woodland for the long term. This will be a real legacy for future generations, and it fills me with optimism for a better future.



Holm oak (*Quercus ilex*) is dominant in the Mediterranean region. Introduced to Britain in the 16th century, it has long been naturalised and thrives in the UK.

# ENSURING THE SURVIVAL OF THE FITTEST

Hardly a week goes by when we are not reminded of the many threats to the trees and plants of Britain and consequently, biosecurity is now much higher up the public agenda. We spoke to the woman in charge: Professor Nicola Spence, DEFRA's Chief Plant Health Officer.

If the UK's Chief Plant Health Officer, Nicola Spence, has the weight of the country's flora on her shoulders, she bears it lightly. A plant virologist, Professor Spence is an expert in plant health and the international tree trade; she leads a team of biosecurity professionals who provide the line of first response to the incursion of plant pests and diseases into the UK.

In 2013, in the wake of the discovery of ash dieback (*Chalara fraxinea* – now known as *Hymenoscyphus fraxineus*) the Tree Health and Biosecurity Task Force recommended the appointment of a senior person to advise the government, to lead the operational response to disease outbreaks, and to make contingency plans for the future. Professor Spence was appointed the following year and since then, plant health and tree resilience have moved higher up the national agenda.

She has a very clear vision of her job. 'Dutch elm disease was the first landscape-changing disease, which can be traced back to an infected shipment of logs from Canada. *Chalara* has probably been present in the UK since 2004. How did we not notice?

'In the light of these potentially catastrophic diseases, we ask



Professor Nicola Spence,  
Chief Plant Health Officer at DEFRA.

“

***Increasing  
globalisation means  
an increasing threat  
of importing  
invasive plant  
pathogens.***

”

ourselves how we can prevent similar problems arising in the future and work with other stakeholders to draw up contingency plans. It is also critical to create a larger number of trained individuals to do the necessary scientific research.'

## RESISTANCE

The plant health team work at customs posts and ports and collaborate with a wide number of partners in forestry and agriculture at home and abroad.

Regulating the import of plant material is a critical part of the job. Pests and pathogens can arrive in all manner of organic material, notably packaging, furniture, plant products and fresh produce. Wooden packaging such as pallets should comply with international standards, but much does not. There is a 20-strong team at Heathrow alone, tasked with checking and overseeing imports, and the number of inspectors throughout the country is likely to double when Britain leaves the EU. Prohibited items are sent back to the source or destroyed at the cost of the importer. Highly trained detection dogs, first used by the Austrian Research Centre for Forests, were borrowed to sniff out pests such as Asian longhorn beetle in 2012.





The 2015 Ai Weiwei installation, 'Tree' at the Royal Academy, London. According to a review in *The Independent*: 'In the courtyard is a thicket of trees made from pieces of wood that Ai has collected in the mountains of China. He brought them down to his studio to be painstakingly reassembled and made more real than real trees. They should remind us as we leave and enter how fundamental are our rights to travel, see and make art.' (Photo courtesy Peter Curbishly, [www.flickr.com/people/peter\\_curb](http://www.flickr.com/people/peter_curb))

## BIOSECURITY PLANNING

Professor Spence and her team manage the [UK Plant Health Risk Register](#), a publicly available online portal which provides information about plant pests and diseases. It is 'a tool for government, industry and stakeholders to prioritise action against pests and diseases which threaten our crops, trees, gardens and countryside'. The list of threats has almost doubled in size since 2013 and 30% of them affect trees. Anyone can submit a finding, which will be followed up and, if necessary, acted upon by a government scientist. There are regular monthly meetings between the Forestry Commission and Plant Health Services to discuss new risks. In March, for example, a new beech leaf disease ([Fagus grandifolia](#)) was noted in the USA, and Professor Spence's team are already liaising with authorities in America and drawing up preventative contingency plans for the UK.

More than just a grim list of threats, the Plant Health Risk Register also includes risk assessments and links to the [UK Plant Health Information Portal](#), with contingency plans and more detailed information relevant to individual pest and disease threats.

Preparedness is assessed and reassessed every six weeks and robust contingency planning means that if an outbreak occurs, the response is rapid. In 2012 an infestation of Asian longhorn beetle was discovered in Kent, which emanated from the wooden packaging that arrived at a stone-importing business.

Asian longhorn beetles thrive in 22 different tree species, including sycamore, plane, poplar, hornbeam ash and hazel. Introduced to Europe and North America in wooden packaging, the larvae can bore through a tree, killing or significantly weakening it.

In 2012 DEFRA immediately implemented a 2 km buffer zone around the infected tree, removed the source tree and all other trees within a 100 m radius of the site. Of the 2229 trees removed, 66 were infected and all were incinerated on site. Happily, the threat has now been eradicated in the UK.

For owners and managers, events like this raise interesting questions about cost, compensation and insurance. DEFRA say that they treat each event on a case-by-case basis.

Despite all the precautions and regulations, occasionally it is the sharp eyes of one person in the most unlikely place that sparks a full-scale response. In 2015 Nicola herself spotted the tell-tale signs of Asian longhorn beetle infestation in a large wooden artwork installation at the Royal Academy in London. Identifying the D-shaped exit holes in the wood typical of this beetle, she quickly brought down the full power of DEFRA to have the display removed and fumigated, although as she says, this was not without its complications, as the installation was created by the Chinese dissident artist Ai Weiwei and the government was keen to highlight his work.

### TREE HEALTH RESILIENCE

Training the next generation of scientists and addressing key skill shortages in the sector is another part of the job. Professor Spence noted, 'In the past, trees have been very much neglected in basic research. At least now we have a genetic map for ash. In fact, Great Britain leads the world in tree genomic sequencing. Professor Richard Buggs, an evolutionary biologist at Kew Gardens, is doing pioneering work in genome sequencing on ash trees to find strains that are resistant both to ash dieback and to the emerald ash borer. This is complementary to the strategy of simply breeding disease-resistant saplings from ash trees that have survived, and planting these in an attempt to counter what's been dubbed "Ashmeggedon".

'Furthermore, we are learning from our neighbours and liaise closely with our colleagues in Canada, the USA and Russia regarding ash borer research. We have also seen what has happened to olive trees in Italy, which are being wiped out by *Xylella fastidiosa*. The Italians were slow to react to this terrible disease, which has destroyed monoculture olive groves in the south of the country and ruined livelihoods.'

Involving the public in research and observation is an important part of DEFRA's strategy to combat pests and diseases. [Action Oak](#) was launched in 2018 to raise funds for more research into acute oak decline. The disease has been prevalent for some 40 years, but incredibly, little research had been undertaken until recently. Action Oak's programme will research genetics and metabolism,

disease and environmental stresses. It also hopes to spread best practice for oak husbandry and put in place a new nationwide monitoring scheme.

Launched in 2018, the [Tree Health Resilience Strategy](#) pulls together several initiatives to combat threats to the nation's trees. It is all about collaboration between government and the public: the volunteer citizen scientists of [Observatree](#) carry out a really useful role and small woodland owners and managers can all play a part. Spotting pests and diseases relies on detailed local knowledge and accurate reporting.

The UK has a global reputation for setting the high standards for biosecurity of plants and trees, but there is no room for complacency.

Despite the ease with which diseases spread, Professor Spence wants everyone to continue working in and enjoying British woodlands.

'I would much rather see people walking their local woodlands and noticing changes in trees and leaves. Observant woodland visitors are often the first line of defence against a disease. Use the [Tree Alert](#) reporting tool to report any suspicious changes to trees.

'Pests can survive in plain sight in unmanaged woods. Be aware of the current threats, monitor your trees and notify Observatree if you spot a current problem such as chalara. If you are replanting, think about diversity and plant a good mixture of stock, which is preferably sourced and grown in the UK. Practise good biosecurity – clean your boots and tools as you leave your wood, and especially if you have been in other woodlands.'

## PESTS AND PATHOGENS



**Emerald Ash borer beetle** is a highly destructive insect pest of ash trees. It can cause extensive mortality to ash populations, especially as it is able to attack trees of all ages and sizes.

(All images above Crown Copyright. Forestry Commission)



**The Asian longhorn beetle** (ALB, *Anoplophora glabripennis*) is native to eastern Asia, and poses a serious threat to a range of broadleaved trees. Its main pathway of entry is in wood packaging materials and via the live plant trade. It has recently been eradicated in the UK.



**Symptoms of acute oak decline (AOD)** include weeping black gouges on stems and trunks, a tell-tale 'stag's head' thinning of the crown – and too often, death. Research is still ongoing as to whether AOD is a disease or brought on by a combination of environmental factors – climate change, historic droughts or pollution.

### [READ MORE](#)

There is a great deal of information online – click on the links below to learn more.

[Observatree](#)

[Action Oak](#)

[UK Plant Health Risk Register](#)

[Don't risk it campaign](#)





# WOODLANDS AWARDS 2019

Easy to enter with great prizes to be won, the prestigious Woodlands Awards are back for a third year. **ANTHONY MASON** explains how to get involved.

**N**ow in their third year, the Woodlands Awards continue in their mission to celebrate the hard work, the initiatives, the inventiveness and the sheer enjoyment of the woodland world.

And this year we are adding one new category: Best Woodland Dogs!

## Awards categories

There are now 15 categories altogether, divided into two groups: awards for individuals (woodland owners and users) and awards for enterprises (woodland organisations, businesses, educational programmes and so on). See the list in the box, right.

## How to enter

Each of the categories has its own criteria for entry. Some (such as the Woodland Photography Award, or the new Woodland Dogs Award) depend on individuals submitting their own entries. Some (such as Woodland Courses) depend on personal recommendations. Others still (such as Woodland Blogs) depend on a mixture of these.

The main idea is that they are all easy to enter. Full details are available on [www.woodlands.co.uk/woodlands-awards](http://www.woodlands.co.uk/woodlands-awards)

**Deadline for submissions: 31 July 2019.**

Any questions? Please email [antony@woodlands.co.uk](mailto:antony@woodlands.co.uk)

## Winners

A panel of judges will draw up shortlists of the best entries, and then award the prizes. There may be a number of winners in each category (last year there were 54



**New for the 2019 Woodlands Awards – a new category of Best Woodland Dogs.**

winners altogether): all entries judged to be of equally high merit will be awarded a first prize (i.e. no second, third etc).

The 2019 award winners will be announced in September 2019.

A note to past winners: the competition rules say that winners cannot win an award in the same category for a second time, but there is nothing to stop them entering (or being entered) in another category.

## Prizes

The prizes will be a mixture of award certificates, selected woodland books and woodland equipment and/or tools – and recognition!



### The Woodlands Awards sponsored by [Woodlands.co.uk](http://Woodlands.co.uk)

Prizes will be awarded in each of the following categories:

#### Awards for individuals

- Woodland Blogs
- Small Woodland Websites
- Woodland Photography
- Woodland Sculpture
- Woodland Tool Recommendations
- Whole Wood Owners' Coordinators
- Woodland Hair (and/or Beard)
- Woodland Dogs

#### Awards for enterprises

- Woodland Contractors
- Forest Schools
- Woodland Courses
- Community Woods
- Woodfair Trade Stands
- Woodland Books of the Year
- Regional and National Woodland Organisations

# SAVING SCOTLAND'S RED SQUIRRELS



Squirrels – how are populations of reds being supported in Scotland's woodlands?  
**GILLIAN HATCHER** of Saving Scotland's Red Squirrels explains.

**R**ed squirrels are one of Scotland's most loved animals, and despite significant decline in recent decades, most of the UK population is found here. Today there are still many places in Scotland where you could encounter a red squirrel, from the country estates of the Scottish Borders, to the Caledonian pine forests of the Highlands. However, for many, they have become an increasingly rare sight.

The main threat to the red squirrel's future in Scotland is the spread of non-native grey squirrels. The grey squirrel is a North American

“

***It's said that at one time Scotland's forests were so dense that a red squirrel could travel from the east to west coast without ever having to touch the ground.***

”

species that was first introduced to Britain in Victorian times, to decorate the gardens of large stately homes. They soon expanded their range, completely replacing red squirrels in most of England and Wales, as well as parts of central Scotland.

A larger and more robust species, grey squirrels out-compete reds for food and living space. Some grey squirrels also carry squirrelpox, a virus that they carry without harm to themselves. Red squirrels have no natural immunity to squirrelpox, and the disease is usually fatal within two weeks. Following a squirrelpox outbreak, grey squirrels can replace



the local red population around 20 times as fast as they can through competition alone.

Saving Scotland's Red Squirrels (SSRS) is a partnership project that was established in 2009 to ensure red squirrels continue to be a part of Scotland's special native wildlife. Led by the Scottish Wildlife Trust, the partnership also includes Scottish Natural Heritage, Forestry Commission Scotland, Scottish Land & Estates, RSPB Scotland and the Red Squirrel Survival Trust.

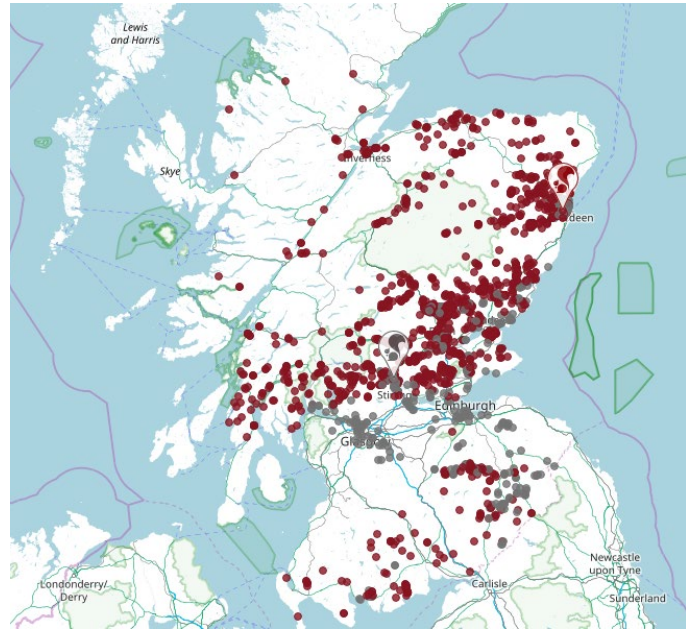
## Controlling the greys

The project's main focus is combatting the spread of grey squirrels in areas where this action will have a positive impact on Scotland's core red squirrel populations.

Across the Central Lowlands, SSRS is working coast to coast to prevent grey squirrels spreading northwards towards Scotland's core red squirrel populations in the Highlands. Targeted grey squirrel control work and squirrelpox testing in key locations is crucial to maintaining 'red-only' zones in areas such as Loch Lomond and the Trossachs National Park.

In the north-east, the aim is to completely remove an 'island' population of grey squirrels that was first released into the city of Aberdeen in the 1970s, before spreading across the wider region. Thanks to a highly successful community trap-loan scheme, grey squirrels are once again largely limited to Aberdeen and reds are gradually recolonising the outskirts of the city.

The south of Scotland poses the greatest conservation challenge. Both squirrel species are found here and squirrelpox is widespread amongst the region's grey squirrels, meaning outbreaks are common. However,



This map shows sightings of some 2,000 red squirrels in Scotland in the first half of 2019. (Map ©SSRS)

both experience and mathematical modelling have shown that when grey squirrel numbers are kept sufficiently low, red squirrel populations are permitted the breathing space they need to repopulate an area following the devastation of an outbreak.

In the south, SSRS is working closely with a network of community volunteer groups dedicated to protecting their local red squirrels. Targeted grey squirrel control is successfully keeping most red squirrel populations in priority areas stable, but grey squirrels are continuing to move into red squirrel territory.

Since 2010 SSRS has also been conducting extensive red and grey squirrel population monitoring across priority areas in Scotland. This knowledge plays a



Photo © Raymond Leinster/SSRS



Photo © Raymond Leinster/SSRS

significant role in conservation efforts, allowing the project to evaluate its impact over time and to decide where to focus its efforts.

In 2017 SSRS received a National Lottery Heritage Fund grant to begin a five-year project phase called ‘Developing Community Action’. Alongside vital conservation work, the project is now focusing on engaging with local communities and individuals, inspiring and supporting them to take action to protect red squirrels where they live. Managing the spread of grey squirrels is an ongoing challenge and this community involvement will be the key to long-term, sustainable red squirrel conservation in Scotland.

### Managing woodlands for red squirrels

There are various ways people can get involved, from survey work to fundraising and helping at events. One of the simplest things people anywhere in Scotland can do to help is report sightings of both squirrel species on the project’s website, [scottishsquirrels.org.uk](http://scottishsquirrels.org.uk). This citizen science complements more rigorous population monitoring as well as providing a real-time snapshot of the situation in a local area.

Volunteers also play a vital role in the project’s grey squirrel control work. Any volunteers involved in control, whether it be monitoring a trap in their garden or providing an on-call dispatch service, will be fully trained and provided with the support they need to follow a strict protocol that ensures the process is legal, safe and humane.

Land-owner cooperation is crucial to achieving the landscape-scale protection Scotland’s red squirrels need, and SSRS greatly relies upon the support of

woodland managers in priority areas. Woodland owners and managers can help the project achieve its goals by permitting access to project staff and trained volunteers for survey and grey squirrel control work, or by carrying out control work themselves.

Project staff can offer advice and training on managing woodland for the benefit of red squirrels, grey squirrel control best practice and, where eligible, accessing funding for control work via the [Scottish Government’s Forestry Grant Scheme](#).

Although red squirrels are most often associated with coniferous habitats, they can also live comfortably in broadleaf woodland in the absence of grey squirrels, which have a stronger preference for broadleaf. It’s said that at one time Scotland’s forests were so dense that a red squirrel could travel from the east to west coast without ever having to touch the ground. Red squirrels – like Scotland’s biodiversity as a whole – benefit from a variety of native woodland habitats across the landscape. With our help, red squirrels can continue to thrive here, enjoyed by future generations for years to come.



#### MORE INFORMATION

Visit [scottishsquirrels.org.uk](http://scottishsquirrels.org.uk), or contact Saving Scotland’s Red Squirrels at [squirrels@scottishwildlifetrust.org.uk](mailto:squirrels@scottishwildlifetrust.org.uk) to find out more.

UK Squirrel Accord

Red Squirrel Survival Trust



# MEET THE MAKER



**RACHEL BOWER** has been weaving willow for nearly two decades. Interviewed by the Basketmakers' Association, she discusses her work and inspiration.

## How and when did you realise you wanted to be a basketmaker?

I went on my first basketry workshop 19 years ago and immediately fell in love with the craft but lacked the confidence or know-how to become a professional basketmaker. It was only after reading a Facebook post by Mary Butcher, entitled 'So you want to become a basketmaker?' that I began to think I could do it on a more professional level as I definitely had the passion for it.

I signed up for as many workshops that time and money allowed to gain confidence and knowledge from some really amazing tutors. Their encouragement and support have been invaluable in helping me take my journey forward.



## How did your style develop?

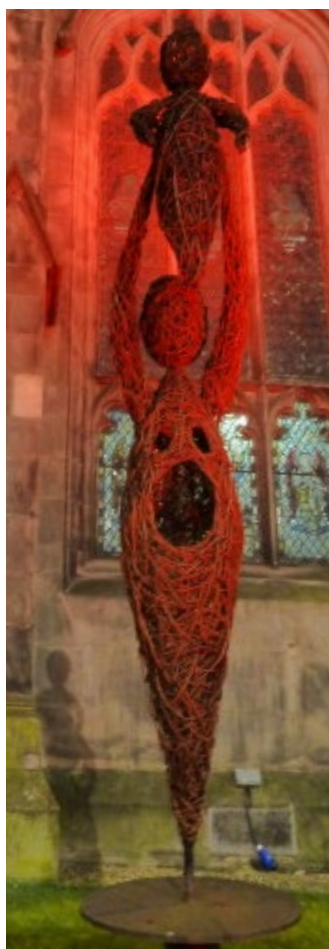
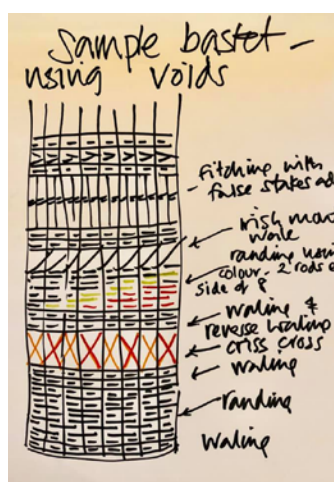
My style is still evolving. When my kids were younger I made a lot of baskets with buff willow (willow that has been boiled for several hours to remove the outer bark and stain the inner rod) as it was quick to soak, but I prefer

working with barked willows now, especially since I discovered willows like Dickie Meadows and some of the other purpureas. Their long, slender and straight rods are a joy to work with and I enjoy playing with colour that the different varieties allow. I also like combining willow with leather or other wood such as hazel.

## Where do you look for your inspiration?

I live in Angus, north-east Scotland, overlooking the Grampian Mountains and love being outside in nature. I joined Instagram just under a year ago and discovered that there was a very active and supportive makers' community. Instagram is such a visual platform and there is so much inspiration which feeds the creative





part of your brain. I am also currently on a City & Guilds basketry course in Shropshire which involves researching the work of basketmakers that inspire me. It has helped me to understand which directions to take.

## How do you start a piece?

Sometimes I make things in batches, so I will spend one day making bases and the next adding the uprights, side-weaving and borders, then another session adding the handles. I love the meditative-like flow that can happen when doing repetitive work. After attending several workshops over the last year, I have learnt so much more about designing work. Measuring and making a note of what you do at each point is vital to making a basket that you would like to repeat. I also sketch and record ideas in a notebook that I carry with me most days.

## What's your favourite use of willow?

I think it will always be baskets. Aside from making them, I love that they have a functional use. But I also enjoy making miniature bird sculptures out of driftwood and the tips of willow that are left after trimming the side weaving on baskets. I like the zero-waste aspect and that they are easy to make anywhere so I'm not restricted to being in my workshop.

## What's your proudest achievement?

My most public achievement has been designing and making an 8 ft tall willow sculpture of a mother and child, commissioned by St John's Church on Princes Street in Edinburgh (left), but I think my proudest achievement might be yet to come! I recently connected with a charity-run local nature reserve who have just completed an amazing community workspace and I have begun to teach there on a regular basis. Having taken a long time to realise basketmaking was something I could do on a more professional level, I am keen to channel it into helping pass on the skills and confidence to others and help keep this special craft alive.

## What's your favourite type of product to make and why?

That's hard to answer! I love making baskets



that combine willow and wood, and my favourite is a style originally designed by Polish maker Stanislaw Dziubak. I think it has such an elegant form and I enjoy searching out handle shapes from a hazel coppice that my partner manages each winter. I also enjoy making leather-strapped shoulder baskets, a versatile basket and the one I use the most myself. The rope coil weave has also become a new favourite to make.

## Tell us about your workspace

My workshop is basically a glorified shed that I bought off Gumtree for £150. My partner built some decking outside it which we covered over with see-through Perspex corrugated sheets and I spend most of my time weaving there. I prefer working outside and try to do so as much as possible even if it means working with a few layers on and a hot-water bottle stuffed up my jumper in winter! I have plans to build a bigger workspace in the next couple of years as





my time spent making has increased over the last year.

### What does the craft mean to you?

The craft gives me a real sense of fulfilment. I love the physical aspect of basketmaking and enjoy the challenge of working with and perfecting the use of the willow. Also, having planted my own patch of willow four years ago, I love the connection to nature and the appreciation for each season that growing, harvesting and drying the willow can give. I think there is something very grounding and comforting in yearly rituals. I have a huge respect for the traditions that have passed down through generations and feel the importance of keeping the skills alive.

### Do you prefer harvesting or making?

I enjoy growing and harvesting the willow and being involved in the process from start to finish has given far more meaning and connection to the craft but making is most definitely my main love.

### Where do you source your willow?

I source my willow in a number of ways. I buy bolts (a traditional measure) of willow from Musgrove Willows, a three-generation run family business on the Somerset Levels, and I also buy willow from Myreside Willow, a grower just outside Edinburgh who grows a number of different varieties. By far the most rewarding source is harvesting the 15 different varieties that I grow on a patch of land close to where I live. I coppice them every year when the sap is down, usually in January and February, as the winter frost can help to deepen the colours of some varieties.



#### LINKS

Thanks to the **Basketmakers' Association** for their kind permission to reproduce this interview.

Rachel's work can be seen on her Facebook page, **Woven Willow** and on Instagram at **Woven Willow Work**.

[www.wovenwillow.co.uk](http://www.wovenwillow.co.uk)







**SARAH PARTRIDGE** of Orchard Barn in Suffolk explains how her project to resurrect a Tudor timber-frame building has turned into a thriving social enterprise.

I was born in a wonky timber-frame house first built in the 1500s and my mother was a local recorder of old buildings. Timber-frames are, it seems, in my blood. I started my first timber-frame renovation at the age of 17, and with a few gaps for other pursuits such as teaching yoga and organic smallholding, I have been around old buildings all my life.

Twelve years ago, I co-founded OBeC CIC – a community interest company that took its name from a traditional timber-frame barn situated in an orchard in rural mid-Suffolk. The social enterprise was established to deliver environmental education. Building community and heritage skills are also key to what we do. OBeC runs courses in timber framing and uses traditional framing tools and techniques. Our current project is the reinstatement of a venerable 1580 ruin.

The first project OBeC embarked upon was the restoration of Orchard Barn. It had been neglected for decades and was

a bramble thicket ripe for a community restoration project. In 2007 the term 'structural ivy' was much quoted, as the south gable was held in place by this tenacious tree.

Initially, I was told that all green oak used in the UK was imported from France. However, I took the 'like for like' aspect of sourcing green oak for the timber-frame repairs to heart and was determined to source what we needed from local woods, and I did.

I was on a steep learning curve. Ten years ago, finding a mobile mill and sawyer was no mean feat, and then there were the restrictions of seasonality to grapple with. Milling had to be done in the winter so as not to adversely impact on the birds and wildlife. There was also the challenge of getting the absolute best from the available trees (which hadn't been grown with timber in mind). I persevered, and I have learnt loads.

I took my cue from the 300-year-old timbers in the barn –





that light bulb moment came when I realised that a jowl post was an upturned tree. Our ancestors turned the big and gnarled buttress to their advantage and used it in a part of the building that needed meaty timber to support wall plates, ties and the roof frame.

It was at that point that I resolved to deepen my learning from past building methods and utilise them. I set about finding a timber-framer who could also teach. His name is Rick Lewis, and his company, Traditional Oak Carpentry, was just down the road. Rick has been our main teacher over the last decade.

That first year OBe recruited 22 paying students – home-owners, surveyors, conservationists, builders (all of whom wanted or needed to know how to repair a traditional timber-frame) and ran 21 days of timber-frame repair courses. After four months we were able to remove the acro props and the barn was self-supporting once more. (I kept the structural ivy as a trophy.)

## Restoring a long house

Fast forward to 2017 and Orchard Barn is entering Phase Two. I applied for, and miraculously received, planning permission to reinstate a ruined timber-frame house which is adjacent to the main barn. First built in the 1580s, this Suffolk long house was last inhabited during the 1930s, and even then it was in a state of disrepair (see photo, middle right). Thirty years later and the roof had fallen in, and not long after the house fell over. For the last 40 years this flat-pack medieval



**Top:** Orchard Barn in 2018. **Middle:** By the 1960s, this Tudor long house had almost completely collapsed. **Above:** An artist's impression of how the long house will look once restored to its former glory.



relic has been sleeping in a fairy-tale bramble thicket awaiting someone with a magic wand – or more likely sharp loppers and thorn-proof gauntlets) to rescue her. From the beginning we all knew her resurrection was going to require skill, co-ordination and lots of trees.

Early in the project we commissioned an architectural historian to survey the ruin. He measured and recorded existing timbers and evidence of sizes and structure. We put to one side the big timbers that we hope to repair and re-use. That was the easy part. Next job: a spot of digging.

The inside of the house was knee deep in what I have come to call 'cottage compost'. It is the most friable, yummy looking compost and I realised it was decayed thatch, daub, rotten timbers (the small ones) and decades of leaf mould. If only our modern building materials would break down and leave as little trace (or leave such delicious organic matter. I bagged the composted cottage up and put it on my raised beds to nourish my vegetables and indirectly myself!

The beautiful, straight-grain 20 foot-tall ash trees were another challenge. Now I know we all like trees, but the phrase 'right tree, right place' is a sensible one. And the right place is not growing through the living room floor. I've made my peace with them. They will be converted into chairs to be

used in the long house once it is restored as a building again.

### Bartered timber

Around 2016, Orchard Barn volunteers started to help with the restoration of a local woodland. In exchange for our time we received trees, mainly oak and elm, along with lots of coppice hazel for wattle.

Barter is alive and well in sunny Suffolk.

We are also lucky to have a local group of volunteers with their own Lucas mill. They mill our bartered trees to size and we use the resulting green oak during our timber-framing courses. You've guessed right – the students' 'practice piece' is the reinstatement of the Tudor timber-frame.

Two years in, and over 30 people have had a hand in the framing of the green oak. Collectively, we have now framed half the house (up to wall plate level) and we hope to raise this half-house frame this summer.

I'm so looking forward to reaching that stage. It will be an opportunity to invite everyone back to share in their achievements and to raise a glass of homemade apple wine to the health of our community, the building and the future of OBee.

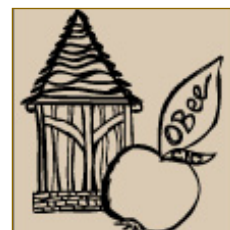
And yes! There's still the other half of the house to source trees for; courses to organise and framing to get involved in. Interested in learning how?



Orchard Barn, near Ringshall in Suffolk, runs courses in natural and traditional building, greenwood and rural skills.

To read more about life and learning at Orchard Barn, take a look at **Sarah's blogs**.

Visit the **Orchard Barn website** for a complete list of activities and courses.





# PINE MARTENS ON THE MARCH

**HILARY MACMILLAN** of the Vincent Wildlife Trust celebrates the return of the pine marten, which is gradually extending its range from Scotland south of the border.  
Should grey squirrels be worried?

**T**he pine marten once flourished in the woodlands of Britain and research suggests that during the Mesolithic era it was the second most common carnivore after the weasel. The fortunes of the pine marten, however, were to change. Its rich chestnut-brown coat was prized by furriers in centuries past and numbers declined dramatically with the loss of woodland and the control of predators during the Victorian game-shooting heyday. As a result, today it is our second rarest carnivore after the wildcat – but things are looking up.

## Lifestyle and location

This native small mustelid is nocturnal, lives at low density and is largely solitary. Martens breed once a year,

with one to three kits born in the spring. The kits are independent at about six months old but will often stay longer with the mother – until she sends them packing.

Pine martens prefer three-dimensional, complex habitats and have superb climbing skills. Their favoured den site is a tree hole, but in the absence of such cavities, they will use manmade structures, squirrel dreys and large bird nests.

Today, pine martens are present across northern and central Scotland, with some populations in southern Scotland. More recently, there have been sightings of martens in areas of Northumberland and Cumbria, as the species extends its range south of the Scottish border.

The picture elsewhere in England and Wales is very different; until recently martens were considered



Robert Cruickshanks/Vincent Wildlife Trust

functionally extinct in southern Britain. In Wales, however, this situation has changed with the Pine Marten Recovery Project, led by Vincent Wildlife Trust (VWT), a mammal conservation and research charity, and with the support of key partners including the People's Trust for Endangered Species (PTES), Chester Zoo and the Woodland Trust. Between 2015 and 2017, following an extensive feasibility study and local community engagement, the VWT translocated over 50 pine martens from Scotland to mid-Wales. The martens have been monitored ever since, originally using radio-tracking and later remote cameras, hair tubes and scat collection. This monitoring has shown that the translocated population is thriving, with kits born each year. Small losses to predation for example are at the expected level.

Martens are opportunist feeders and will eat what is plentiful locally at a particular time of the year. They most definitely have a taste for small mammals, which make up to 40% of their diet in Britain. There is a seasonality about their diet too. In summer and autumn, they are dependent on fruiting trees and shrubs such as rowan, cherry, and hazel, with fruit constituting around 30% of their diet. Of course, martens will eat birds' eggs if they have the opportunity, but this has the beneficial effect of predating jays, magpies and other corvids, which are themselves efficient predators of songbirds. Predation is, of course, key to a healthy, balanced ecosystem.

## Pine martens and squirrels

Pine martens and red squirrels have evolved together throughout their Eurasian range in a natural predator/prey relationship, although studies in Britain and Ireland highlight a low occurrence of red squirrel in pine marten diet. [Recent research](#) in Ireland by Dr Emma Sheehy and



colleagues from the University of Aberdeen has suggested that where pine martens are naturally recovering their former range, grey squirrel numbers are decreasing, allowing recolonisation of woodland by red squirrels.

[A follow-up study](#) in Scotland by Sheehy supported the findings of the Irish project, suggesting that pine martens have the potential to suppress grey squirrels where they co-occur, but not red squirrels, which appeared to benefit from pine marten presence. Though compelling, the mechanism behind this relationship remains unclear, and further research is ongoing to understand the dynamic between the three species. Suggestions that pine martens will control our grey squirrel population are at the very least premature. The jury must remain out on this one for the time being.

## Protection for the pine marten

The pine marten is listed under Schedule 5 of the Wildlife and Countryside Act (1981) which means that it is illegal to intentionally kill or injure pine martens or disturb their dens. Any research that could disturb pine martens, such as trapping animals or monitoring den boxes, must be done under a licence from the relevant statutory body.

It is clear that the pine marten is doing well in Scotland and the population is now spreading south into the border counties. In Wales too, there is good news, as the translocated martens continue to thrive. A large-scale survey of this population will take place this summer with the help of teams of volunteers. There is also work underway with a view to reintroducing the pine marten to the Forest of Dean in Gloucestershire. It seems that, along with almost all of Britain's carnivores, the marten is another success story – a reason for a collective celebration to counter the normally dismal news of the loss or decline of so many of our wildlife species.

Radio-tracking pine martens in Scotland.  
(Lizzie Croose/Vincent Wildlife Trust.)



### Vincent Wildlife Trust

has been at the forefront of wildlife conservation for 40 years. The Trust's specific niche is the smaller native mammals. Current work focuses on the rarer bats and members of the mustelid family, notably the pine marten and polecat. VWT provides scientifically sound, practical solutions to conservation problems. More information about the Trust's work can be found at [www.vwt.org.uk](http://www.vwt.org.uk).



Vincent Wildlife Trust

With a background in conservation, Hilary Macmillan is Consultant Head of Communications at Vincent Wildlife Trust.



# SYMBOLS IN TREES

CLARE GIBSON reviews the prickly yet beautiful hawthorn.

The profusion of headily scented white flowers produced by the hawthorn (*Crataegus monogyna*) in May and June makes it a delightful symbol of spring and early summer.

In times past, the hawthorn (which is also known as the whitethorn, may tree or may) played a central role in May Day rituals, when people would go ‘a-maying’, setting out to gather armfuls of may blossoms to weave into wreaths to adorn maypoles. Most spring rituals are all about the awakening of nature as a prelude to procreation, and while maypoles were phallic symbols, wreaths represented femininity on account of both their shape and blooms. The hawthorn also represents the fusion of the masculine and feminine principles, for not only does it produce thorns (male symbols) and flowers (female), its flowers are themselves hermaphrodite. White is a symbol of purity and chastity, which is another reason why brides were once decorated with hawthorn blooms at this time of year.

## Scented symbolism

The powerful perfume given off by hawthorn blooms adds further elements to its symbolism, some considering it suggestive of sex, and others, of death, and particularly of the plague, or Black Death. This evocation of the spectre of death may be why many have traditionally considered it unlucky to bring hawthorn into the home.

Indeed, there are dark and light aspects to the hawthorn’s symbolism. Its thorns, for example, make it a protective symbol. This association is illustrated by the Roman poet Ovid, who, in his work *Fasti*, related that the goddess Cardea, a goddess of hinges or doorways, repelled evil, birdlike snatchers of babies

“

***Beware of an oak,  
it draws the stroke;  
avoid an ash,  
it courts the flash;  
creep under the thorn,  
it can save you from  
harm.***

”

with hawthorn branches; hawthorn torches were also lit at weddings to propitiate her. In later centuries, hawthorn branches hung in doorways were thought to keep malevolent witches at bay, for they would either become hopelessly entangled in the thorns or, thwarted, would fly off to wreak mischief elsewhere. Similarly, hawthorn twigs arranged around a baby’s crib would, it was believed, repulse supernatural entities intent on harming the infant within.

Hawthorns often grow in boundary hedgerows. The ancient Celts considered hawthorns to be especially beloved by faeries, or the fairy folk, and thus regarded them as portals, or arboreal boundaries, between this world and the Otherworld, or spirit world. It was therefore considered prudent to appease the faeries by hanging colourful ribbons from



Photo courtesy Daniel K/Pixabay.

hawthorns. It was believed that cutting down a hawthorn was a dangerous act that would provoke terrifying supernatural wrath.

Some say that the crown of thorns worn by Christ at his Crucifixion was made from hawthorn, another source of negative and positive symbolism, on the one hand evoking death, and, on the other, divine protection. Another ancient superstition holds that the hawthorn was created by lightning, and consequently has the power to repel it, as stated by a proverb: ‘Beware of an oak, it draws the stroke; avoid an ash, it courts the flash; creep under the thorn, it can save you from harm.’

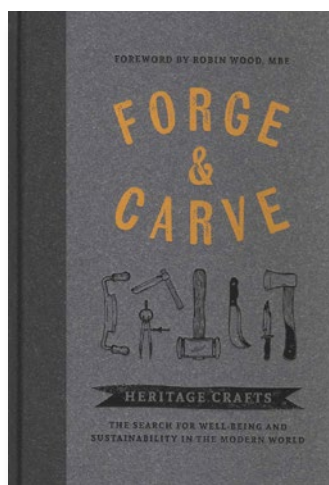
## Glastonbury thorn

Perhaps the most famous hawthorn in Britain is the Glastonbury thorn (*Crataegus monogyna* ‘Biflora’), a descendant of which grew in the grounds of Glastonbury Abbey. The original holy thorn was created when Joseph of Arimathea, who supposedly founded the abbey following Christ’s crucifixion and his own arrival in England, pushed his staff into the earth as he rested on Wearyall Hill. Miraculously, the staff took root overnight – which Joseph took as a sign that a church should be built nearby – and subsequently grew into a hawthorn that flowered twice a year, in spring and on the day of Christ’s birth, thus reinforcing its sacred symbolism.

More prosaically, a crowned hawthorn was adopted as his badge by the victorious Henry VII because Richard III’s crown was found discarded in a hawthorn bush after the battle of Bosworth Field in 1485.

The hawthorn, then, is a tree of historical significance, with both light and dark associations, but at this time of year it symbolises beauty, life and promise.

# BOOK REVIEWS



What do a coracle-maker, a broom-maker and knife-maker have in common? Answer: they are all practitioners of traditional crafts that are officially endangered. The **Heritage Crafts Association** lists 212 crafts that once supported everyday life and are now dying out – this arises from a lack of apprentices willing to learn the painstaking skills involved and the fact that most things can now be made more cheaply by machine, probably from plastic. At a time when a number of heritage crafts are in danger of disappearing, this handsome tome is a welcome reminder that it is not all bad news.

*Forge and Carve* celebrates traditional crafts by interviewing 18 crafts people from 15 crafts, photographing their work and workplaces, and asking them how they survive in a world more attuned to digital downloads than creating enduring items made from natural resources such as wood, leather or clay.

From blacksmiths to basket-makers and cordwainers to coracle-makers, it's a fascinating study of talented and dedicated individuals who share a common aspiration of reviving or maintaining traditional knowledge of ancient techniques. At least nine of these crafts involve wood.

For those, like me, who have only the vaguest idea of exactly how much work goes into producing a handmade chair, this book is more than just a decorative homage to talented craftsmen and women. Each section focuses on an individual creator, with biographical details about how they

JUDITH MILLIDGE enjoys a celebration of craftsmanship.

## FORGE AND CARVE

**Heritage Crafts: The search for well-being and sustainability in the modern world**

Canopy Press  
Hardback: 320 pages  
RRP: £24.99  
ISBN: 978-1909414655

came to learn their particular skills and what motivates them.

Uniquely, this book provides not only an overview of each process, it also details the crafters' workspaces and tools, complete with beautiful photographs. Several talk about the joy of combining traditional techniques with a modicum of modern technology – and that is exactly how most crafts have survived and evolved over the centuries. 'I try to blend the best of the past and the present in my work ... the working principles of a lathe is not very different to a fire drill used in the Stone Age ... But I would really miss the electric motor of my lathe – I find that it saves time and physical energy,' says woodturner Franz Josef Keilhoffer.

As well as providing a wealth of information about traditional crafts, and often a step-by-step guide to creating, say, a knife or a turned wooden bowl, this book provides an insight into the minds of people who have chosen doggedly to pursue a career and lifestyle a little out of the ordinary. Peter Faulkner, a master coracle-maker from Herefordshire who uses hazel wands for the structure of his boats, says, 'My business motto is *liberatus et pulcritudo* – freedom and beauty – which is essentially what a coracle represents.'

A celebration of enduring craftsmanship, *Forge and Craft* is a joy to read. The title not only describes the actions necessary for so many crafts, but also represents the career path of the crafts people who forge their way through the world and provide an inspiration to us all.



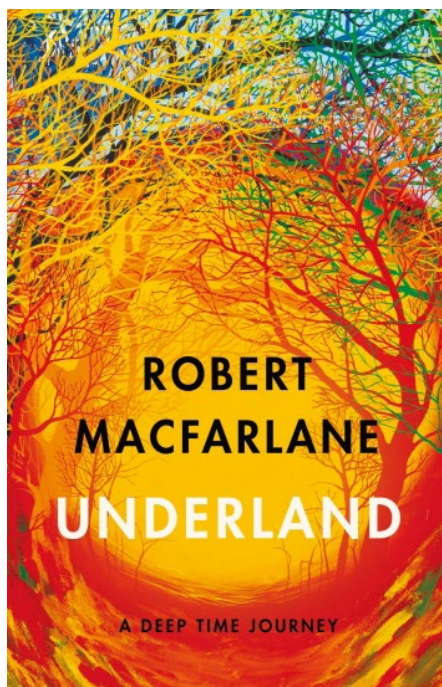
'Geography lessons have never been so exciting, personal or terrifying.' **JOHNNY MORRIS** relishes Robert Macfarlane's wide-ranging journey through the worlds beneath our feet.

Three-quarters of the way through Robert Macfarlane's dazzling book, he recounts a conversation with Robert Mulvaney, a paleo-climatologist and ice-core expert at the British Antarctic Survey in Cambridge. After handing Macfarlane a phial containing grains of sand, Mulvaney explains that they were extracted from deep inside a glacier and they prove that a kilometre below the ice there was once a desert. 'They're beautiful,' says Macfarlane. 'Desert diamonds from the bottom of the world.'

'I can tell you are not a scientist,' replies Mulvaney.

It is an unfair jibe. Scientist or not, Macfarlane serves science brilliantly in his latest work, *Underland: A Deep Time Journey*. With every chapter he demonstrates his talent for explaining science and communicating the sheer wonder of the world through scientific goggles. The ambitious scope of his storytelling steps lightly from geology to linguistics to geomorphology, into folklore via nuclear physics and meteorology – all brought into focus with elegant prose and sprinklings of poetry. Like a skilled mixologist, he serves up cocktails of scientific knowledge that delight and deliver more than the sum of the factual parts.

Tree-lovers and forest folk will especially enjoy his research into the 'wood-wide web' – the mutually beneficial system that helps trees communicate and heal each other below their understorey via mycorrhizal fungi. Macfarlane enthuses that the idea is 'so powerful in its implications that it unsettles the ground you walk on.' In



typical style, he deals with the complex subject by walking and talking with a new expert friend, in this case Merlin Sheldrake, a young mycologist.

Throughout his writings, Macfarlane has developed a knack of finding and describing vivid characters that add verve and passion to his explanations and Merlin Sheldrake doesn't disappoint. His tales of ash forests communicating via 'tree snogging', 8,000 year-old honey fungus extending four-square miles under Oregon soil and melanized dark fungus thriving on the extreme levels of radiation after the disaster at Chernobyl are a joy.

This multi-layered way of reading the environment is very engaging, but Macfarlane's most impressive skill is to combine this depth with live, action-packed, travel journalism. In his previous nature writing, most noticeably *The Old Ways* and *Mountains of the Mind*, Macfarlane has always managed to take the reader with him as a passenger on his quests and adventures. In *Underland* he raises the stakes, thrilling us with his on-the-spot reports straight from the coalface (literally in some cases) deep down below the earth's crust.

Like a literary Indiana Jones, he dangles and drops into bottomless ice holes in Greenland, crawls through minuscule rock cracks beneath the Paris Metro and scrambles through mountains in ice storms to view cave drawings in northern Norway.

The claustrophobia, tears and occasional loneliness are all honestly communicated in a first-person style that makes us anxious for the author's survival. Geography lessons have never been so exciting, personal or terrifying.

It all adds up to a nail-biting account, but Macfarlane leaves the most frightening underworld experience to the last, when he visits a nuclear waste processing plant deep below the ancient rocks of Finland. Here, he highlights evidence and his concerns that we are destroying the ecosystem of our own planet. Encounters with climate change and experiences of hell-bent mineral extraction are recounted throughout the book. Like the underworld he explores they lie as a thread of imminent danger just beneath the surface of the boundless curiosity of this wonderful book.

Read it tonight., ideally deep under your blankets with a the aid of a torch.

## UNDERLAND ROBERT MACFARLANE

Hamish Hamilton  
Hardback 496 Pages  
RRP: £20.00  
ISBN: 978-0241143803



**BECKY WILKINSON**, Education and Training Officer for the Royal Forestry Society's Teaching Trees programme, recommends *Forest Craft: A child's guide to whittling in the woodland*

## FOREST CRAFT

A child's guide to whittling in the woodland

**RICHARD IRVINE**

GMC Publications

Paperback: 160 pages

RRP: £16.99

ISBN: 978-1784945008

Of the many joys of exploring woodlands with children, one of the best is the endless possibility for creative and imaginary play presented by the materials around them in the forest. With no plastic in sight or complicated instructions to follow, creativity and resourcefulness can abound as children discover, experiment and create. *Forest Craft* embraces these opportunities and develops them in many wonderful ways that are sure to delight those who experiment with them.

The book is subtitled 'A child's guide to whittling in the woodland', but it is so much more than this. It is a beautifully presented book with clear instructions and engaging ideas which inspires me as an adult and forest school leader to get out my tools and have a go at some of the projects. The explanations are simple enough that they could be understood by a child, but it

would also be an invaluable resource for parents, teachers and outdoor professionals seeking to expand their knowledge or gain fresh ideas for forest crafts.

For those new to working with tools, the book starts with a good summary of those that are needed to attempt the projects contained within. The easy to read, conversational style guides you through which tools you might consider for different tasks, as well as talking about common challenges and ways to overcome them. The text is neither patronising nor overwhelming, but instead offers support from an experienced professional keen to share his passion for the tools that he works with. There is signposting to the laws regarding the carrying of tools and advice on safety and the wearing of gloves.

Despite a lifetime of enjoying the outdoors and embracing craft projects, one of the biggest surprises to me on becoming a forest school leader was how different types of wood were to work with. The 'Which wood to use' section gives excellent advice on how to source wood for your craft projects, as well as guiding you through the features of the most common types of



wood, which ones to use for different projects and which to avoid.

The projects contained in the book range from the simple classics such as elder beads to the stunning whisk or the whimsical gypsy flowers. Each project has a simple resource list to go with it to help you prepare, alongside clear instructions and beautiful step-by-step photographs. There's no grading of the projects into 'beginner' or 'expert'; instead each project stands on its own merits, open to all to have a go at should they feel confident with the tools and techniques needed to attempt it. One of my favourite projects is the mini furniture, beautiful in its simplicity and suitable for all to attempt but containing the possibility for endless variations and fun as the children are inspired by the opportunities presented to them.

Overall, this is an outstanding book which provides a wonderful resource for anyone wanting to explore forest crafts. Published by GMC Publications, it makes an excellent companion to *Forest School Adventures*, reviewed in **LWM 49** last autumn. So many of us within the forest education community train in groups but then spend the majority of our working lives independently and this book is like having your trainer sitting alongside you, reminding you of what you need to do and what you can achieve.



**MATT LARSEN-DAW** immerses himself in the world of the plant hunters of the 19th century.

An epistolary novel about the life and times of a Victorian botanist abroad may sound like a book with niche appeal, but in truth there is something for everyone in this intriguing and multi-faceted work of historical fiction by Gabriel Hemery (author of the sublime *The New Sylva*, which gets a couple of cheeky nods in this novel).

*Green Gold* starts with the discovery of a set of long-lost journals in the archives of a Boston arboretum, charting the journey of real-life Scottish botanist John Jeffrey in his specimen-hunting mission to Oregon in the 1850s. The book builds on a genuine historical mystery – the lack of any first-hand account of Jeffrey's mission, despite the fact that he was required by contract to keep detailed journals and to mail copies home to his backers at regular intervals along with seeds collected. Jeffrey never returned, and was eventually remotely dismissed from service by his frustrated employers, despite a steady flow of botanical samples sent back across the Atlantic over the course of two years.

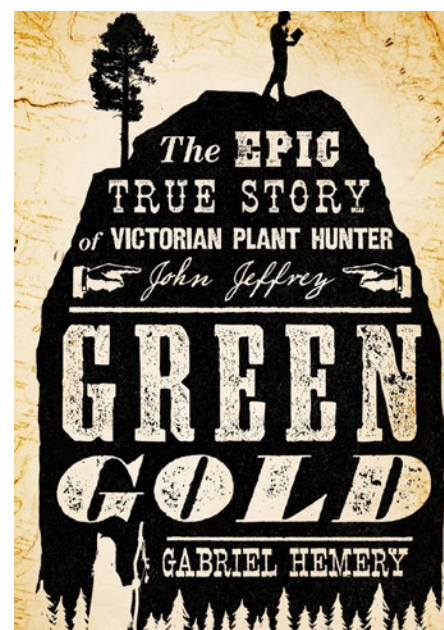
Hemery has constructed his imagined account of Jeffrey's adventures around details gleaned from these boxes of specimens – notes that recorded dates and locations, and occasionally insights into challenges he was facing in pursuit of his duties. Around these clues Gabriel Hemery weaves a narrative that brings to life the real struggles that John Jeffrey would have faced in travelling to the New World, deftly flitting between real letters – mostly between Jeffrey's employers in Britain – and fictional journal entries. He establishes early on why the journals were not sent back during the mission, while also justifying a style that escapes the restrictions of Victorian reserve. Isolated and under duress, John Jeffrey begins to confide in his

journals far more than the details of his botanical investigations, and at the same time becomes attached to them as a source of comfort on his lonely journey. He wrongly assumes that his employers will be satisfied by him sending back the literal fruits of his labours.

While the precise experiences of John Jeffrey can only be imagined, the harsh challenges of the journey he undertook across the Atlantic, through Canada's icy wastes and over formidable North American mountain ranges, can be gleaned from real historical accounts.

Jeffrey pursues his challenging scientific mission with wide eyes and an open heart, which contrasts with those seeking their fortunes in the California Gold Rush. Jeffrey is portrayed as a pure-hearted man with a deep connection to nature which gives him more in common with the Native American communities he encounters than with his fellow white settlers. This is the foundation for a love story that provides moments of genuine poignancy, and allows Hemery to chart the early stages of Native American oppression from a perspective more aligned with the natural landscape in which events are set than with either of the clashing cultures.

Thanks to Hemery's masterful characterisation, Jeffrey shines through the stilted epistolary structure to emerge as a likeable, believable and nuanced figure whose exploits feel immediate and credible. The first person narrative is immersive, despite being slightly undermined at points by an unnecessary and distracting present-day story of the discovery and investigation of the journals. A simple prologue and epilogue would have been sufficient and would have avoided interruptions to the narrative flow. Likewise, although the peevish letters between employers are a



key part of the book, emphasising the gulf between their expectations and the realities of the dangerous situation into which they have thrust their young employee, it might have been wise to resist the temptation to include so many archive letters and articles – perhaps presenting them in an appendix for the history enthusiasts.

These are quibbles, however, as this thought-provoking book leaves a lasting emotional and intellectual impact and a new perspective on the treescapes of our native lands. Like Jeffrey's mission itself, this book brings immediate rewards, but becomes even better with time and reflection.

## GREEN GOLD

The Epic True Story of Victorian Plant Hunter John Jeffrey

GABRIEL HEMERY

Unbound Digital

Paperback: 302 pages

RRP: £8.99

ISBN: 978-1789650235

The exhibition **Green Gold: Plants from the travels of John Jeffrey** is at the John Hope Gateway, Royal Botanic Garden Edinburgh and runs until the end of June. Open daily from 10am. Free entry.



# New and Noted

“

*I feel it happiness to be  
Unknown, obscure and  
like a tree*

”

**John Clare**

## POETRY PAMPHLETS

Candlestick Press  
Paperback: 16 pages  
RRP: £4.95

### INSTEAD OF A CARD

If you've ever baulked slightly at the cost of greeting cards, destined to be read, propped up and recycled in short order, you may enjoy the latest offerings from Candlestick Press, who have packaged slim greetings card-sized pamphlets of poems and writing on a variety of subjects to send instead of a card.

Competitively priced at £4.95, each 16-page volume is produced on quality FSC-accredited paper and is supplied with an envelope and bookmark on which a message can be written.

Rather more interesting and absorbing than the usual card, they make excellent introductions to the work of contemporary and historical poets and writers. The cover artwork is carefully chosen and beautifully printed, and included in the purchase price is a donation to a relevant conservation charity.

The subject matter is not entirely about the natural world – other topics include revenge, love, fathers, knitting and cricket, among many more. For a full list of titles, visit the **Candlestick Press website**.



## LUMBERJILLS BRITAIN'S FORGOTTEN ARMY

**JOANNA FOAT**

The History Press  
Paperback: 272 pages  
RRP: £14.99  
ISBN: 978-0750990905

Combining war studies and woodlands, this book focuses on a forgotten army of the Second World War. In 1939, when conscription sucked up most able-bodied men, and at a time when Britain was almost entirely dependent on imported timber, the forestry profession and trade were in trouble.

British forestry was depleted by the demands of World War One and subsequent planting was not yet mature. Timber was required by many areas critical to the war effort, from aircraft manufacture and shipbuilding to collieries and communications.

The government was forced to open up forestry work to women and the Women's Timber Corps emerged. This body of young women faced hardship and discrimination, but proved they could work as well as men in every role of forestry, felling trees, operating mills and managing forestry sites.

Joanna Foat has interviewed surviving veterans and their families to produce a fascinating book full of first-hand accounts of wartime forestry.



# EVENTS ROUND-UP

# 2019

## JUNE

[WEALD AND DOWNLAND MUSEUM](#) 15-16 June 2019  
Chichester, West Sussex

[ROYAL HIGHLAND SHOW](#)  
20-23 June 2019  
Edinburgh, Scotland

## JULY

[TIMBER FESTIVAL](#)  
5-7 July 2019  
Feanedock, National Forest

[KENT COUNTY SHOW](#)  
5-7 July 2019  
Kent Showground, Maidstone, Kent

[OPUS WOOD AND CRAFT FAIR](#)  
6-7 July 2019  
Burrowbridge, Somerset

[GREAT YORKSHIRE SHOW](#)  
9-11 July 2019  
Great Yorkshire Showground, Harrogate

[WOODFEST COUNTRY SHOW](#)  
12-14 July 2019  
St Asaph, Denbighshire, Wales

[STRUMPSHAW TREE FAIR](#)  
20-21 July 2019  
Strumpshaw, Norfolk

[ROYAL WELSH SHOW](#)  
22-25 July 2019  
Builth Wells, Wales

[WILDWOOD](#)  
27-28 July 2019,  
Wakehurst Place, Sussex

[NEW FOREST AND HAMPSHIRE COUNTY SHOW](#)  
30 July-1 August 2019  
Brockenhurst, Hampshire

## AUGUST

[SOUTH DOWNS SHOW](#)  
17-18 August 2019  
Queen Elizabeth Country Park, Petersfield, Hampshire

[WILDERNESS GATHERING](#)  
15-18 August 2019  
West Knoyle, Wiltshire

[STOCK GAYLARD OAK FAIR](#)  
24-25 August 2019  
Sturminster Newton, Dorset

## SEPTEMBER

[WYCHWOOD FOREST FAIR](#)  
2 September 2019  
Charlbury, Oxfordshire

[CONFOR WOODLAND SHOW](#)  
5-6 September 2019  
Longleat, Wiltshire

[BELMONT WOODFEST & COUNTRY FAIR](#)  
7-8 September 2019  
Faversham, Kent

## OCTOBER

[SURREY HILLS WOOD FAIR](#)  
5-6 October 2019,  
Cranleigh, Guildford

[GROWN IN BRITAIN WEEK](#)  
7-13 October 2019





---

# COURSES & WORKSHOPS

## Royal Forestry Society

**An introduction to soil identification for foresters, Thursday 27 June**

**Alice Holt, Surrey**

Tutor: Andy Moffat

£125 RFS members/£150 non-members

**Essentials for measuring your trees and woods, Friday 12 September**

**Lowther Estate, Penrith**

Tutor: Mike Jones

£70 RFS members/£80 non members

**Building with timber in small woods, Friday 5 July 2019**

**Checkendon, South Oxfordshire**

Instructors: Ken Hume and Herbert Russell of the Oxfordshire Woodland Group

£60 RFS members /£70 non RFS members

To book [www.rfs.org.uk/events/training-courses](http://www.rfs.org.uk/events/training-courses)

## Woodland Skills Centre

The Woodland Skills Centre is a community-owned social enterprise company based in the heart of the Clwydian Range Area of Outstanding Natural Beauty. The Centre offers courses in traditional crafts and bushcraft, courses for youth and community groups, as well as a health and well-being programme.

### **SUMMER COURSES**

**Know your trees**

15 June

**Bushcraft through the seasons**

15-16 June

**Peg loom weaving**

6 July

**Make a three-legged stool**

13-14 July

**Gypsy crafts 1**

10 August

**Gypsy crafts 2**

11 August

**Family day in the woods**

25 August

**Growing and using medicinal herbs**

31 August – 1 September

For more information and to book a place please visit the website, [www.woodlandskillscentre.uk](http://www.woodlandskillscentre.uk)

## Celebration of Craftsmanship & Design

**THIRLESTAIN LONG GALLERY, CHELTENHAM**

**17– 26 AUGUST 2019**

Be inspired and uplifted by the beauty and skill on display at Cheltenham's contemporary furniture exhibition.

Britain's most eclectic exhibition of contemporary, bespoke, designer and maker furniture in the UK celebrates its 25th anniversary this year.

It includes the Best Use of British Timber Award (sponsored by Woodland Heritage) and for the first time a selection of furniture colleges and schools have been invited to exhibit the work of their students at the Celebration of Craftsmanship & Design.

The focus is on supporting and promoting all areas of the bespoke furniture movement, with a particular emphasis on the use of sustainable timber.

For more information, visit [www.celebrationofcraftsmanship.com](http://www.celebrationofcraftsmanship.com)

---

## ACKNOWLEDGEMENTS

**Rachel Bower**

[www.wovenwillow.co.uk](http://www.wovenwillow.co.uk)

**Gillian Hatcher**

**Saving Scotland's Red Squirrels**

**Julia Goodfellow-Smith**

[www.questforfuturesolutions.co.uk](http://www.questforfuturesolutions.co.uk)

**Richard Hare**

**Keeper's Coppicing**

**Clare Gibson, aka @MrsSymbols**

**Hilary Macmillan**

**Vincent Wildlife Trust**

**Sarah Partridge**

**Orchard Barn**

**Professor Nicola Spence**

**Plant Health Risk Register**

**Chris Colley, Ruth Feltham, Simon Feltham, Antony Mason,**

**Johnny Morris, Tom Ward, and the [Woodlands.co.uk](http://Woodlands.co.uk) editorial team.**