



MAGAZINE 2023

oakbank

CREATING THE PERFECT HABITAT



2023 PRODUCT GUIDE

IN THIS ISSUE

- Countryside Stewardship & SFI Updates
- Biodiversity Net Gain
- Acres Eco-Ag Conference 2022
- Notes from a farm shoot



BY APPOINTMENT TO
HER MAJESTY THE QUEEN
CONSERVATION SEED SUPPLIER
OAKBANK GAME & CONSERVATION LTD

+ A NOVEL MARKET FOR ASH TREES & TREE RISK MANAGEMENT



WELCOME

WELCOME TO OUR 2023 MAGAZINE

Whether you are interested in regenerative agriculture, country sports, habitat creation for wildlife, woodland management, stewardship, sustainable farming incentive or biodiversity net gain, we hope you will find something in this year's publication that prompts you to give us a call. The Oakbank team are all available should you wish to discuss anything that we talk about in the magazine or, of course, to discuss which seed mixes might suit your needs. Wishing clients old and new a very happy and healthy 2023.

MEET THE TEAM



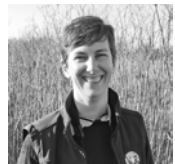
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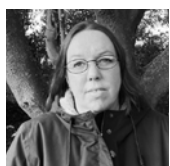
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REVIEW OF 2022

Where do I start? In terms of impact on a nation, the death of Her Majesty Queen Elizabeth II was unparalleled. Her late Majesty was an inspirational and constant figure in all our lives and the out-pouring of love and grief following her death in September showed how much she meant to us all. In King Charles III we have a new monarch who is also devoted to our great Country and the Commonwealth and whose passion for and knowledge of the British countryside and the people who work in it is quite humbling. God save the King.

From a business point of view, 2022 saw an exciting development for Oakbank with Velcourt Group Ltd acquiring 50% of the business in April. Velcourt, which was founded in 1967, manages 58,000 ha of farmland for a variety of clients cross the UK and undertakes highly regarded and applied research and development to underpin its advice and farm management systems. Their investment in Oakbank was seen as a complementary fit, given the direction of travel of food production, the environment and rural land-use. From our point of view we saw this as a huge opportunity to work with an independent and well-respected farming business to help demonstrate and deliver financially and environmentally sound solutions on a large scale.

2022 also saw the completion of Sarah Brockless' UK tour, delivering workshops in less favoured areas for the Princes Countryside Fund. The workshops, which started in 2020, aimed to help farmers in less favoured areas come together to understand how they might better use their inherent assets and natural resources to generate additional income. Sarah travelled from the Scilly Isles to the Orkneys to deliver these workshops over a covid interrupted 2-year period, although the travelling was far less stressful than dealing with the RPA on a daily basis! On that subject, it was with great sadness that we said goodbye to Sarah at the end of the year. The stress of dealing with government funded schemes and the RPA became too much for her and she is now setting off on her own to take on ecological consultancy work local to her home in East Anglia.

Fortunately for us, Henry Barringer joined us from Savills in September as our Conservation and Stewardship Division Manager. Many of you will already know Henry but for those who don't he is based in Norfolk and brings a wealth of experience in delivering higher tier CS agreements, contract farming agreements and farm diversity projects. His key motivation when assessing farms and estates is how farming and environment can work together to create an efficient, profitable and biodiverse business. He has also been involved with four large rewilding projects, a topic which stimulates much debate in the Oakbank office!

For many other rural businesses, 2022 has been a very difficult year with bird flu having a huge impact on poultry and egg producers. Outbreaks of bird flu in France meant that a large number of game bird eggs and poults destined for the UK never arrived. The knock-on effect for game farmers and shoots was, in some cases, catastrophic and in the vast majority of cases seriously damaging. Despite this, most shoots were able to continue, albeit on a much smaller scale and our hope is that the reduction in numbers released may lead to the realisation that the value of a day's sport is not solely judged on the number of birds shot or the number of times you pull the trigger but on the whole experience, including the privilege of being in beautiful countryside, with friends, enjoying our sport. How you put a financial value on this is not easy, but we must get away from it all being about number of birds shot or number of cartridges fired.

The December announcement from Defra that the Local Nature Recovery (Tier 2) of ELMS was to be scrapped and replaced by an 'enhanced' version of Countryside Stewardship was met with some objections from conservationists, who claimed it was watering down the environmental commitments promised by the Government. From our point of view, provided there is some enhancement, such as more flexible options, better payments for scrub creation and management and a less dogmatic inspection process, we think that CS can still deliver some huge benefits across the country. It may also mean we won't experience the usual problems that accompany new schemes, such as delayed agreements and delayed payments.

To end with some good news – thanks to your continued enthusiasm for the GWCT mixes (see page 22) not only were we able to donate a whopping £9,600 to the Trust, which will help fund their invaluable research, but you have also provided a home, shelter and food for myriad wildlife on your farms. Please keep up the good work. Our wildlife needs you more than ever.



VELCOURT
RESPONSIBLE FARMING FOR THE FUTURE

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MONTHLY E-NEWS

For timely information about Environmental and Countryside Stewardship, Pest Alerts, Cover & Companion Cropping Open Days and Trials results, Woodland Management Updates and the occasional quip, sign up to our monthly enews bulletin.

We promise not to clog your inbox!
Email info@oakbankgc.co.uk and ask to be added to the E-News circulation.

AFFILIATIONS

Oakbank supports and is affiliated to the following organisations.



OAKBANK SERVICES

AN OVERVIEW OF THE SERVICES WE OFFER

COUNTRYSIDE STEWARDSHIP/SFI CONSULTATIONS AND APPLICATIONS

Whether you need some help and advice when completing your own, on-line application or want to put together a first class mid- or higher-tier CS application, we have the people to help you. We are experts in grant applications and will tailor applications to deliver what you want on your estate and, in most cases, deliver for the farm, the farm environment, the shoot and the bottom line.

ELS/HLS/CS AUDITS

Take away the worry of an RPA inspection by asking Oakbank to audit your Stewardship Scheme. We will carry out an audit and send you a report highlighting areas of concern so that you can remedy them before an inspector calls.

REGENERATIVE AGRICULTURE ADVICE

We have been working with Opico, Sky Agriculture and Indigro to develop mixes and methods of establishment to improve soil health. Our on-line webinars, with the likes of Dr Christine Jones, have been well received and our Regen team is here to help and advise clients who are considering moving into a more regenerative approach as well as creating the right cover crop mixes for those already engaged.

GAME COVER CROP ADVICE (SITING/CHOICE/AGRONOMY)

Setting up a new shoot or want a fresh pair of eyes to look at game crops then we can help you. From siting of the game cover to crop choice and agronomy advice to help ensure you get the best out of the crop.

FARMLAND BIRD SURVEYS

Whether or not it will be a condition under the new ELMS to have a bird survey done to inform the application remains to be seen but, with farmland birds being an ecosystem indicator, having a breeding and/or over-wintering bird survey done on your ground can only be a good thing. It may help obtain future funding or help prevent future restrictions on your farming operations or may just make you feel good about what you are delivering for farmland birds. If you want a survey carried out by an experienced surveyor then Kirsty Brannan is here to help!

ECOLOGY SURVEYS AND BIODIVERSITY NET GAIN PLANNING

With money from the private, rather than public sector becoming more important within agriculture, our ecology team is here to help you assess your existing natural capital/biodiversity value. We can then help you plan projects to enhance the biodiversity and potentially bank biodiversity credits.

WOODLAND MANAGEMENT

We deliver Woodland Management Plans of the highest standard whether grant aided or not. Plans can be tailored to meet shooting requirements, biomass delivery or simply to improve the overall woodland habitat. We ensure all the correct felling licences, consents and utilities are in place prior to work starting. We can engage contractors on your behalf, manage felling operations and prepare tenders for standing or roadside sales.

WOODLAND CREATION/PLANTING

The new English woodland Creation Offer (EWCO) provides capital grants to cover planting costs as well as the opportunity to access additional funding depending on where the woodland is to be created and what additional benefits the woodland will provide. Oakbank can help you through the application process as well as select suitable species and plan the layout. If the project is large enough we can also help you register with the Woodland Carbon Code to give you the opportunity to add value to your planting.

TREE RISK MANAGEMENT

If you have trees near buildings, roads or public rights of way then you have a duty of care to ensure they are safe. We can help you deliver your estate wide tree risk management policy as well as carrying out your tree hazard inspections.

For more detailed information about our Woodland Services please go to page 26

COUNTRYSIDE STEWARDSHIP AND SFI UPDATES

PAYMENTS

On January 5th Defra announced payment increases for the majority of Countryside Stewardship options, these have been widely welcomed by the industry, due to the recent increases in inputs and materials.

REVENUE PAYMENTS

On average revenue options have gone up by 14 %. Payments will be back-dated to existing CS agreements. Some rates have stayed the same for options such as AB14 (harvested low input cereals), AB2 (basic over winter stubble) and GS1 (take field corners out of management).

The AB9 (winter bird food) payment has increased from £640/ha to £732/ha. This was needed and will help cover the cost of inputs needed to grow great crops. AB10 (unharvested cereal headlands) have seen a 28% increase to £822/ha. The GS options (Grassland management) have seen healthy increases also. Examples of some of the most popular options we see being used, and their new rates are summarised in the table below;

OPTION CODE	OPTION	PREVIOUS RATE	RATE FROM 1 JAN 2023
AB1	Nectar flower mix	£579.00	£614.00
AB5	Nesting plots for lapwing	£566.00	£587.00
AB8	Flower rich margins and plots	£628.00	£673.00
AB9	Winter bird food	£640.00	£732.00
AB10	Unharvested cereal headland	£640.00	£822.00
AB11	Cultivated areas for arable plants	£544.00	£550.00
AB12	Supplementary winter feeding for farmland birds	£657.00	£669.00
BE3	Management of hedgerows	£9.00	£10.00
GS2	Permanent grassland with very low inputs (outside of SDAs)	£132.00	£151.00
GS13	Management of grassland for target features	£131.00	£152.00
HS1	Maintenance of traditional farm buildings	£4.03	£4.42
SP8	Native breeds at risk supplement	£142.00	£167.00
SW1	4-6m buffer strip on cultivated land	£419.00	£451.00
SW3	In-field grass strips	£624.00	£658.00
WD4	Management of wood pasture and parkland (lowland)	£148.00	£198.00



As in previous payment rate reviews, existing ELS/HLS (Environmental stewardship) agreements will not see payment increases. Now is a perfect time to analyse if moving into a new Mid-Tier or Higher Tier CS agreement would be more beneficial both financially for the farming business, but also for wildlife. Our team of consultants would be delighted to assist with a payment review meeting. Do please call the office if this would be of interest, or you would like any advice.

CAPITAL PAYMENTS

Capital payments under CS have seen a much-needed review, as this was overlooked during the previous Defra payment review. On average payments have increased by 48%. These changes will be applied to all CS and SFI pilot capital grant agreements which began on and after the 1st of January 2023. For those whose agreements started before the 1st of January 2023, old rates will still apply. However, if you have not yet started carrying out your capital works for these, you can withdraw from this part of your agreement in order to apply for a new agreement with the updated payments.

Any capital works included in new agreements submitted after the 1st of Jan 2023 will have three years to complete the works. For those whose agreements started on or before this date, an extension to their 2 year time limit can be requested.

SFI

The Sustainable Farming Incentive (SFI) has seen the introduction of a Management Payment of £20 per hectare, for up to 50 hectares of land entered into the scheme. This means farmers will receive up to £1,000 per year as a further incentive to apply and to help towards the administrative costs of participating. The RPA hope this will encourage "smaller or tenant farms" that may not have already looked at what SFI can offer. In addition, 2023 will see 6 new standards introduced to the SFI, the details of which will be provided in our monthly newsletter and on our website, oakbankgc.co.uk/downloads.

ELM

By the end of 2022, we were unsure of the future of the ELM scheme but, recent announcements from the RPA in early 2023 have provided more certainty and been broadly welcomed. The plans for Local Nature Recovery have now been scrapped and replaced with 'Countryside Stewardship Plus'. This is an improved version of the current CS, with an additional 30 options available. Landscape Recovery is also set to reopen to new applications in the spring of this year and next to fund a further 25 projects with a focus on net-zero, protected sites and habitat creation.

SMALL CHANGES MAKING BIG GAINS FOR WILDLIFE

BY JAMIE GUNN



There is no hiding the fact that our wildlife is in need of some help. In the UK, 41% of species have experienced declines since 1970, and at the global scale, 70% of wildlife on earth has been lost in just the past 50 years. In the UK, farmland birds have been some of the hardest hit, with an overall 56% decline in populations in the same 50 years. Corn bunting, grey partridge, turtle dove and tree sparrow have all declined by over 90%, with the turtle dove fast approaching extinction in the UK.

As farmers, gamekeepers, and land managers, many are well placed to contribute towards reversing this decline. Some are turning to large scale rewilding to achieve this, but this doesn't sit well with me and the need to produce food for an ever-growing population. However, with a few small changes to the ways in which we manage those areas outside the productive field, we can contribute to altering the current trajectory of these species without reducing yields, breaking the bank, selling the fleet, or wrangling a herd of bison!

HEDGES

Hedges are very much a man-made habitat, so despite what some may say, they require management. This is often best achieved by cutting, but to generate the best value for wildlife, the frequency and timing at which this occurs needs to be considered.

Avoid cutting hedges every year. Most blossom, and the subsequent fruit that follows, can only be produced on 2nd year growth. By cutting back to the previous cutting line every year, not only do you encourage scar knuckles to form, but you also remove the hedge's ability to produce a flower and fruit.

Cut hedges later. So, the hedges have been left for a year and the fruit is just beginning to ripen, but the 1st of September comes around and everyone rushes out to cut their hedges, removing the fruit just as wildlife is about to need it most. Ideally, hold off cutting your hedges until the new year. By this time, most fruit has either been eaten or has dropped to the floor and started to rot. For those who can't cut later in the year due to ground conditions or standing crops, limiting your cutting to a 3 yearly rotation will have a similar benefit.

Cut slightly higher and wider. Trimming to the same height every cut not only produces scar knuckles but can also encourage the base to become thin and gaps to appear. Cutting just 10cm wider and higher at each cut prevents this from happening, whilst also leaving a degree of new growth, fruit, and flowers. On a 2-yearly rotation, this management will still take the hedge 20 years to grow 1m.

It is worth noting that it is not just birds that benefit from cutting hedges less frequently. Many insects, including rare, hairstreak butterflies, lay their eggs on the new growth of hedges in late summer to overwinter before hatching in the spring. By cutting every year, an entire generation of these species is destroyed.

Starting again. When managing hedges in this way, inevitably there will come a time where the hedge becomes too big. Either the inner wood begins to die, or it has encroached too far into the field. At this point, heavy cutting back to a manageable size, coppicing or laying can take place (depending on the composition of the hedge), thereby beginning the cycle again and producing an even thicker, healthier hedge. Having this diversity of hedges across the farm at different stages within the cycle is key to providing for a range of farmland wildlife.

DITCHES AND MARGINS

Similarly to hedges, most ditches and margins are also man-made and, as such, will also need managing. If not managed, many will either begin to lose their diversity or develop into scrub. Whilst scrub is an important habitat for many species and is to be encouraged in awkward field corners and unproductive areas, along productive field margins it can soon become unmanageable and prevent access to ditches and hedges. If unchecked this can hinder efficient drainage. Here are some tips for how you can manage these for the benefit of wildlife whilst also maintaining a 'tidy' looking farm.

Keep short areas next to your crop. Long grass has many benefits which we will discover in a moment, but areas of regularly cut, shorter grass are also vital. Regular cutting prevents more dominant species from taking over and allows rarer, less competitive species to come through. Furthermore, many ground-nesting birds and their chicks require areas such as this to feed and dry out in the sun, albeit next to longer areas to dart into if a predator is spotted. A 1 or 2m mowed strip next to a crop not only has benefits for wildlife, but also looks smart and can help define the edge of the crop and the margin.

Allow areas to grow long, but not get too woody. Once most grasses have grown tall and headed, they die and fall over. This carpet of bent over grass stems produces a roof under which bank and field voles will create their runs and trails. This is true for both margins and ditch sides and provides the perfect hunting strips for barn owls and kestrels. Such tussocks and thatched clumps are home to a number of hibernating insects, many of which are predators of the very pests damaging the crops next door. Again, there will come a time at which it is required to cut these areas but doing so in a rotation ensures that the habitat is not completely destroyed in any one area. For margins, this could mean cutting alternative strips and, along ditches, cutting alternative banks on a two or three yearly rotation.



Hold off cutting between March and late July. This is the height of the bird nesting season so refraining from cutting in this time ensures that nests and young chicks are not killed/destroyed. Once cutting begins in late July, the importance of the rotation is highlighted as it provides alternative areas for any young broods to move into for protection within close proximity.

Get paid to do it! All of the management techniques discussed here can be paid for under a Countryside Stewardship Scheme, along with a number of other more ambitious but equally as important options, including winter bird food plots, wildflower margins and nectar flower mixes. The deadline for applying for these 5-year schemes is the end of July 2023, but we encourage anyone who is looking to enter to begin the process sooner rather than later. Whilst officially, this is the last year of Countryside Stewardship applications, at the time of writing ELMS is likely to have a slightly altered version of Countryside Stewardship form its middle tier of Local Nature Recovery. If this is something you would be interested in, please contact a member of our team who would be more than happy to help.



BIODIVERSITY NET GAIN

BY HENRY BARRINGER

Biodiversity Net Gain (BNG) is a new approach to development and land management that aims to leave the natural environment in a measurably better state than it was before the development took place. The Government's response to the 2018 consultation on net gain set out that there would be a 2-year implementation period for mandatory BNG once the Environment Bill received Royal Assent and became the Environment Act (which happened on 9 November 2021). So we are expecting BNG to become mainstream planning policy as of November 2023. This will mean that all planning permissions granted in England will have to deliver at least a 10% biodiversity net gain.

BNG will be measured using Defra's biodiversity metric 3.1, and habitats will need to be secured for at least 30 years. The Biodiversity Metric is a habitat based approach to determining a proxy biodiversity value developed by Natural England. The Biodiversity Metric is designed to provide ecologists, developers, planners and other interested parties with a means of assessing changes in biodiversity value (losses or gains) brought about by development or changes in land management.



SO AS LANDOWNERS, HOW MIGHT THIS AFFECT YOU?

Firstly, if you have any potential development sites, these will need to comply with BNG regulations by the end of this year. A number of Local Planning Authorities are already requiring BNG targets to be met despite it being sooner than they are obliged to do so, and biodiversity credit sales are already taking place. You will therefore have to consider if your developer can meet the BNG requirements of the development site on the farm/estate or if they will have to source these credits elsewhere. It is an excellent opportunity to provide BNG offsetting on the same farm as the development, providing there is sufficient potential uplift available.

Ideally the local authorities want the offsetting scheme to be as close to the area of habitat loss as can be. However, the credits can be bought by developers as a last resort when onsite and local offsite provision of habitat cannot deliver the BNG required. Therefore, if you have land that could be reverted to habitat that would show a considerable uplift in biodiversity score, you can sell these credits to any developers with a local shortfall.

HOW CAN OAKBANK HELP?

Oakbank's team of Ecologists and Environmental Consultants have a wealth of experience in undertaking baseline audits of land in order to determine BNG potential. Therefore, if you have a field or area on a farm that you are considering for BNG, we can undertake a walkover survey to calculate the current Ecological Baseline score of the site. From this we can advise on potential BNG uplift and develop a BNG scheme that maximises financial return from credits, whilst providing the best benefit to wildlife and local habitat.

Examples of popular schemes include arable land reversion to a patchwork of species rich grassland (chalk or acid for example) interspersed with pockets of scrub and trees. Or existing intensively managed grass being allowed to wet up and become more diverse. Effectively the bigger the gain for biodiversity, the more credits you will generate. There is no set value for credit trading, this is very much based on local demand.





COVER CROPS – INVESTMENT OR COST?

BY IAN GOULD



An investment is an asset or item acquired with the goal of generating income or appreciation. Appreciation refers to an increase in the value of an asset over time. When it comes to agriculture, farmers make lots of decisions that are designed to deliver benefit over the long term; field drainage; storage facilities; livestock housing; etc. It is not always easy to know the exact rate of return on these investments, but farmers understand that they are part of a strategy to deliver long term prosperity.

When it comes to investing in our soils, I believe that we have somewhat taken them for granted for too long, solving problems with horsepower, metal and chemistry. Today there is a growing realisation that we have neglected a vital component of soil health, the biology, and there are great gains to be had by paying more attention to looking after it. Soils are vast complex ecosystems that contain an incredible diversity of micro and macro-organisms which rely upon each other to function as a community. The work of Dr Elaine Ingham and others has created the Soil Food Web which starts to explain how this all fits together. As the organisms grow in size and number, they move through the soil and perform a wide array of functions that benefit the community:

- Helping to decompose organic materials, including composts, manures and plant residues.
- Fixing atmospheric nitrogen and solubilising soil minerals into plant available form.
- Storing and recycling soil nutrients.
- Enhancing soil aggregation and porosity.
- Building soil humus that increases nutrient and moisture retention.
- Preying on crop pests and then becoming consumed by higher level predators.
- Recent work by Dr James White on Rhizophagy shows how plant roots can actually digest microbes and extract their DNA and nutrients. It appears that this process is an important source of Manganese, Iron, Calcium and Magnesium in particular.



For many farmers, cover crops are considered defensive tools against soil erosion and nutrient loss. They can perform these roles very well, by protecting the soil surface from rain, wind and sun. They regulate the surface temperature which, in turn, helps to manage the environment for the soil biology, protecting it from the excesses of our unpredictable climate. They harvest nutrients and, in the case of legumes, produce nitrogen which is potentially available to the following crops. Cover crops can also help with water infiltration and retention, which can help in times of heavy rain and in times of drought.



So, how do we quantify this 'investment' in cover crops. There are plenty of people out there telling you how much phosphate a 'cover crop' can assimilate and how much nitrogen a 'cover crop' can deliver, which comes up with a ££ figure. BUT these do not take into account the huge disparity in crop establishment/species mixes/soil types etc. However, if you say a cover crop seed mix costs £40/ha it only needs to absorb and return around 25kg/ha of phosphate or 20kg/ha of nitrogen to pay for itself. As the living roots of cover crops help improve the soil's structure, what value do you put on an extra three days ripening of a wheat crop during times of drought thanks to the improved water retention, or preventing many kilograms of topsoil from disappearing down the road or down the drains in the event of heavy rain?

Obviously there are establishment costs and it is an extra job at a busy time, but what I can tell you for sure is that farmers who have invested in cover crops properly are doing more each year, not less. I think that the focus on Carbon as a tradable commodity misses the value it has in your system, in what Dr Christine Jones calls the "Liquid Carbon Pathway". In essence, root exudates are like cash in the system as they can quickly be exchanged for goods and services that are provided

by the microbes. Having a diverse range of currencies allows this trade to be conducted with a wider range of microbes, so your crop has more chance of receiving all the nutrients it needs. By building a carbon-rich soil economy and reducing / removing tillage, farmers will begin to build up fungal communities in the soil. Bacteria photosynthesize but have a small surface area whereas fungi cannot photosynthesize but can have an enormous surface area. The bacteria trade carbon to the fungi in return for the minerals that the hyphae have extracted by excreting enzymes into the soil, releasing valuable nutrients. In modern systems that use lots of tillage and synthetic fertiliser, this relationship doesn't work well as the soil is highly dominated by bacteria with very little fungi. The mycorrhizal fungal networks also play a huge role in accessing water in times of drought, which can be incredibly valuable for maintaining yield.

It should be made clear that we are not advocating farmers stop applying all inputs, this would be catastrophic for many businesses. However, by investing in your soil's natural ability to deliver nutrient and water through the use of cover crops, other key soil services will be enhanced, delivering excellent crop performance without so many costly synthetic inputs.





PRODUCT GUIDE 2023

In this Product Guide, you will hopefully find the seed mix to suit your situation. Whether it's for **Game Cover, Stewardship, Soil health, Forage** or **Amenity** purposes, this guide should have something to interest you! However, if you are looking for something different or need help solving a specific problem then please give the office a call. We are happy to discuss issues that might be unique to your farm or shoot and can put together bespoke mixes where required. We know the Countryside Stewardship and Environmental Stewardship schemes intimately and can help you choose a suitable seed mix for your specific soil type, location and purpose. All of our seed is of the highest quality and we always use certified seed for species which have a certification standard. Where there is no certification standard we have our own germination and purity tests carried out, so we know exactly what we are supplying. Some of our mixes are multi-purpose, qualifying as winter bird seed, providing reasonable game cover and improving soil health. Please be aware that we reserve the right to change the composition of these mixes during the season if prices/availability of certain species changes dramatically.

WHAT'S NEW IN 2023?

Decent maize varieties will again be in short supply and will be expensive! We have managed to secure a reasonable quantity of Mas 48L as our Oakbank maize. We grew several hundred acres of this variety last season and were delighted with the results so have now had it treated with Agrostart to give it that early boost and strong rooting that you associate with Oakbank maize.

GAME COVER

In this section you will find crops that are typically used for game cover, whether as straights or in mixes. Some of them may also qualify as suitable for Countryside Stewardship, AB9 winter bird food crops, in which case they will be clearly marked as such. By definition a game crop is any crop grown with the intention of feeding and/or holding game birds in the shooting season. As the season does not begin until September and lasts until the end of January there is no rush to get game covers drilled in the spring. Many game cover species come from warmer climates so will only grow when the soil is warm enough. Please also remember that if game birds are to spend time in these crops they need to be easily accessible and provide a good overhead canopy. That means they need to be relatively weed free and sown on wide enough rows to allow the birds to move around under the canopy. Far too many crops are sown too thick so the birds can't access them until they have died back in December.

KALE

As ever, seedbed conditions at time of drilling make the difference between success and failure with kale.

Sow into a warm, fine, moist seedbed and the kale will be up in rows in a week and shouldn't look back. Our main varieties are Gruner Angelita, Astera and Goldeneye. Our Gold Fire Kale Blend proved very successful again last year, a combination of kale varieties treated with Take-Off seeming to deliver outstanding early vigour.



GRUNER ANGELITA & ASTERA

- Good early vigour
- Strong stem
- Winter hardy
- Good second year crop
- » Seed treatment – recleaned only
- » Bag size – 1kg



GOLDENEYE

- Good early vigour
- Some club root resistance
- Strong stem
- Winter hardy
- Good second year crop
- » Seed treatment – recleaned only
- » Bag size – 1kg



GOLD FIRE KALE BLEND

- A mix of Goldeneye, Anglian Gold and Spitfire Kale Rape
- Goldeneye and Anglian Gold Treated with Take-Off ST
- Excellent early vigour and good winter hardiness
- Good second year crop
- » Seed treatment - Take-Off ST
- » Bag size – 5kg (hectare)

MAIZE

The key characteristics of a good maize crop for holding game are that it has good early vigour and stands through the shooting season.

It should also be sown on wide rows and kept weed free. Some people are looking for a very early variety that produces early cobs and can be flailed off as the season progresses to provide a good food source, whereas others want a very late maturing variety that doesn't produce any feed value so as not to attract the unwanted attention of corvids, rats, badgers and deer. And somewhere in the middle sit the majority of our customers who are looking for a maize that gets away strongly, produces cobs that mature in October and stands through the season. Maize portfolio below:



OAKBANK MAIZE (MAS 48L FAO 310)

- Proven variety with excellent standing power
- Agrostart seed treatment improves rooting and nutrient uptake
- Mid-maturity but will produce good cobs in most situations
- » Seed treatment – Redigo M/Korit & Agrostartt
- » Bag size – 45,000 seeds
- » Max seed rate 120,000 seeds/ha



GAME MAIZE (MAGNATO FAO 240)

- Slightly taller variety but still stands well
- Earlier to mature than the Mas 48L
- » Seed treatment – Optiplus
- » Bag size – 50,000 seeds
- » Max seed rate 120,000 seeds/ha



LATE (NO COB) MAIZE (PELOTA FAO 550)

- Very late maturing
- Good standing power
- » Seed treatment – Optiplus
- » Bag size – 50,000 seeds
- » Max seed rate 120,000 seeds/ha



SUPER-EARLY MAIZE (VR EMMERSON FAO 160)

- Proven variety in the UK
- Super-early for guaranteed cobs
- Good standing power
- » Seed treatment – Redigo M & Korit
- » Bag size – 50,000 seeds
- » Recommended seed rate 100,000 seeds/ha



SORGHUM

Still a popular cover crop in the south of the UK, sorghum provides a warm and windproof cover crop.

Often grown alongside maize as a wind break, sorghum has also come into its own as part of many wild bird seed mixes as it stands so well and helps hold up some of the weaker seed bearing species. It must not be sown until the soil temperature reaches 14°C.



OAKBANK MILO

- Blend of US and French grain sorghum
- Fantastic standing power
- French sorghum will set seed
- Leaf structure similar to maize
- » Seed treatment – re-cleaned only
- » Bag size – 10kg



MID-HEIGHT SORGHUM

- Grain sorghum
- Slightly taller than Milo
- Good standing power
- » Seed treatment – re-cleaned only
- » Bag size – 10kg

OAKBANK GAME MIXES

The mixes in this section have been developed for Game although the majority of them are also suitable as wild bird seed mixes.

Mixes that qualify for ELS/HLS/CS are clearly labelled. Under CS the AB9 option pays £732/ha and it opens the door to a further £335/ha through the AB12 supplementary feeding option. Other stewardship mixes which would also be suitable for game but are more directed at farmland birds can be found in the Stewardship section (page 20).



GM109

✓ ELS
✓ HLS
✓ CSS

- A traditional 'game cover' type mix
- Provides food and cover
- Not suitable for cold or exposed sites
- Contains mustard, fodder radish, white, red and reed millet, phacelia, quinoa, buckwheat
- » Seed treatment – re-cleaned only
- » Bag size – 8kg (half hectare)



GM313

✓ ELS
✓ HLS
✓ CSS

- A very good holding and driving cover for the South
- Sunflowers add colour and finch food
- Grain sorghum and reed millet deliver warm cover right through the winter
- Contains dwarf grain sorghum, sunflowers, white, red and reed millet, mustard, fodder radish, camelina
- » Seed treatment – re-cleaned only
- » Bag size – 10kg (half hectare)



GM416

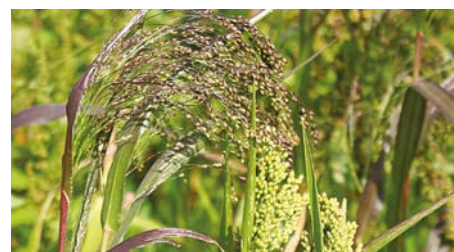
✓ ELS
✓ HLS
✓ CSS

- Fantastic all-round game cover for areas that can grow sorghum
- Stands through the winter and provides large amounts of food for game and songbirds
- Most popular annual game mix
- Sprayable for broadleaf weeds
- Contains spring triticale, white, red and reed millet, linseed, dwarf grain sorghum, camelina, mustard
- » Seed treatment – Redigo Pro (spring triticale)
- » Bag size – 25kg (half hectare)

MILLET

A very popular food crop in the warmer parts of the UK, millet forms the basis of many wild bird seed mixes as well as being a useful early food source for game birds.

Red and white millet are primarily 'food' producing species whilst Japanese reed millet is an excellent winter cover crop in its own right.



RED & WHITE MILLET

- Red millet matures slightly earlier than white millet
- Both produce large quantities of palatable seed
- Mix well with Oakbank Milo and tolerant of same herbicides
- Sold as individual species or as a mix in Oakbank Millet Mix
- » Seed treatment – re-cleaned only
- » Bag size – 10kg



JAPANESE REED MILLET

- Excellent 'structural' component in mixes
- Very good standing power through the winter
- Will grow in harsher climates than sorghum
- » Seed treatment – re-cleaned only
- » Bag size – 10kg



REED MILLET MIX

- The perfect blend of reed, red and white millet
- Delivers cover and food through the winter
- » Seed treatment – re-cleaned only
- » Bag size – 10kg



OAKBANK FEED & FLUSH

✓ ELS
✓ HLS
✓ CSS

- Truly winter hardy mix providing warm, dry habitat and lots of food
- Providing the kale establishes well it can be left for a second year
- Inclusion of millet and sorghum restrict it to less severe climates
- Contains Astera kale, spring triticale, white, red and reed millet, fodder radish, camelina, dwarf grain sorghum, quinoa
- » Seed treatment – Redigo Pro (spring triticale)
- » Bag size – 20kg (half hectare)



OAKBANK ELEVATION MIX

✓ ELS
✓ HLS
✓ CSS

- Feed and Flush for the north of the UK and more exposed sites
- Very warm and winter hardy mix that also provides natural food
- Good kale establishment means it can be left for a second year
- Contains Astera kale, Goldeneye kale, Spitfire kale rape, linseed, spring triticale, camelina, quinoa, mustard, fodder radish
- » Seed treatment – Redigo Pro (spring triticale)
- » Bag size – 20kg (half hectare)



OAKBANK GRASS WEED BUSTER

✓ ELS
✓ HLS
✓ CSS

- Developed as a mix with which you can tackle grass weed problems such as couch, barnyard grass and foxtail millet
- Suitable for late sowing (late July) so stale seedbeds can be easily attained
- Can be sprayed post-emergence with most graminicides
- Provides good winter cover and food
- Can be mixed with kale and/or chicory to provide two-year crop
- Contains buckwheat, camelina, fodder radish, forage rape, quinoa, mustard
- » Seed treatment – re-cleaned only
- » Bag size – 15kg (hectare)

PERENNIAL CROPPING OPTIONS

All wild bird shoots and any shoots reliant on game crops to produce drives should have a percentage of their crops as perennials.

However, please don't think that you can just plant a perennial crop and it will guarantee cover for many years. All perennials need to be established with care and need annual management if they are to deliver the habitat that game requires. Once established they are a terrific source of reassurance especially in difficult years. Perennials are excellent for providing reliable cover, but they don't produce much winter food. They can attract insects and be useful for brood rearing, plus they can offer considerable cost savings over their lifetime. Some are easy to establish (and to remove if required), others, artichokes for example, are rather more permanent. Please talk to us to discuss what you are looking to achieve and we can advise you on the best solution.



GM206

- Our most popular and successful perennial mix
- Must be sown on wide rows to avoid disappointment
- Reed millet delivers cover in year 1
- Chicory, reed canary grass and sweet clover then provide cover for 5 years+
- Contains reed millet, reed canary grass, chicory, sweet clover
- » Seed treatment – recycled only
- » Bag size – 6kg (half hectare)



CANARY/REED CANARY

- Reed canary grass (*phalaris arundinacea*) is UK native unlike Canary grass (*p. aquatica*)
- Both must be sown in wide rows (75cm) and need ongoing management
- Better sown in mixes
- » Seed treatment – recycled only
- » Bag size – 2.5kg



HOME SWEET HOME

- Developed for estates with grey partridge interest
- Long-term mix delivering winter cover and spring chick food
- Sweet fennel a very winter hardy perennial that also delivers insects in the spring
- Reed millet and kale rape give cover in year 1
- Contains sweet fennel, sweet clover, chicory, spitfire kale rape, lucerne, reed millet
- » Seed treatment – nitrogen gold inoculum (lucerne)
- » Bag size – 12kg (hectare)



MISCANTHUS

- Fantastic holding and driving crop
- Takes two years to establish
- Once established holds birds all day whatever the weather
- Best grown in strips alongside a food crop
- Can be oversown in year 1
- For establishment advice and costs please contact the office on 01480 890686 or info@oakbankgc.co.uk
- » Minimum order size – 2,000 rhizomes (0.2ha)
- » Bag size – 2,000 to 10,000 rhizomes

CATCH CROPS

These are for late sown game cover crops, whether patching in failed areas of game cover or creating a drive after harvest and not to be confused with Cover Crops for Soil Health (see page 23).



OAKBANK RESCUE MIX

- Contains Jupiter leafy turnip, forage rape, fodder radish and mustard
- » Seed treatment – recycled only
- » Bag size – 5kg



UTOPIA

- The best late sown brassica for game
- Canopy similar to kale
- Don't drill too early or crop will bolt and flower
- » Seed treatment – recycled only
- » Bag size – 2kg



OTHER CATCH CROPS

- Forage rape
- Fodder radish
- Mustard
- Stubble turnip
- Spitfire kale-rape

GAME COVER STRAIGHTS

- Triticale – winter & spring
- Quinoa
- Buckwheat
- Sunflowers
- Sorghum
- Linseed
- Camelina
- Phacelia
- Beans/peas/wheat/barley



STEWARDSHIP MIXES

WILD BIRD SEED MIXES

Suitable for Mid-Tier option AB9 (£732/ha) or ELS EF2 (£450/ha) the following mixes are all stewardship compliant. Other stewardship compliant mixes can be found in the game mixes section (page 17).



CORN BUNTING MIX

- Designed by the RSPB specifically for corn buntings
- Contains spring barley, spring triticale, mustard, red clover, fodder radish, white millet and camelina
- » Seed treatment – Redigo Pro (barley and triticale)
- » Bag size – 25kg (half hectare)

✓ ELS
✓ HLS
✓ CSS



TREE SPARROW MIX

- Another targeted mix containing species favoured by the tree sparrow
- Contains spring triticale, spring wheat, quinoa, white and red millet, forage rape
- » Seed treatment – Redigo (wheat and triticale)
- » Bag size – 25kg (half hectare)

✓ ELS
✓ HLS
✓ CSS



OAKBANK FARMLAND BIRD MIX

- A more generalist winter bird food mix providing some insect interest as well
- Lots of winter food
- Can be mixed with kale to produce a two-year crop
- Contains spring triticale, spring barley, white, red and reed millet, mustard, fodder radish, phacelia, quinoa
- » Seed treatment – Redigo (barley and triticale)
- » Bag size – 25kg (half hectare)

✓ ELS
✓ HLS
✓ CSS



SOIL, BEES AND SEEDS MIX

- Contains buckwheat, camelina, crimson clover, forage rape, linseed, mustard, phacelia, quinoa, SMART radish, sunflowers, white millet
- » Seed treatment – recycled only
- » Bag size – 20kg (hectare)

✓ ELS
✓ HLS
✓ CSS

AUTUMN SOWN BUMBLEBIRD MIX

Suitable for Mid-Tier option AB16 (£637/ha)



OAKBANK AUTUMN SOWN BUMBLEBIRD MIX

- Establish in September for two-year crop
- Delivers good insect-rich brood rearing the following spring/summer and the spring/summer after that
- Only provides winter food and cover in the second winter
- Good option for wild bird shoots in rotation with AB9
- Contains winter wheat, winter barley, winter triticale, winter vetch, camelina, fodder radish, Astera kale, sainfoin, alsike clover, phacelia, crimson clover, red clover
- » Seed treatment – Redigo Pro (barley, wheat and triticale)
- » Bag size – 25kg (half hectare)

✓ ELS
✓ HLS
✓ CSS

SUPPLEMENTARY FEEDING

Suitable for mid-tier option AB12 (£669/tonne), EF23 (£630/tonne) and HF24 (£822/tonne)

Probably the most important farmland bird option as it delivers guaranteed food through the winter when the birds most need it. You can use your own wheat and oilseed rape but a percentage of small seeds such as millet, sunflower hearts and canary seed are essential to ensure you are feeding a range of species. We will have three standard mixes for winter 2023/4, a **standard mix**, which will be a complete ration including cereals; a **small seed budget mix** which will use a limited range of small seeds to add to your own wheat; and a **small seed premium mix** with a more diverse range of small seeds for customers who want to go the extra mile for their farmland birds. And, as always, we will offer straights as well as bespoke mixes.

GAME FEED MIXES

If you are not in stewardship then our supplier can also offer us game holding mixes including kibbled maize, split peas and black sunflowers. Please ask us for a quote.



OAKBANK FLOWER MIXES

NECTAR FLOWER MIXES

Suitable for Mid-Tier option AB1 (£614/ha) or ELS EF4 (£450/ha) the following mixes are all stewardship compliant



NECTAR-RICH BRONZE

- Standard nectar mix for Mid-Tier CS
- Contains sainfoin, winter vetch, alsike clover, red clover, birdsfoot trefoil, crimson clover, lucerne, black medic, black knapweed, yarrow
- » Seed treatment – nitrogen gold inoculum (lucerne)
- » Bag size – 15kg (hectare)

✓ ELS
✓ HLS
✓ CSS



CELTIC MIX

- The Oakbank slant on the new AB1 option provides a bit more winter cover with the inclusion of chicory, and summer cover in year 1 by adding mustard
- Contains lucerne, chicory, winter vetch, crimson clover, mustard, black knapweed, yarrow, sainfoin
- » Seed treatment – nitrogen gold inoculum (lucerne)
- » Bag size – 12kg (hectare)

✓ ELS
✓ HLS
✓ CSS



OAKBANK HONEY BEE MIX

- Several bee-keepers have asked us for a Stewardship compliant mix containing species favoured by honey bees so here it is
- Contains borage, phacelia, sweet clover, alsike clover, red clover, black knapweed, selfheal, yarrow
- » Seed treatment – recycled only
- » Bag size – 6kg (half hectare)

✓ ELS
✓ HLS
✓ CSS

FLOWER-RICH MARGINS AND PLOTS

Suitable for mid-tier option AB8 (£673/ha)

For customers with a real passion for wild flora we can make up grass and native wild flower mixes for specific soil types such as chalky loam and clay soils but these tend to be bespoke mixes depending on your requirement and budget!



OAKBANK AB8 MIX

- 85:15 grass:flower mix
- A mix designed to tick the boxes for mid-tier CS as well as provide some colour and insect value
- Uses a majority of agricultural cultivars of flowers to keep the cost down
- Contains chewings fescue, meadow fescue, slender creeping red fescue, smooth stalked meadow grass, alsike clover, black medic, crimson clover, hedge bedstraw (N), oxeye daisy, red campion (N), sainfoin, sheeps burnet, spring vetch, yarrow
- » Seed treatment – recycled only
- » Bag size – 20kg (hectare)

✓ ELS
✓ HLS
✓ CSS



OAKBANK AB8 PREMIUM MIX

- A 90:10 grass:flower mix but using more species of grass and native wild flowers
- Native flowers deliver more in the way of diversity and longevity
- Contains chewings fescue, crested dogstail, meadow fescue, slender creeping red fescue, smooth stalked meadow grass, sweet vernal grass, alsike clover, black medic, black knapweed (N), kidney vetch (N), meadow buttercup (N), oxeye daisy (N), sainfoin, selfheal (N), wild carrot (N), yarrow
- » Seed treatment – recycled only
- » Bag size – 20kg (hectare)

✓ ELS
✓ HLS
✓ CSS

TWO-YEAR SOWN LEGUME FALLOW

Suitable for mid-tier option AB15 (£593/ha)



OAKBANK AB15 TWO-YEAR LEGUME FALLOW MIX

- Good option for blackgrass control providing establishment is done correctly
- Helps pollinators and delivers invertebrate chick food for farmland birds
- Contains intermediate perennial ryegrass, cocksfoot, alsike clover, black medic, crimson clover, red clover, sainfoin, winter vetch
- » Seed treatment – recycled only
- » Bag size – 15kg (half hectare)

✓ ELS
✓ HLS
✓ CSS



OAKBANK AB15 NO GRASS MIX

- For fields where blackgrass may not be an issue or where you don't want any grasses in the mix
- 100% legume components good for soil fertility and for pollinators
- Sow at 15-20kg/ha depending on seedbed conditions
- Contains alsike clover, crimson clover, lucerne, red clover, sainfoin, winter vetch
- » Seed treatment – recycled only
- » Bag size – 20kg

✓ ELS
✓ HLS
✓ CSS

LEGUME & HERB-RICH SWARDS

Suitable for mid-tier option GS4 (£382/ha)



OAKBANK GS4 CUTTING MIX

✓ ELS
✓ HLS
✓ CSS

- For clients looking for a mix that delivers a highly palatable forage crop
- Inclusion of festulolium adds resilience on drought prone or waterlogged soils
- Sainfoin and lucerne provide excellent quality silage or hay
- Additional benefits for soil structure and fertility
- Contains intermediate perennial ryegrass, cocksfoot, festulolium, meadow fescue, timothy, birdsfoot trefoil, chicory, lucerne, red clover, ranger plantain, sainfoin, sheeps burnet, sheeps parsley, yarrow

- » Seed treatment – re-cleaned only
- » Bag size – 20kg (sow at 30kg/ha)

OAKBANK GS4 GRAZING MIX

✓ ELS
✓ HLS
✓ CSS

- For clients who graze their stock extensively and want a high quality, herb-rich sward
- Cocksfoot and tall fescue add resilience on drought prone or waterlogged soils whilst creeping red fescue increase grazing tolerance
- Deep rooting sweet clover and chicory
- Additional benefits for soil structure and fertility
- Contains intermediate perennial ryegrass, cocksfoot, strong creeping red fescue, meadow fescue, timothy, tall fescue, alsike clover, birdsfoot trefoil, chicory, red clover, ranger plantain, sheeps burnet, sheeps parsley, sweet clover, white clover, yarrow

- » Seed treatment – re-cleaned only
- » Bag size – 20kg (sow at 30kg/ha)

GWCT PARTRIDGE PROJECT MIXES

These mixes have been developed in conjunction with the GWCT and European partners to help the grey partridge recover its range across Europe.

Both mixes are suitable for the Countryside Stewardship Scheme. For every hectare pack of the GWCT PARTRIDGE project mixes that you purchase, Oakbank will make a donation to the project. Last year that donation amounted to £9600 so please keep buying these mixes and supporting the trust.



GWCT PARTRIDGE WILD BIRD MIX

✓ ELS
✓ HLS
✓ CSS

- Contains triticale, perennial rye, sunflowers, sweet fennel, lucerne, kale, fodder radish, mustard, camelina, chicory, teasel, vetch

- » Seed treatment – Redigo Pro (triticale), Take-off (kale), nitrogen gold inoculum (lucerne)
- » Bag size – 20kg (hectare)

GWCT ADVANCED PARTRIDGE MIX

✓ ELS
✓ HLS
✓ CSS

- Contains seed bearing species such as teasel, stubble turnips, triticale, kale, millet, sunflower and perennial rye; structural plants such as chicory and sweet fennel and a host of flowering species, both annuals (cornflower, corn cockle, corn poppy) and perennials (sainfoin, red campion, yarrow, oxeye daisy, wild carrot, black knapweed, self heal, lucerne, musk mallow, birdsfoot trefoil, common st.johns wort, vipers bugloss and goatsbeard)

- » Bag size – 12kg (hectare)

COVER CROPS FOR SOIL HEALTH

Oakbank is actively involved with this increasingly important market, including substantial trials with our colleagues at Velcourt. We offer a complete range of species for these uses including:

- Black oats
- Forage rye
- Legumes – Berseem clover, vetches, crimson clover
- SMART radish
- Daikon and Oil radish
- Buckwheat
- Phacelia

We are able to offer these species in straight form or we can create mixtures for your particular purpose. We have two standard mixes as follows:



SUMMER FALLOW MIX

- Contains buckwheat, crimson clover, linseed, oil radish, phacelia, SMART radish, spring vetch, sunflowers

- » Seed treatment – re-cleaned only
- » Bag size – 20kg (hectare)



SOILS & STOCK MIX

- Contains forage rye, Barkant stubble turnip, Jupiter stubble turnips, Spitfire kale rape, winter vetch, crimson clover, berseem clover

- » Seed treatment – re-cleaned only
- » Bag size – 25kg (hectare)

COMPANION CROPS



Oakbank has pioneered the use of companion crops with oilseed rape for a number of years as well as the use of small leaved clovers as 'living mulches'. Again we can supply straights such as fenugreek and small leaved white clover as well as the species listed in the cover crop section above, but as a companion crop our standard mix is our most popular. It provides a mix of benefits to help establish the crop and combat CSFB pressure.

- Contains Buckwheat; Berseem Clover; Fenugreek
- » Bag size – 25kg (sow at 10-12kg/ha)

AMENITY

- Grass seed for lawns, sports pitches, landscaping
- Horse paddock grass
- Wild flowers

FORAGE

- Short and long term leys
- Specialist silage and haylage leys
- Traditional pasture meadows

TREES/SHRUBS/HEDGING

All of our bare root trees and shrubs are sourced from a fantastic family run nursery in Yorkshire whilst our cell grown material comes from Cheviot trees in the Borders and Rymer Trees in Suffolk. The provenance and quality of the plants is second-to-none and we are very competitively priced. From 60cm bare-rooted whips to cell grown plants, pot grown shrubs and standard trees we can supply whatever your hedging/tree planting/shrubby area creation project requires.

- 30-90cm hedging whips plus spirals and canes
 - » Multiples of 25 plants per species
- 20-60cm cell grown plants
 - » Multiples of 10 plants per species
- 6-8ft Standard Trees plus tubex guards and stakes
- 30-90cm shrubs plus shrub shelters and stakes
 - » Multiples of 25 plants per species



I have long followed the Acres USA organisation and their regular publication is an excellent source of information around Regenerative and Organic Agriculture.

In order to learn from some of the world's leading authorities in this area, I travelled to their Annual Conference in Covington, Kentucky which is just across the Ohio river from Cincinnati. After an uneventful flight from Heathrow to Chicago O'Hare airport, I drove my rental car down Interstate 65 through Indiana, heading south. I drove past thousands of acres of arable land and, although there was clearly a move toward no-till in some areas, there was precious little sign of any cover crops!

The first day of the conference was an all-day session with John Kempf and Rick Clark, two gentlemen who I have heard speak on numerous occasions but who always expand my knowledge. The first topic was on forms of nitrogen and how the different forms behave very differently. John discussed how nitrates deliver a vegetative response from the plant, something that often makes growers feel good quite quickly as their crop looks better for it. However, this response is driven by auxins in the plant and it creates quite weak growth that can be prone to attack from disease and pests. Compare this with plants that absorb ammonium from the soil, where the plant converts it into peptides and amino acids, followed by the formation of complete proteins. This is a much more efficient process in terms of energy and water use - John suggested that it is 4 times better than the same effect derived from nitrates. Building organic nitrogen sources in the soil, through the use of cover crops has many benefits for the crop. Ammonium is not leachable and it can remain in the soil for a very long time as an exchangeable cation on the soil colloids. In research it has been shown that maize can use 18% of its daily energy as well as three times more water to convert nitrate into protein and achieve the same level of nutrition that it would derive from ammonium.

John went on to say he accepted that farmers would still apply AN or Urea, but he emphasised the need to add a carbon source (humates, etc) and strongly recommended adding 10%

sulphur for every kilo of nitrogen applied, as this helps to build the amino acids. His preferred form of sulphur is ammonium thiosulphate.

Rick Clark built on this conversation by referring to the salt content in ammonium nitrate and how toxic this is for soil biology. He clearly pays a lot of attention to his soil biology, from the microscopic bacteria and fungi, through to the earthworms. His soils are estimated to have approximately 1.5 million earthworms per acre! This becomes important when you understand the role they play in creating macropores for oxygen to get into the soil matrix. Rick also discussed how worm castings have 5 times the nutrient of the soil that they ingest, plus they help to neutralise the soil as the pH of the castings is usually around 7.2-7.4.

Rick and John went on to discuss how cover crops are crucial to build up soil organic matter (SOM) which in turn helps biological processes to help rebuild soil structure. Soil structure can significantly influence the type of weeds that farmers will battle with. For anyone with blackgrass issues this was particularly interesting as most grass weeds enjoy a well aggregated upper layer combined with a compacted layer beneath. This creates an environment where gas exchange is poor and, for grasses, part of their life cycle is anaerobic (also true of thistles). Grass weeds are also strongly associated with low levels of available calcium and boron.

Carbon was a strong theme of Day 2, where I spent the whole day listening to Dr Kris Nichols who runs KRIS – Knowledge for Regeneration and Innovation in Soil. She is well known to members of BASE-UK as she has done webinars for the no-till farming group in the past. Her first question was "If all nutrients were equal, what is the one that would limit production" - Answer: Carbon! Every molecule and every cell is carbon based, but not all carbon is equal. Root exudates, particularly from multi-species cover crops or pastures were crucial for soil regeneration. Dr Nichols showed some incredible images of root exudates leaking out of root hairs and discussed how this was the carbon currency in the soil, exchanged with the biology for nutrients, water, etc.

Dr Nichols put the challenge for a new type of agriculture in the context of what is happening today in the USA. There are approximately 900 million acres being farmed, of which about 12% is done by No-Till, but only about 2% has any cover crop usage (that is still 18 million acres!) This area is growing all the time through various incentive schemes and carbon programs.

Dr Jonathan Lundgren is an award-winning entomologist who runs the Ecdysis Foundation in South Dakota. He is running a project called the "1000 Farm Initiative" that will demonstrate the power of regenerative agriculture on a network of farms, where they will assess the status of key agronomic, ecological and economic factors. It is a huge project but they are already making great progress. One to follow! (www.ecdysis.bio)

One of my favourite presentations was from Dr James White, who was presenting his work on rhizophagy, where roots literally ingest soil biology to extract nutrients and DNA. Some of the microscopy he used to demonstrate this was remarkable, but it showed how this process happened at the root tips. It is thought that some root exudates are used like bait to attract the right microbes for the plant. Dr White's work suggests that this process is very important for the supply of manganese, iron, calcium and magnesium to the plant. As multi-species crops produce a wider range of microbes, so the plants have a wider variety of nutrients available. This may well lead to changes in nutrient density in the produce, making it better for us to eat.

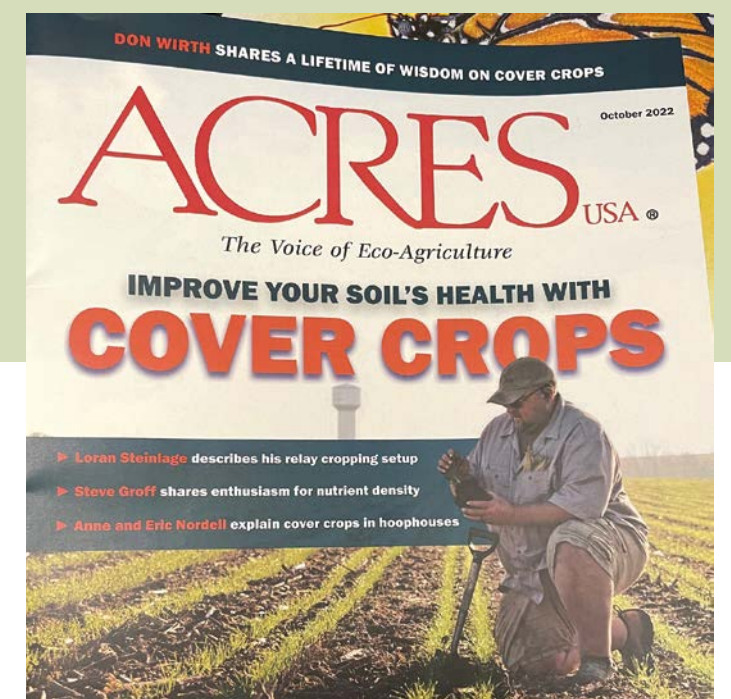
The final session for me was with Professor Don Huber of Purdue University. This gentleman is in his mid-80s and is as sharp as a tack, speaking with great authority about managing plant disease with nutrition. He gave some examples of where disease is linked to deficiencies of particular nutrients:

- Take All is strongly associated with low availability of manganese and / or copper.
- Wheat Ergot is strongly linked to a deficiency of copper
- Verticillium Wilt + Common Scab in potatoes connected with manganese deficiency
- Frost resistance can be increased in some crops by using nutrition (Copper is key)

This was the third time that I had visited a Conference in the US, as before, I received a warm welcome, learned a huge amount and made several new friends that will continue my learning journey for many months and years to come. It is well worth getting out of your familiar surroundings to shake up a few entrenched thoughts and investigate new ideas. It is something that the Nuffield Foundation does so well with its delegates each year. I only wish I had discovered it sooner in my career! Hopefully I encouraged a few of the attendees to make a return trip to Groundswell this summer. The only downside of this trip was my journey home, where I hit a deer on the highway, spent about 10 hours being messed around by the car hire company, missed my flight and got home 24 hours late. Even with that rather stressful interlude, the trip was a real success and I look forward to applying what I learned this year.



Rick Clark



OAKBANK WOODLAND DIVISION

SERVICES



WOODLAND MANAGEMENT PLANNING

- Multifaceted and comprehensive woodland management plans
- Concise, operational woodland management plans
- Ancient Woodland Restoration Plans
- Felling licence applications and assistance

We are able to offer all levels of assistance, from detailed woodland management plans for semi-natural, ancient woodland and SSSI's, through to more concise plans for simple woodland improvements and to enable felling licences. We also offer one-off visits to discuss and advise on your woodland management and to mark up your thinnings to maximise your crop potential for the future. We specialise in advising on how to improve your woodland ecologically, for game shooting and to maximise the potential economic return. Whatever your woodland needs, we can assist.

NEW WOODLAND CREATION

- Grant application
- Assisting woodland design and layout planning
- Contractor engagement
- Supply of trees, shrubs and protection
- Management of site Health and Safety

We are experienced at planning, administering and managing new woodland planting schemes for all requirements. If you are an estate manager wanting to plant new woods for shoot improvements or a Town Council Clerk wishing to plant an area of public amenity woodland, we know how best to achieve it and we are here to help.

GRANT APPLICATIONS AND FUNDING GUIDANCE AND ASSISTANCE

- English Woodland Creation Offer
- CS Woodland Creation Planning Grant
- CS Woodland Management Plan Grant
- CS Woodland Tree Health Grant
- CS Woodland Improvement Grant
- Woodland Carbon Code
- Ancient Woodland Restoration Plans

We have a very good understanding of these complex grants and can assist you in securing these important income streams for your woodland. Whether it be new woodland creation, woodland management plans or funding to restore and improve woodland affected with Chalara ash dieback or *Phytophthora ramorum* (larch and chestnut), Oakbank is here to help.

TREE RISK MANAGEMENT

- Guidance on tree risk strategy to suite your needs and tree stock
- Production of Risk Management Policy
- Carry out tree hazard inspections and provision of written reports
- Contractor engagement
- Management of site Health and Safety

Managing the risk posed by trees is acknowledged as an essential part of managing any land holding, and we have extensive experience in this field. We can advise you on the most cost effective and reasonable approach to managing your tree stock. Implementing a proactive and defensible system need not be particularly onerous in terms of time or cost but would prove invaluable in the event of a tree related incident. Call us now to discuss implementing a workable tree risk management strategy.

WOODLAND OPERATIONAL MANAGEMENT

- Marking of trees for thinning and harvesting operations
- Woodland Maintenance Management
- Contractor engagement
- Timber harvesting and marketing
- Management of site Health and Safety

Oakbank can help you plan, arrange and supervise all of your woodland operations, including timber harvesting, be it through contractor engagement or through negotiated or tendered standing sales. We can manage your coppice cutting and fencing requirements, your new woodland planting or young woodland maintenance needs such as spraying, replacing failed trees (known as beating up) or tube maintenance. We have a portfolio of trusted contractors and timber buyers ready to work for you.

MANAGEMENT OF ANCIENT AND VETERAN TREES

- Guidance on sensitive management of these important structures and habitats
- Carry out inspections and provide reports and guidance for managing specific trees
- Contractor engagement
- Management of site Health and Safety

Ancient and veteran trees are beyond normal maturity for their species and are therefore relatively rare and incredibly important habitats within our ecosystem and our landscape. These structures require specific care, presenting a unique set of management challenges, which differ from conventional arboriculture, including the management of land surrounding the trees themselves and management to prevent structural failure. We have a lot of experience in the management of these irreplaceable elements of our heritage and would be delighted to assist you in the management of yours.



A YEAR AS A FORESTRY GRADUATE

BY MAX BATTISON

Max Battison joined Oakbank in October 2021 under the Royal Forestry Society Forestry Roots programme for Forestry graduates. His year with us was so impressive that we had no hesitation in offering him a woodland consultancy role, which he started in October 2022. Here he explains just how much he learned in his placement year with us.

My year with Oakbank as a Forestry Roots Graduate was incredibly rewarding and I learned a huge amount, thanks to the support and training given by Ross and the team. Much of it was learning the practical applications for some of the theory learned on my degree course, and the variety of work that I got involved with really opened my eyes to the opportunities within the sector. From writing woodland management plans and overseeing felling and planting operations to completing tree risk inspections and helping with grant applications for new woodland planting. In addition, the diversity of clients with whom Oakbank works has allowed me to gain a greater understanding of good forestry practice on all scales of the spectrum.

One of the biggest learning curves was completing tree risk hazard surveys. Learning what to look for in the tree's reaction to defects caused by certain factors is something that interests me greatly. I'd had very little experience of this prior to starting at Oakbank but by going out with their arb team and completing my basic tree inspection training, I now have my Professional Tree Inspectors qualification. This has enabled me to complete several tree risk surveys, most recently a festival site on an estate where I also completed the management plan for 250ha of woodland.

I have also been involved with helping clients' apply for the English Woodland Creation Offer (EWCO). It is refreshing to see that this generous grant is being utilised by so many to help increase the country's tree cover and realise the future potential for properly managed woodland. In tandem with these EWCO applications is the woodland carbon code and woodland carbon calculator. I have been learning how to use these to help landowners register their planting scheme to potentially deliver additional income through the sale of carbon credits.

I have enjoyed the balance between outdoor and office-based work. This balance has allowed me to build relationships with the team around me at Oakbank, not just within the woodland division but also with the Countryside Stewardship and Regenerative Agriculture sides of the business. Working in this environment, I have been able to learn about land management from the points of view of many different people, with differing objectives, yet ultimately with the same common goal of proper management of our countryside for the benefit of people, biodiversity and climate resilience.

My advice to anyone wanting to follow a similar career in forestry is to get involved with as much as you can to gain a greater understanding of woodland management. Gaining experience in any practical aspect of forestry, whether this be at a volunteer tree planting day or having a job as a chainsaw operator, will help with understanding of good forestry practice. I found that volunteering was a great way to get out into the woods and help with multiple projects that helped improve my knowledge and put class taught theory into action.

A NOVEL MARKET FOR ASH TREES

BY DAN SMALL



Ash (*Fraxinus excelsior*) is a broadleaf tree, native to the U.K. and common throughout Great Britain. It is a high canopy tree, which means that when it is mature it can be one of the tallest trees within a woodland.

The airy canopy and early leaf fall provided by ash allows sunlight to reach the woodland floor, providing optimum conditions for wildflowers such as dog violet, wild garlic and dog's mercury. In turn, these support a range of insects such as the rare and threatened high brown fritillary butterfly. Because the trees are so long-lived, they support deadwood specialists such as the lesser stag beetle.

Ash timber has many uses but one that not many of our readers will know about is the manufacture of hurleys! Unless you are a fan of Gaelic sports you have probably never heard of a hurley so here is a brief synopsis.

Hurling is a Gaelic sport with its traditions set in the mists of ancient Irish history. The first written reference to hurling dates back to 1272 BC. It is a fast and furious, stick and ball game, played by teams of 15 on a rectangular grass pitch with H-shaped goals at each end. The stick that is used is called a 'hurley', or a camán in Gaelic. The primary objective is to score by hitting the small, hard ball (similar to a baseball) past the goalkeeper and into the net for three points, although a single point can be scored by hitting the ball between the uprights but above the crossbar.

The hurley is a long stick, which is similar in size and dimension to a hockey stick but with a broader base. It is traditionally made from ash and specifically the bottom 1.3m of an ash tree, to take advantage of the grain running down and along the root buttresses. The sweeping grain at the base of the hurley allows for a strong stick which can cope with the wear and tear of hurling.

Ash is used to make hurleys because of its strength and its flexibility. This means that it can cope with striking a dense ball, numerous times and the vibrations and impacts are soaked up by the stick. For the same reason, ash is used for making handles for sledgehammers and axes and it is even used in the manufacture of cars - Morgan uses ash in the construction of the frame and body of the car.

When felling an ash tree for the hurley market, a different felling technique is needed. The hurley makers need to use the curved grain that runs into the root buttresses and therefore the cutter has to bore into the root ball with a chainsaw to extract the necessary timber. Typically, the tree will be felled with a harvester at 1.3m in height, which leaves a very tall stump for the experienced Hurley cutters to fell and extract. Once at the ride side, these hurley 'butts' are then loaded into a lorry and exported to Ireland where they are milled and processed into hurleys.



Selling timber into the hurley market demands specific attributes from the tree, notably it must have:

- A clean stem up to 1.3m – no side branches or large knots
- 20-40cm diameter at 1.3m height
- A straight stem, with minimal sweeps or bends
- Prominent root buttresses
- No rot or discolouration in the timber (although this is difficult to tell until the tree is felled)



A good stand of ash with these attributes, relatively easy access, short and flat extraction routes and a large enough quantity for the buyer, will fetch a premium. At the time of writing this could be £300+ per cubic metre for a standing tree (around 10 times the value of firewood). With the bottom 1.3m of the tree accounted for, the remainder of the tree can be processed into other markets such as firewood and biomass. The only costs that the tree owner may incur are things like preparation of a felling licence, access improvements and restocking after a felling operation.

Accessing the niche market for hurley does require additional time but in the right scenario the financial benefit will far outweigh the additional costs incurred. High-value markets such as this are especially important when clear-felling or regeneration felling of ash, due to the conditions required to restock the areas, which will be enforced by the forestry commission.

As you would expect, Ash Dieback does influence this market as the *Hymenoscyphus fraxineus* fungus affects the structural integrity of the timber and the colour of the wood, both of which can de-value or rule out the opportunity for hurley.



LEICESTERSHIRE CASE STUDY

Mature ancient woodland with ash/oak canopy and hazel understory. Thinned (removal of around 30% of the canopy - 3.75ha) and regeneration felled (felling of large groups of tree to facilitate restocking of young trees - 6.3ha) to remove diseased ash and restock with a native broadleaf mix. This will improve the resilience, add a new age structure and protect the long-term sustainability of this woodland.

Income:

- 80m³ of Hurley at £300/m³ = £24,000
- 285t of Hardwood Chip at £17/t = £4845
- 1135t of Firewood at £32/t = £36,320
- Total - £65,165.

Expenditure:

- Professional fees - £5000
 - » Survey and Management Advice
 - » Felling Licence Approval
 - » Woodland Tree Health Grant application
 - » Competitive standing timber sale
 - » Management of felling operation
 - » Sale and Measurement of Hurley Butts
 - » Sourcing and securing of planting stock
 - » Management of restocking operation
- Restocking - £44,000
 - » Plants
 - » Stakes and guards
 - » Labour
- Total - £49,000

Balance:

- +£16,165

TREE HEALTH UPDATE

As a landowner or land manager you are probably aware of an increase in tree ailments turning up in the UK over the past few years. To those of us in the forestry industry, sadly it feels like a monthly occurrence. The main one we will all be well aware of is ash dieback, purely because of the widespread and devastating nature of its effects on our ash population. Forest Research have reported that there were 5 tree pest and disease outbreaks in the 32 years between 1970 and 2002, and then a further 20 in the last 20 years since – a rapid increase!

WHY THE INCREASE?

The huge increase is essentially down to imports, not only of plants, but of plant-based products, soil and composts, wood and other tree related products such as wood packaging and dunnage. This is down to the growing demand for a wider range of trees and plants, predominantly in our gardens, increased demand for instant impact trees (large size makes them far more difficult to check at our borders), and a significant increase in global trade and increase in ship capacities, resulting in 8 million containers arriving in the UK annually, many of which will contain organic material.

Add to this that tree pests and diseases are very small and so hard to detect at our borders. They come in as Insects, bacterium, fungi or Oomycete (fungus-like eukaryotic microorganisms) and most cannot be seen with human eye and can pass our borders undetected.

DETAILS ON MOST RECENT SIGNIFICANT TREE PEST AND DISEASES

Ash Dieback - *Hymenoscyphus fraxineus*

Ash dieback (ADB) is a highly destructive disease of all ash trees, especially the United Kingdom's native ash species, common ash (*Fraxinus excelsior*). It is caused by a fungus which is of eastern Asian origin. ADB is present in most parts of the UK now and its effects are most visible in regions where the fungus has been present for the longest time, where local conditions are most suitable for the fungus and where the trees are already stressed (too wet or too dry growing conditions). It is predicted that >75% of all ash trees will perish and so managing this species where it is in abundance is essential.



Ash in decline – note healthier ash tree behind.



Young Ash all Dead due to ADB

Oak Processionary Moth - *Thaumetopoea processionea*

The caterpillars of oak processionary moth (OPM) are pests of oak trees and a hazard to human and animal health. OPM was first introduced (imported on large oak trees) to England in 2005 and is subject to a government-led programme of survey and control to minimise its population, spread and impacts. OPM is established in most of Greater London and now in surrounding counties, making its way up main artery main roads, as moths are drawn by traffic draught movement, and so making its way steadily into South England, East Midlands and East Anglia.

Tree Health Implications

OPM is a tree pest because its caterpillars feed on the leaves of several species of oak trees. Large populations can strip whole oak trees bare, leaving them more vulnerable to other pests and diseases, and to other stresses, such as drought.

Human and Animal Health Implications

Older caterpillars develop tiny hairs containing an irritating protein called thaumetopoein, from which the species derives part of its scientific name. Contact with the hairs can cause itching skin rashes (pictured below) and eye irritations, as well as sore throats and breathing difficulties in people and animals. The risk of exposure to these hairs is highest in May and June.



The caterpillars can shed the hairs when threatened or disturbed. The hairs can be blown by the wind and they accumulate in the caterpillars' nests, which can fall to the ground. They can stick to trunks, branches, grass and clothing.



- They have a distinctive habit of moving about in late spring and early summer in nose-to-tail processions, from which they derive their name. The processions are often arrow-headed, with one leader and subsequent rows of several caterpillars abreast.
- They live and feed almost exclusively on oak trees. They can sometimes be seen processing across the ground between oak trees.
- They are only seen in mid- to late spring and early summer (May, June and July).

What to Look Out For - Processions

In late spring and early summer look out for nose-to-tail caterpillar processions, from which they derive their name (see picture).

What to Look Out For - Nests

- nests are built in early summer;
- are made on the trunks and branches of oak trees;
- are almost never made among the leaves of oak trees, on any other tree or shrub species, on fences, walls and similar structures. Such nests are usually made by harmless species, and need not be reported;
- are made of distinctive, white, silken webbing, and are accompanied by white, silken trails on the trunks and branches of oak trees;
- range in size from a few centimetres wide to stretching several feet across;
- can occur anywhere from ground level to high in the oak tree;
- can fall out of oak trees and be found on the ground; and can remain attached to the trees for many months, after the larvae have pupated and the adult moths have emerged.

Health precautions

- **do not** touch or approach OPM nests or caterpillars;
- **do not** let children or animals touch or approach nests or caterpillars;
- **do not** try removing nests or caterpillars yourself; and
- **avoid** or minimise time spent under or downwind of infested oak trees, especially on windy days in summer.
- **do** keep horses and livestock a safe distance from infested oak trees – cordoning off infested trees, covering and stabling can help;
- **do** see a pharmacist for relief from skin or eye irritations after suspected OPM contact;
- **do** call NHS111 or see a doctor if you think you or someone in your care has had a serious allergic reaction - tell the doctor you suspect OPM contact;
- **do** consult a veterinary surgeon if you think your pet or livestock has been seriously affected - tell the vet you suspect OPM contact;
- **do** call in an arborist or pest control expert with relevant expertise to remove infestations in your own trees. Your local council, the British Pest Control Association or the Forestry Commission can provide a list of suitable operators in your area; and if you work on or near oak trees in the affected areas, for example, as a tree surgeon or forestry, landscaping or ground-care worker, wear full protective clothing.

Acute oak decline (AOD)

AOD is an emerging disease of oak trees which was first observed in the UK late in the 20th century. It can kill oak trees within four to six years of the onset of symptoms.



The disease is found mostly on mature oak trees, but younger trees can also be affected. It is caused by multiple agents, especially bacteria, and thousands of trees are affected. For infection to occur, it is likely the trees need to be weakened by certain factors, especially environmental factors. The disease is present in warm, drought-prone parts of the UK where there are also high levels of airborne nitrogen pollution and low dry sulphur levels.

It is found mostly in south-eastern, central and eastern England, and in the Welsh Borders and South-East Wales. As of late 2022 it had not been reported in Scotland or Northern Ireland.

The threat

Oak trees play significant roles in our economy, landscape, biodiversity, environment and culture. Oak timber is one of our most valuable woodland products, and hundreds of jobs and businesses depend on it to some extent. Oak trees are ecologically very important, supporting rich woodland biodiversity by providing habitat for more other species than any other tree species in the UK.

Affected trees have dark-coloured, stem bleeds, which seep black fluid through vertical cracks between bark plates and down the trunks, as in the first, second and fourth pictures above. A lesion (decayed tissue) forms in the live tissue beneath the bleeds. The second picture above shows the severe cracks in the bark which the disease can cause at bleed sites.

D-shaped exit holes (below) made by emerging two-spotted oak buprestid beetles (*Agrilus biguttatus*) might be present in the bark plates of affected trees - about a third of cases show this. These holes are approximately 4mm wide and 3mm high. Their presence on affected trees is consistent with their preference for declining oak trees as habitat. However, in large numbers - and their numbers have been increasing since the 1980s - these insects are themselves a threat to oak trees. This is because their larvae's wood-boring activities can kill trees, which, in some cases, might otherwise have recovered from decline. It is therefore likely that they exacerbate the effects of acute oak decline and hasten its progress. They possibly also contribute to its spread by carrying the causative bacteria from affected trees to healthy trees.



AOD Disease mechanism

AOD is a complex disease which, as discussed, manifests itself on the stems of oak trees as patches of black fluid weeping from cracks in the bark, which cover rotting tissue. In severe cases this stem rot can encircle almost the entire girth of the tree, preventing it from moving water and nutrients, essential for growth, up and down the stem. The trees become weak as a result, and can die within four to six years of the onset of symptoms. This is a rapid rate of decline for trees, which is why the disease is described as acute.

Phytophthora pluvialis

The very latest tree pest to hit our shores *Phytophthora pluvialis*, was confirmed in Cornwall, Cumbria and north-west Scotland in September 2021. This fungus-like pathogen is known to affect Western hemlock, Douglas fir, Tanoak, and several pine species (all of which other than Tanoak, are prominent UK commercial timber species). Demarcation areas to stop the spread are now in place. The UK is the first country in Europe to report *Phytophthora pluvialis* and there are still a lot of unknowns.

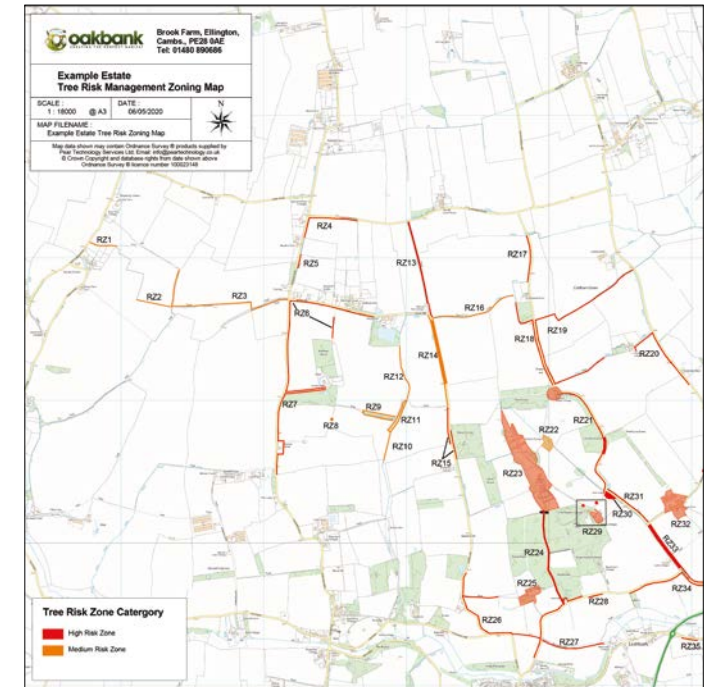
Phytophthora pluvialis is known to cause needle cast, shoot dieback, and lesions on the stem, branches, and roots and so could potentially be economically devastating to the UK Forestry Industry.

'Spot it, report it' is the mantra everyone is being encouraged to adopt with regards to Tree P&D's.

We can assist you with any suspected sightings, subsequent Plant Health Notice actions and any remediation work.

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YOUR TREES AND RISK MANAGEMENT



THE LEGAL BIT

Under both civil and criminal law, the owner of land on which a tree stands has responsibilities for the health and safety of those on or near the land and has potential liabilities arising from the falling of a tree or branches from a tree. All landowners therefore have a statutory duty of care to ensure (as far as is reasonably practical) that every asset, including the trees located on their land, is unlikely to cause harm.

IT'S ABOUT BALANCE

In practice, this requires a balance between the interests of the owners of trees, those of the people that may be harmed by them and those of the public. It is not possible to ensure complete and guaranteed safety unless no trees are present.

The primary means of managing the risk from trees is the implementation of a regime that evaluates and inspects trees on a regular basis (not necessarily annually) to determine their safety.

Trees are a very important part of the overall landscape and their presence has many different benefits depending on how the land is used and where they are situated. An important part of land management must be the impact and risk it has on the human population. Tree felling is an emotive subject, so the measures that are taken must comply with current legislation but also be in context with the location and the number of people who could potentially be harmed, against what is reasonable and practicable to protect and manage the tree.

In order to reduce this risk, tree owners, landowners and land managers are required to "take a balanced and proportionate approach to tree management". This is generally through establishing an operating procedure concerning their trees and a methodical approach to inspection, recording findings and carrying out remedial treatments.

TREE RISK MANAGEMENT PROCESS

The following 5 steps make up a robust strategy for tree safety management where an establishment has a large tree population. Smaller establishments, with fewer trees need only have certain trees periodically checked to cover duty of care.

Step 1: Farm / Estate Policy. A simple policy document needs to be in place identifying what the Estate intends to do to manage the risk posed by its trees.

Step 2: Zoning. This is a process where areas of land are defined according to their level of use and tree stock present. For a programme of tree inspections to be manageable, resources need to be directed primarily to areas where the risk are potentially highest.

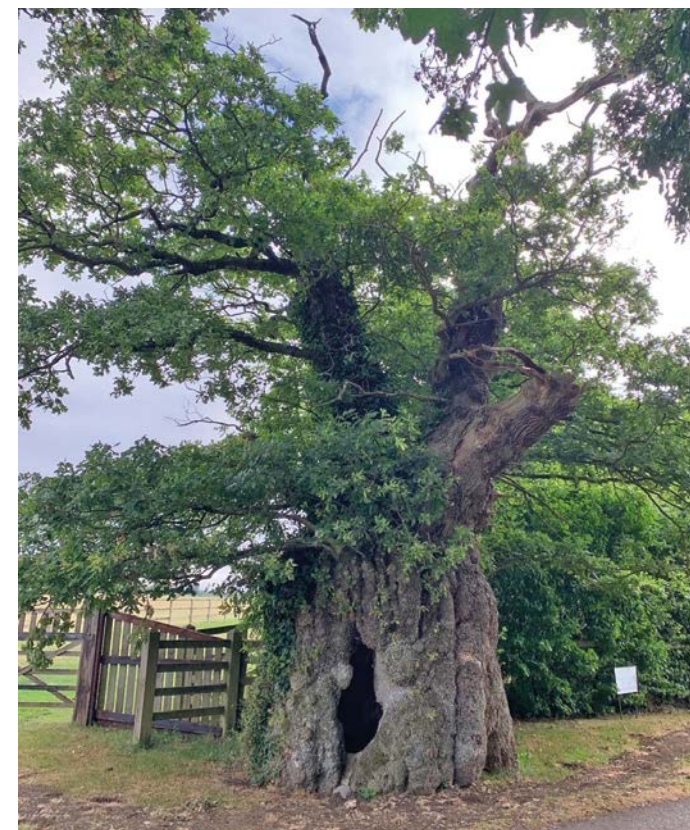
Step 3: Tree Inspection. All trees identified in risk zones will be subject to planned inspection programme.

Step 4: Managing risk at an acceptable level. Any remedial action identified during inspections should be recorded and carried out in a timely manner.

Step 5: Record Keeping. All records including maps, form the basis for safety management reviews and in the case of an accident or incident, will be the essential evidence of an estate wide defensible tree management process.

RECENT EXPERIENCE

A good client of ours had a tree related incident just before Christmas, whereby a member of the public was harmed on a footpath running through their land. Whilst this incident has not been concluded yet, it is easily demonstrated by the land-owner that they had done everything that is reasonable with regards to their legal duty of care, and the policy and inspection process, which we developed on their behalf, provides a robust tree hazard management strategy for all to see.



CONCLUSION

The days of claims of 'act of god' when a tree causes an accident are now well and truly gone, as for the most part, tree failures are 'foreseeable'. This essentially means that when a tree falls over in high winds, it most likely failed as a result of being dead, internal decay, or due to the effects of a wood decay fungus or other defect, all of which would likely have been detected during a tree inspection. Therefore, tree hazard management is now commonplace across the rural management community and insurance companies are beginning to look more closely at tree related incidents. Tree inspections do not guarantee that your trees are safe, rather they demonstrate that you as a landowner or manager have done all that is reasonable to prevent harm to others from trees under your responsibility.

The development of these tree hazard management documents including policy, zone mapping and forward planning of inspections is not particularly time consuming and therefore an expensive exercise. However, they form the foundations of a long term, cost effective and reasonable approach to managing trees to ensure that a proactive and defensible system is in place for the future.



NOTES FROM A FARM SHOOT 2022

BY ETHAN POWELL

It was a day to leave the coats in the car as we met for the first shoot of the season on a remarkably warm October morning. A handful of trees had just begun to turn a wonderful rusty orange against the backdrop of green, framed against the cloudy blue sky. A beautiful day to be out in the countryside. Thankfully it wasn't too bright, and there was a bit of breeze about, as much to cool the beaters down as to make the birds fly well!



Despite the mild temperature, there was still a good amount of game holding up in the covers and in the bottom of the hedges, providing a good showing from the first drive. As the second was brought in, a covey of redleg partridges floated down the hedge line and dropped into a spinney. It wasn't long before they were on the move again, but on seeing the flags they balled up and rolled over the hedge, breaking over the top of an oak tree further on as they hit the wind. A cacophony of shots echoed as they spread across a rather happy line of guns - a mood which continued throughout the day.

Now into its second year, the Countryside Stewardship scheme on the farm is delivering well. The autumn sown bumblebird mixes (AB16), which were drilled in September 2021, have been fantastic. Given the dry summer, having some cover already up and away was a bonus, and helped out where the maize struggled. As things cooled down, the pheasants enjoyed tucking up in them, and plenty of seed was still available from the mix of cereals and brassicas. As well as the winter cover, they also provided a generous source of nectar throughout the summer. As the phacelia, fodder radish, crimson clover and trefoil

came into bloom, the plots and were awash with colour and became a real haven for insects and the wildlife that feeds on the insects, including pheasant and partridge chicks.

A new stewardship option for the farm in this scheme is the cultivated areas for arable plants (AB11). Established last autumn, they did exactly what it says on the tin, as both sharp and round leaved fluellen started popping up all over the margins, alongside the usual suspects such as groundsel, speedwell and mayweed. The open ground the option delivered also doubled up as nesting habitat for solitary mining bees, as well as giving the partridges some dirt to bask in when the sun was out.

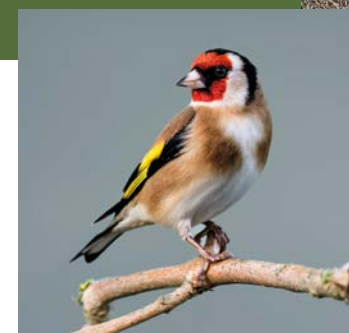
The farm hosted the Oakbank stewardship team for a day in July, with the hopes of spying some turtle doves. We didn't have to wait long! As we arrived and stood in the shade of a barn a turtle dove landed in the top of an adjacent hedge, but he didn't stick around for long. As the day drew on into the mid-afternoon, we took a walk up to the orchard where half a dozen could be seen from one spot. One male perched atop an oak tree gently purring, whilst the rest displayed over the meadow - they had heard we were coming and

decided to put on a show! The tall scrubby hedges around the orchard make for perfect nest sites, with a pond close by for water and supplementary feed spread on the track, the doves have their own little oasis. It was a good breeding year for them again, with 6 pairs and 5 juveniles fledged. Ringing numbers for other farmland birds have also been excellent, a grand total of 7,306 in 2022 with 3,920 of these new individuals and 3,386 re-traps. Some of the more notable of these included 949 yellowhammers, 579 goldfinches, 136 blackcaps, 20 whitethroats, 14 linnets and a little egret!

Not everything can go quite that smoothly though, can it? Maintenance works were needed on the main electric line running through the farm and after informing the utility contractors last year about the appropriate time to come, they decided, in their wisdom, to arrive in late May. Now this not only presented a problem for drilling covers and releasing birds, as many of the drives are located close by, but also for the existing habitat in their way. Jubilee meadow, seeded from green hay 20 years ago, is one of the most floristically diverse areas of the farm and is home to an abundance of wildlife. Unfortunately,

it is also situated right under the wires they needed to work on. The assured 'sympathetic' cut of the meadow over a few days was more akin to a biodiversity blitzkrieg, as the majority of the area was flattened in an afternoon... just in time to celebrate the Platinum Jubilee. One upshot was that a local botanist came out to survey the one-acre meadow beforehand and found over 60 species in an afternoon!

Hopefully next year will be less disruptive for wildlife and just as productive for the conservation on the farm. As the stewardship areas continue to develop, especially the floristic plots, we look forward to seeing what more they can deliver for nature. The success, as usual, is down to the dedication and passion of Graham Denny (farmer, keeper and my Uncle), who's hard work makes it all happen. Recording and ringing numbers this year demonstrate again that the effort pays off - invest in helping improve biodiversity on farm and nature will reward you.





2023

PURDEY AWARDS

FOR GAME & CONSERVATION

The Purdey Awards have been held annually since 1999 and seek to promote a wider appreciation of the outstanding game and habitat conservation work carried out by shoots throughout the United Kingdom and to give well-deserved recognition and reward to the best.

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