

nationalgrid

GRIDLINE

The magazine for landowners

Winter 2016

Christmas cheers

Share a wee festive dram as we reveal the secret ingredient of Scotland and possibly the UK's smallest distillery

Inside

From wartime bomb shelter to underground farm

The grantor putting the sprout back on the menu

Scott of the Antarctic's lasting wildlife legacy

nationalgrid

Some useful contact numbers

The Land & Business Support team are responsible for acquiring all rights and permissions from statutory authorities and landowners needed to install, operate and maintain National Grid's electricity and gas transmission networks.

The group acts as the main interface for landowners who have gas and electricity equipment installed on their land. Your local contacts are listed below.

ELECTRICITY AND GAS

» Land teams – all regions 0800 389 5113

WAYLEAVE PAYMENTS

» For information on wayleave payments, telephone the payments helpline on 0800 389 5113

CHANGE OF DETAILS

» To inform National Grid of changes in ownership or contact details, telephone 0800 389 5113 for electric and 01926 654844 for gas, or email grantorservices@nationalgrid.com

ELECTRICITY EMERGENCY

» Emergency calls to report pylon damage to National Grid can be made on 0800 404090. Note the tower's number – found just below the property plate – to help crews locate it

ELECTRIC AND MAGNETIC FIELDS

» For information on electric and magnetic fields, call the EMF information line on 08457 023270 (local call rate). Website: emfs.info

GAS EMERGENCY

» 0800 111 999

DIAL BEFORE YOU DIG

» Before carrying out any work in the vicinity of gas pipelines, overhead power lines or underground electric cables, you should contact Plant Protection on 0800 688588 so that searches can be made to determine the exact position of any National Grid assets

CUSTOMER COMMENTS

» Write to Land & Business Support, National Grid House, Warwick Technology Park, Gallows Hill, Warwick, Warwickshire CV34 6DA. Or email ld.customercomments@nationalgrid.com



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Christmas is a time to get together, and the same goes for migrant wildfowl, who flock to a safe haven in the West Country in huge numbers



Welcome



Hello and welcome to your festive edition of Gridline.

As we get ready for Christmas and the new year, it's only fitting that we feature two grantors responsible for the great Brussels sprout revival and the return to traditional whisky making.

We also dropped in on one of the UK's wetland reserves, which plays host to the biggest winter influx of birds, and an underground farm where the seasons simply don't matter.

Elsewhere, National Grid technician John Bethel reveals why it's important to dial before you dig. His warning comes as the UK Onshore Pipeline Operators' Association shows there were 870 recorded unnotified/uncontrolled excavations close to buried pipelines in 2015 – up 21% on the previous year.

Most incidents involved landowners and land managers or their contractors, with 84% occurring on farmland, private land or near roads and waterways.

Thanks for your continued support in keeping our records of your land ownership up to date. We're always keen to improve how we communicate with you, but if we could do things better, let us know in the enclosed survey or online at the Gridline website at gridline.nationalgrid.com

After you've completed it and the festive lull kicks in, don't forget to browse the same site for more Gridline stories. Meanwhile, all that remains for me to say is have a merry Christmas and prosperous New Year.

Dawn McCarroll
Editor, Gridline

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ONE-MINUTE INTERVIEW

Louise Blakey, land officer north-west and Scotland

BACKGROUND I joined National Grid as a land officer in July this year after employment at Babcock as a member of the property consultancy team, working on behalf of electricity distribution companies.

CURRENT FOCUS Working through the land officer development programme and gaining chartered surveyor status.

FAVOURITE FICTIONAL HERO Mary Poppins as she is practically perfect in every way!

THE SONG THAT MEANS MOST TO YOU Home by Michael Bublé.

MOST SCARED OF Snails, slugs and frogs... anything slimy. I stood on a jellyfish at the beach when I was little and have been terrified of slimy creatures since.

BEST BIT OF ADVICE YOU'VE BEEN GIVEN Shy barins get nowt - a north of England saying akin to 'if you don't ask, you don't get'.

DREAM JOB I love baking, so running my own little tea room would be amazing.

FAVOURITE HOLIDAY DESTINATION Italy, I just love everything about it.

IDEAL DINNER GUEST Beatrix Potter. As a child I read her books and would think how fascinating it would be to meet someone with such talent and imagination.

TOP OF BUCKET LIST To travel round New Zealand; I've always wanted to go there.

MOST TREASURED POSSESSION A small wooden chair that belonged to my grandparents.



Exotic pioneer wins top title

A groundbreaking farmer who introduced British consumers to many of the semi-exotic vegetables we take for granted has been named Farmer of the Year.

Nathan Dellicott, farm director of Barfoot Farms, was honoured in the prestigious Farmers Weekly Awards for his part in creating a specialist-crop-producing powerhouse.

Business founder Peter Barfoot set out on his

veg-producing journey in the early 70s on an eight-acre smallholding near Bognor Regis and the company now supplies vegetables to major supermarkets and restaurants from 2,430 hectares in West Sussex and Hampshire.

One of Nathan's triumphs has been to supply the market with tenderstem broccoli after being told it was impossible to grow in the UK. Courgettes, sweetcorn and butternut squash are among other breakthrough crops.

Despite large-scale intensive production, sustainability is at the heart of the business. Farm waste goes through an anaerobic digestion plant to create renewable energy, while resources have also been committed to improving flora and fauna.

Real Time Kinetic (RTK) satellite guidance technology ensures farm machinery uses only permitted routes through fields, reducing soil compaction as well as the use of resources on soil conditioning and fuel costs.



Image: Hugh Nutt

NEWSLINE

The latest news from National Grid and its landowner partners

DON'T SETTLE FOR LESS

If you wish to convert an existing electricity wayleave agreement into a permanent easement, you are reminded there's no need to be out of pocket if using an agent.

We advise you seek professional advice from a qualified chartered surveyor or agricultural valuer.

National Grid will pay reasonable agent's and solicitor's fees upon completion of the Deed of Grant, in accordance with its published Fee Scale.

So there should be no need to pay an agent any of the payment rightly due to you.

Contact us directly at box.electricityeasements@nationalgrid.com and to find out more on wayleave payments call 0800 389 5113.

Link with Denmark moves a step closer



National Grid and its Danish counterpart Energinet.dk have launched the tendering process for the new Viking Link 1400MW interconnector.

If granted planning permission, the 650km subsea cable would connect existing substations at Bicker Fen

in Lincolnshire and Revsing in Denmark and be fully operational by the end of 2022.

"Connecting to Denmark will allow Great Britain to trade with the wider European, Scandinavian and Nordic electricity markets and bring additional sources of renewable energy to Britain from Denmark and its neighbouring countries," said Alan Foster, director of European business development at National Grid.

Is it a bird? Is it a rocket? No, it's Electroman

Liam Hughes, a National Grid helicopter pilot, played his part in creating a very special day for seven-year-old Felix, who has a passion for electricity pylons.

Felix, who lives with a rare blood condition, is also on the autistic spectrum and is fascinated by electricity pylons. His father Steven contacted Make-A-Wish UK to help transform his son into the pylon-powered superhero Electroman as a birthday treat.

THRILLED

After being contacted by the charity, Liam and his manager John Rigby (above) arranged for Felix – dressed in his special Electroman costume – to accompany them on a routine flight assessing overhead power line maintenance needs.

During the 20-minute flight,

the little boy used the helicopter's camera to scan the pylons and substations.

Later, the helicopter put down at Luton airport, where Electroman, now joined by his sidekick Sparkgirl (sister Yael), repowered an easyJet plane that was struggling to take-off.

"We were thrilled to meet Felix and his family, and pleased to take a small amount of time out of our day to make his wish come true," said Liam.

"Obviously, we can't offer flights like this for everyone but it was great to meet Electroman – someone as passionate about pylons as we are!"



Gone in six seconds

Employees at National Grid's Grain LNG terminal in Kent had a grandstand view of the demolition of the UK's highest concrete structure when the 801ft chimney was detonated by demolition experts.

A huge amount of contingency planning, scheduling and forecasting was required by LNG staff as the demolition resulted in 40,000 tonnes of concrete landing just 800m from the plant boundary.

Importation terminal manager Simon Culkin said: "Our facility has been built to withstand earthquakes, but we were extremely vigilant to assess the risks and consider further mitigation measures."



Image: Edward Badley

IT'S A FACT!

MID-DECEMBER'S PEAK DEMAND OF 52.0 GIGAWATTS WOULD LIGHT UP **500 MILLION CHRISTMAS TREES**. THE 7,650KM OF HIGH-PRESSURE GAS PIPELINES IN THE UK ARE ENOUGH TO **STRETCH FROM LONDON TO DALLAS, USA.**



TAKE-OFF FOR BATTERY STORAGE

Eight new battery storage facilities to be built around the UK will play a key role in balancing energy supply and demand on the grid – in particular, the higher volatility that comes with renewable energy.

The move will contribute 201MW of

storage capacity. The first time battery storage has been used at grid scale, it is expected to save £200 million in four years, thanks to its ability to respond to changes in supply and demand in under a second – compared to 10 seconds by other solutions.



Digging FOR VICTORY

THE MAZE OF INTERCONNECTING TUNNELS WHERE THOUSANDS SHELTERED FROM THE LUFTWAFFE IS PLAYING HOST TO A NEW KIND OF FARMING, THANKS TO THE VISION OF GRANTOR TRANSPORT FOR LONDON

Low-energy LED lights create enough warmth and light to grow the leaves and give off a pleasant pink hue



The rhythmic deep rumble and occasional wail of brakes of Northern Line trains echo disturbingly close above our heads as we descend into the bowels of the capital.

Above us, thousands of passengers head through Clapham North en route to London's West End, blissfully unaware of the agricultural revolution taking place beneath them.

Down here, 108 feet below the bustling pavement, businessman-turned-farmer Steven Dring tends to a crop of micro greens and salad, which is causing a stir among New Covent Garden traders and perfectionist celebrity chefs alike.

A lifetime earlier, as German V2 rockets caused mayhem at street level, around 8,000 terrified Londoners sought refuge in the series of labyrinthine tunnels built as bomb shelters at the onset of war.

After the hostilities, the temporary fear-laden retreat of thousands – complete with bunk beds, hospital and even a mess – was forgotten as grantor Transport for London (TfL) concentrated on its core business of running the Underground.

The eight interconnecting tunnels, some more than

a kilometre in length, are a lasting and hugely impressive testament to the engineering capacity of a nation preparing to dig for victory.

Now nearly 80 years on, Steven and his friend Richard Ballard are keeping the spirit of the wartime slogan alive with their state-of-the-art Growing Underground (GU) farm, named in homage to rock band The Jam's Going Underground hit.

DRUNKEN CONVERSATIONS

If their business's presence is a surprise to Londoners, it's even more of a shock when Steven explains, in a lilting West Country accent redolent of working the land, that neither he nor his business partner have any previous knowledge of growing.

"It all started from a series of drunken conversations in the pub. We realised the only growth area was the green sector, so we wanted to do something sustainable with a low carbon footprint," said the former business logistics executive, who moved to the capital from Bristol 18 years ago.

The result was an attempt at setting up a farm in a tower block to make use of cheaper vertical space in >>

Steven checks and removes any salads failing to hit GU's high standards



"The sky's the limit... even though we can't see it down here"

Growing Underground

"We wanted to sell our produce within a small area to keep the footprint down and also to ensure freshness"



The same tunnels were once home to a frightened public and the channels where wasabi shoots grow were filled with bunks

London and close enough to the wholesalers, distributors and restaurants to ensure a four-hour target from packaged to plate.

That failed, but further research led the pair to the forgotten 65,000 square feet of tunnels near Clapham Common and a meeting with TfL bosses delighted that the tunnels, built in arcs in case they were ever needed for extra Tube lines, would be put to use once again.

HYDROPONIC GURU

What followed was a leap, literally, into the dark as the friends began growing the first crops wearing head torches while TfL began the process of lighting the space.

"It was very basic at first, but after getting the equipment from Finland and talking to hydroponic guru Chris Nelson, who has built these farms all over the world, we pressed ahead with trials of red oak lettuce and the results were spectacular," said Steven.

The farm now produces 18 types of greens, from fennel, with its subtle yet strong aniseed aftertaste, to lesser-known salads including wasabi mustard, red amaranth, pea shoots, celery and micro rocket.

The quality of the product hasn't gone unnoticed by Michelin-starred chef Michel Roux Jr, who has become a director, and traders at New Covent Garden, who have an unerring and brutal focus on price, quality, consistency and flavour.

Crowdfunding now totalling £1.2 million helped the friends to invest in LED lighting and ventilation, and work is advanced with university partners to investigate



the possibility of robotically moving the growing trays through the different stages.

Steven said: "After chitting, the seed trays are drenched in water, which then ebbs away to be refreshed with nutrients before being pumped back in again. Throughout the process, the LED lights go on and off and the temperature, humidity and carbon dioxide levels are controlled so that we are basically mimicking nature."

The slightest deviation in temperature is picked up by sensors, which alert one of the nine-strong team, who sow and cut around 70 metres of crop from 300 trays each day, ready for delivery to restaurants within the M25. "We wanted to sell our produce within a small area to keep the footprint down and also to ensure freshness, and we've been delighted with the response," said Steven.

"When we launched, we didn't want to find somewhere that would limit us. We had to do it on a commercial scale and, hopefully, we will hit profitability in a couple of years. From then on the sky's the limit... even though we can't see it down here."



For more information:
growing-underground.com

WATCH OUT THERE'S A PIPELINE ABOUT

PIPELINE TECHNICIAN JOHN BETHEL ON WHY IT'S VITAL TO GET IN TOUCH BEFORE WORKING NEAR GAS PIPELINES

John is out on a routine job in Gloucestershire where he's met by the farm owner's daughter and secretary, Helen Hughes.

It's a standard check of the gas marker posts, but John is soon in conversation; a part of the job he says is crucial to maintaining a good relationship between Grid and grantor.

Helen said: "National Grid are very good at letting us know when they need to come out. They know we run a business here, and the guys are very good when it comes to avoiding crops and shutting farm gates. We appreciate they have an important job to do and a bit of goodwill by both parties goes a long way."

IMMEDIATE HAZARD

John takes up the story: "Engineers like me keep a close eye on every metre of National Grid's 8,000km of gas transmission pipelines, ensuring they always operate efficiently and safely.

"If grantors are planning to work in the vicinity of a gas pipeline, it's important that they contact Plant Protection at least 14 days in advance, either in writing or online using a service called EAGLES."

Registering online is easy and you can quickly find out if work needs to involve us, based on a risk assessment. If it's flagged as needing further investigation, a pipeline technician will visit to assess the scope of the works, free of charge.

John added: "We use specialist detection equipment to locate the exact position of the pipeline and mark it out with wooden pegs.



At every site, the age and operating pressure of the pipeline is likely to vary, as well as the diameter, wall thickness and grade of steel.

"Pipelines don't always run in straight lines between marker posts, and although normally buried 1.1 metres below the surface, this varies according to the contours of the land.

"I let landowners know if we will need to supervise the project and provide specific written guidance on working safely and the kind of trees or bushes that can be planted near pipelines."

John stresses that engineers like him are there to help, to be open and honest, and to listen to grantors' concerns: "Our pipelines are continuously monitored by fortnightly aerial surveys and foot patrols every four years, along with regular inspections of the cathodic

protection system that guards against corrosion."

If an immediate hazard is spotted during a helicopter survey, the pilot will land, if safe to do so, and stop the work there and then. If not, our team may be asked to attend immediately or, if it's less urgent, within 24 hours.

John added: "I was recently called to a tree nursery where earth had been excavated from over a pipeline for a new plantation nearby. The helicopter guys had spotted the hole, which had filled with water, but, luckily, there had been no damage."



DIAL BEFORE YOU DIG!
Complete a free online request at beforeyoudig.nationalgrid.com
Email plantprotection@nationalgrid.com
Call Plant Protection free on 0800 688588

Free safety check



HERE ARE A FEW POINTERS

- ▶ Routine ploughing activities to a depth of 0.5 metres are fine, but deep excavation, such as chain trenching to install new drainage, can have an impact.
- ▶ Contact us before using mechanical excavators to clear ditches, when fencing, tree planting, removing surface soil, building or stacking materials near pipelines.
- ▶ Report any contact with a pipeline immediately, whether damage is visible or not - even a surface scratch can damage the coating or cathodic protection system.
- ▶ Often we are only contacted when work stops because a gas pipeline or marker post is discovered - calling a halt at that stage results in delays and inconvenience.



Safe HAVEN

OFTEN DESCRIBED AS THE BIRTHPLACE OF MODERN CONSERVATION, SLIMBRIDGE WETLAND CENTRE DRAWS VISITORS FROM FAR AND WIDE TO SEE THE WILDFOWL THAT FLOCK THERE

Winter is here at Slimbridge Wetland Centre in Gloucestershire and the ponds are alive with activity, as the annual influx of thousands of migrant wildfowl gathers pace.

It's 8am and senior reserve warden Martin McGill is carrying out the first feed of the day to an assortment of swans, geese and ducks.

In the peak winter season there can be upwards of 40,000 wild birds at Slimbridge and around 200 individual bird species. The reserve, a National Grid grantor, was established in 1946 by the naturalist

Sir Peter Scott, after he visited the site on the Severn estuary in search of a rare goose. The Wildfowl & Wetlands Trust (WWT), which he founded, went on to establish eight other centres across the UK.

Passionate about conservation, Sir Peter was deeply concerned about the ability of the planet to withstand human demands upon its resources and used his profile on TV to alert millions to the dangers facing wildlife.

HAND-FEED

The 800-acre mosaic of pools, lagoons, reed beds, saltmarsh and meadows at Slimbridge provides wildfowl with shelter and food in the winter months and ideal breeding conditions in summer.

A fox-proof fence around the inner landscaped grounds creates a safe haven for the swans, geese and ducks, as well as visiting migrants and wild birds.

"It always amazes me that a pintail duck, which hasn't seen any humans for months in the Arctic, will drop straight out of the sky and land because it knows it will be safe," said Martin, who started work at Slimbridge on a work placement in 1988.

As a youngster growing up in urban Bristol, he kept ducks and would think nothing of cycling the 24-mile trip to Slimbridge to gaze at wildfowl. "It inspired me to follow a career in conservation," he said.

Martin starts his daily routine with the 8am swan feed





Visitors to Slimbridge are encouraged to see the wildfowl close-up and even hand-feed them so that they feel a connection.

NEXT GENERATION

To help foster the next generation of conservationists, there are a huge range of attractions and hands-on activities for younger visitors, from giant LEGO animals to pond dipping, puddle jumping, handling frogs and canoe safaris.

And it's not just about wildfowl. The reserve is the only place you can see all six species of flamingo, for example, as well as frogs, toads and salamanders, water voles, harvest mice and otters.

But the WWT argues there's no point saving endangered species if you don't conserve their wetland habitats and ecosystems, which store rainwater, help manage floods and provide drinking water.

England has lost 90% of its wetlands in the last 400 years, drained for building or agriculture.

"Even creating a mini-wetland or pond in your back garden provides a home for insects and amphibians, as

"It inspired me to follow a career in conservation"

Starting in November, the swans and other wildfowl are fed three times a day



well as food and cover for birds," said Martin.

For the reserve's wardens, autumn is a time for habitat creation and maintenance, carrying out essential repairs on hides and clearing invasive scrub.

"Extra water is pumped into ponds and to flood pastures," said Martin. "Over the years we converted a lot of meadows into wet grassland, which is better for waders."

Around two million gallons of water are taken each day from the nearby canal to feed the lagoons at Slimbridge. Nutrients in the water from bird faecal material and uneaten food – which can cause algae build-up – are filtered out in a linear series of pools, marshes and cascades.



Wetland centre



"If we save the sandpiper, we improve the survival chances of birds from 100 species"

Sir Peter realised that detailed studies were key to the survival of the natural world, and started a captive breeding programme for rare and endangered species. Saving the ne-ne goose from extinction was one of his first successes in the 1950s, after a successful breeding programme at Slimbridge.

A current focus is to understand an alarming crash in the population of Bewick's swans, whose arrival from the Arctic traditionally heralds the start of winter.

WWT experts identify individual Bewick's swans by their unique bill patterns, a method pioneered 50 years ago by Sir Peter at Slimbridge. One of the most intensive single-species studies in the world, it has now recorded the lives of nearly 10,000 swans.

In December, conservationist Sacha Dench



Martin on the lookout for (top to bottom) the black-headed gull, redshank and heron



RENAISSANCE MAN

Sir Peter Scott was the son of polar explorer Captain Scott, who perished in the frozen Antarctic wastes returning from the South Pole in 1912.

In a letter written from his tent, as he lay close to death, Scott urged his wife Kathleen to make their two-year-old son 'interested in natural history. It is better than games'.

As it turned out, Peter excelled in both sport and natural history, and convinced many other people of the need to protect wildlife. A fine wildlife painter, he went on to present the natural history TV programme *Look* from 1955 to 1981.

During WWII he won the Distinguished Service Cross for his role commanding gunboats.

A fine sportsman, he won a bronze medal in the 1936 Olympics in single-handed dinghy sailing, was national glider champion in 1963 and skippered the British team in the 1964 America's Cup yacht race.

After founding the World Wildlife Fund in 1961, he campaigned successfully for the Ramsar Treaty, protecting wetlands, and championed greater protection for the Antarctic and a ban on whale hunting.

Sir Peter, who died in 1989, was once branded 'the patron saint of conservation' by legendary broadcaster and naturalist Sir David Attenborough.



completed a human swan flight, following migrating Bewick's on their 4,350-mile migration from Northern Russia, in a powered paraglider to gather important information on the hazards faced by the swans.

ARTIFICIAL CONDITIONS

Another critically endangered bird is the spoon-billed sandpiper, which in 2011 was down to fewer than 100 pairs in Eastern Russia, largely due to illegal trapping in its wintering grounds in South Asia.

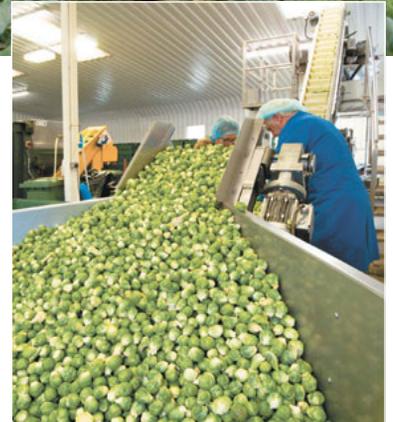
A reserve population was established at Slimbridge in a biosecure unit, and in Russia a technique called head starting has been used successfully to restock the population. Eggs are collected, incubated under artificial conditions and reared to beyond the critical stage, prior to release in the wild.

"If we save the sandpiper, we improve the survival chances of birds from more than 100 species which share the same migratory flyway," said Martin.

A £6-million project will soon see Sir Peter Scott's former home open to the public for the first time. Fitting then that when asked if he has a favourite bird, Martin said: "They're all important and it's just such a privilege to continue the work that Sir Peter started."



To find out more go to: www.org.uk/slimbridge



READ ALL *a sprout it!*

CHRISTMAS DAY WOULDN'T BE COMPLETE WITHOUT BRUSSELS SPROUTS, SO IT'S JUST AS WELL GRANTOR JOHN CLAPPISON'S TEAM ENSURE THERE ARE PLENTY TO GO AROUND

It's all hands on deck at W Clappison & Sons, Yorkshire's leading sprout grower. Supermarket customer Aldi has the vegetable on a 'super six' discount price promotion, and has sent an urgent order to replenish its shelves.

"We worked late into the night and were up again at 6am this morning to get the job done," said farmer John Clappison, keeping a watchful eye on an army of sprouts moving along the sorter/grader conveyor belt.

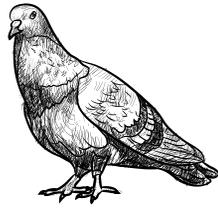
John farms a total of 1,000 acres in and around the Risby Park Estate, nestling in the foothills of the Yorkshire Wolds, near Beverley, on land either tenanted, owned or rented.

"We devote 260 acres to growing 1,200 tonnes of sprouts each year, equivalent to 4% of the UK crop, as well as vining peas for Birds Eye, wheat and barley," said John, whose farm supplies bagged sprouts to supermarkets Morrisons and Aldi and in the case of Morrisons, loose product for sale in trays.

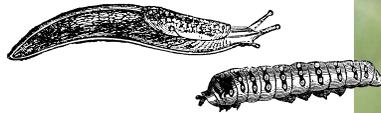
Produce is also sold locally at farmer's markets, where whole sprout stalks – which keep the buttons fresh for longer – are also popular.

"We're the largest grower in Yorkshire and among the top 20 suppliers nationwide, although not quite in the league of the two or three big boys who each farm more than 1,000 acres." >>

A festive favourite?



The vegetable is afflicted by no fewer than 47 different pests and diseases, including aphids, caterpillars, slugs and pigeons, making them notoriously difficult to grow organically



John checks some of the 14,000 plants on every acre ahead of the labour-intensive harvest



NICHE CROP

Sprouts are a niche crop, being relatively labour-intensive, requiring specialist equipment and involving long hours. “There are not many people who want to grow them, or can do it,” said John.

The vegetable is afflicted by no fewer than 47 different pests and diseases, including aphids, caterpillars, slugs and pigeons, making them notoriously difficult to grow organically.

“This year we had a wet spring and early summer, which have affected the crop, and we were hit hard by a plague of diamondback moths from North Africa. Some of the pesticides that used to be effective have been banned by the EU.

“Our orders are 20% up for this time of year, but like other growers, we don’t have capacity to meet demand. We have long-term contracts with supermarkets, which protect our price when there’s over-supply but mean we don’t profit during shortage.”

The family started growing sprouts for Birds Eye in

IT’S A FACT



- ▶ Sprouts are a member of the brassica family of vegetables along with cabbage, kale and broccoli.
- ▶ They originated in Afghanistan and are thought to have been grown in Belgium by the 13th century, hence the name.
- ▶ In 2014, Stuart Kettell spent four days rolling a Brussels sprout to the top of Mount Snowdon using only his nose to raise money for Macmillan Cancer Support.
- ▶ Research suggests that people who hate sprouts may have a genetic sensitivity to naturally occurring compounds called glucosinolates, which make them taste bitter.
- ▶ The second warmest November on record in 2015 resulted in sprouts the size of golf balls up to 1.6 inches across, compared to the norm of 1.2 inches.
- ▶ Sprout tops, the clusters of leaves at the crown of the stalk, are increasingly popular in their own right.
- ▶ Around 82,000 tonnes of sprouts are grown in the UK each year.

1976 on 40 acres when the market was almost entirely for frozen product. A major investment in the pack house enabled the business to move from bulk supply to direct sales to supermarkets.

“At that time, fresh sprouts were available in November and the season was over by the end of Christmas, but now it’s all about fresh product, which we harvest from mid-August through to March. The main eating season remains from October to January.”

The extended season and year-round demand has been prompted by the development of new varieties and a renaissance in the vegetable’s popularity.

SCHOOL DINNERS

Sprouts have come a long way since they were associated with a bitter taste and school dinners, and now have a sweeter taste with nutty overtones, as well as a darker, more appealing colour. They have been bred to be disease-resistant and have a longer shelf life. Chefs have also come up with imaginative new recipes, frying them with chestnuts or shredding in salads, while supermarkets have developed sprout juices, coleslaws and even a guacamole-style dip.

There’s more awareness of the vegetable’s health benefits too. Gram for gram they have four times as much vitamin C as oranges, are high in fibre and contain sulforaphane – a phytochemical thought to have powerful cancer-fighting properties.

John currently grows 12 varieties of sprout developed over the last 10 years by breeders mainly based in the Netherlands. Having been ordered in February, the seed is grown in compost plugs ready for



delivery to the farm in late April.

The plants, now four inches high, are transferred to the farm's fields where 14,000 plants per acre are planted from 20 April to 10 May.

The sprouts grow buds on the sides of thick stalks and mature over several weeks, from the lower to upper part. At 3ft high, the plant is harvested using specialist machines to cut the stalks four inches from the ground using rotary knives.

STRIPPED OFF

The stalks are then fed manually into an onboard machine that strips off the buttons, ejecting the leaves and ground-up stalk back on to the field as fertiliser.

At the farm, the sprouts are refrigerated overnight at 3-4°C. Once in the pack house, they are loaded on to a lift roller grader and sorted into five sizes. They then either go into loose trays or bags, and are labelled.

"Currently, we're making visual checks on the sprouts for defects, but we plan to invest in a new colour sorter that scans the vegetable and automatically ejects imperfect or underweight buttons using air jets," said John. "Even under our current system we process 50 sprouts a second."

Orders are taken daily and the pack house operates seven days a week. The whole process from field to lorry takes just 24 hours, with sprouts harvested one day, packed and despatched the next.

Christmas still accounts for more than 60% of all sprout sales. "The rush starts around the third week of November when demand increases from the catering industry for the office party season," observed John.

As the nights lengthen, darken and become colder, all four harvesters are pressed into service and the pack house runs 24/7.

"Much of the topsoil here is on chalk, which means



Just some of the 1,200 tonnes of sprouts from John's 260 acres destined for a Christmas dinner table near you... or not



"The rush starts around the third week of November when demand increases... for the office party season"

we can still work the fields after heavy rain, but harvesting is impossible when the temperature drops below -2°C," said John.

"It's ideal when you get a deep penetrating frost of -3 or -4°C, which clears by mid-morning and the plants thaw out. Contrary to popular opinion, it's a myth that sprouts taste sweeter after a frost."

Like many farmers, John is concerned about the fall-out from Brexit. "We rely on temporary workers from places like Poland and Lithuania; local people simply don't want to do this kind of work," he said.

His workforce increases from 10 to more than 30 in the weeks preceding the big day itself. "I tell my staff on 8 December that we need to do the same amount of production in 14 days that we have done in the last three months," said John.

"They always tell me it's impossible, but they always rise to the occasion," he added.

"Christmas Day comes as a tremendous relief – and it's definitely a time to celebrate and have a drink or two – but it's back to work at 7am on Boxing Day."



HISTORIC ESTATE

John's grandfather Wilfred started farming on the Risby Park Estate in 1932.

The estate belonged to the influential Ellerker family, who reputedly once hosted King Henry VIII during a visit to Hull.

Risby Hall was demolished after a fire in the late 18th century, but the site of the house and traces of the former gardens are a scheduled ancient monument.

The Clappison family have developed the estate's former ornamental lake into a highly regarded coarse fishing venue, along with a waterside cafe.

John has also restored a lakeside folly to its original splendour.



THE SPIRIT OF *Christmas*

MARKETING MATERIAL LAUDS THEM AS 'PROBABLY THE SMALLEST DISTILLERY IN SCOTLAND', BUT OUR VISIT REVEALS A GRANTOR BIG ON REVIVING THE HANDCRAFTED SKILL OF WHISKY MAKING

Ask Stuart McMillan the key ingredients for the perfect malt whisky and he's unequivocal: "Water, barley, yeast... and passionate people."

Just as well then that the four-strong team in the early throes of helping Scotland's smallest distillery to punch well above its weight all live, breathe and drink the stuff.

The manager of Strathearn Distillery near Perth, an hour's drive north of Edinburgh, revels in the scale – or lack of it – of the operation, based in a 160-year-old renovated farm stable.

An arch the size of a badminton court houses the two copper stills affectionately known as Wee Erin and Bella the Stripper – we'll explain later – the mash tun where the hot water and malted barley are mixed, and two large 1,600-litre fermenters.

Next door there's the Bond, where wooden casks store much of the 14,500 litres of whisky and gin produced by this newest and tiniest Highlands grantor.

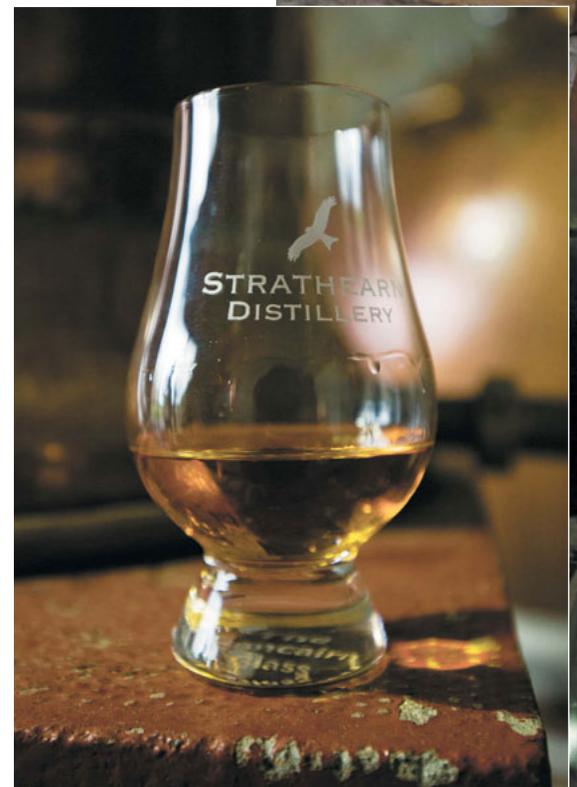
The venture is the brainchild of Tony Reeman-Clark, whose love of fine spirits and premium flavours led him to discover a passion for fine malt whisky and develop the product portfolio at Strathearn.

The revelation of going against the grain – Strathearn uses only finest quality malt instead of grain to lessen the potential for hangovers – prompted him to open a craft distillery, and three years ago the dream became reality.

You'll find none of the impersonal guided tours around giant, automated factory units here. Stuart and the team take their time to create 'beautiful spirits the traditional way'.

"We would love to be known as the home of handcrafted Scottish spirits and we can do that because the whisky or gin in every bottle is probably only ever touched by three people," said Stuart.

This celebration of the artisan approach is echoed by head of distilling Liam Pennycook, a 23-year-old who has found his vocation thanks >>

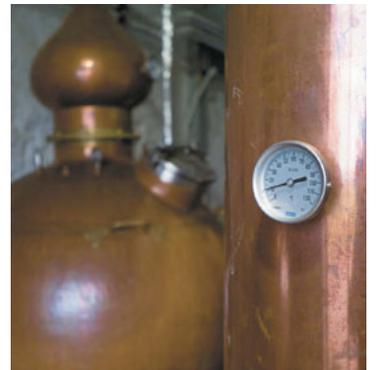


Liam (left), known as The Sage, has an intuitive nose and palate for the perfect malt, while Stuart (right) extols the virtue of taking your time





"We are dedicated to quality and not quantity at every stage of the process"



(Clockwise from main picture) Stuart loads one of the whisky casks into the Bond; one of the two copper stills; the disused stable now home to Scotland's smallest distillery

The wee-est dram

to a seemingly innate gift for creating the perfect flavour profiles. He oversees the seven-hour process of hand-mixing the water and only malted barley – no other grains – so the starches break down and convert into simple sugars.

ARTISAN DISTILLERY

Around 80% of the conversion happens in the first 20 minutes of the mixture being left to stand, but the Strathearn team leave it for 90 minutes.

The mixture is then cooled, pumped into the fermenters, with yeast added, before being left to ferment for six days to produce a low-strength alcoholic ‘beer’. Larger distilleries opt for speed and a much shorter turnaround.

“This is where Bella comes in,” revealed Liam. “The ‘beer’ is heated in the still and the alcohol evaporates, or is stripped out, and condenses into a higher strength 30% ‘low wine’, which is more interesting but not yet whisky.”

This is fed into the 500-litre spirit still, Wee Erin, where the second distillation process initially creates a pear-drop-flavoured spirit that, once it loses its harsh edge, is poured into casks to develop the malty, biscuity taste synonymous with the traditional Christmas and New Year dram.

The distillery only produced its first drop of Scotch whisky for sale earlier this month though. It can only claim that accolade once the spirit has been matured in oak casks for three years and a day.

An auction seemed the only fair way to sell the first 100 bottles from Strathearn. The first bottle from the first cask, which Tony has promised to hand-deliver, stood at £2,500 as Gridline went to press.



MALT MATTERS

- ▶ The spirit takes its extra characteristics from the wood, so a malt spirit stored in a small sweet chestnut or oak cask for six months will have different flavours.
- ▶ The smaller the cask the quicker the maturation process and the more defined the taste.
- ▶ It's fine to drink whisky neat or with a mixer, but adding a few drops of water opens up different, new and subtle flavours.
- ▶ When whisky comes off the still it's clear. The colour and flavour comes from the casks, so an old whisky will generally be darker in colour.
- ▶ Strathearn has produced a limited run of uisge beatha, which is matured for short periods of time in small casks to replicate the way the west coast distillers used to make it 300 years ago.
- ▶ The oldest existing whisky is believed to be a 400ml bottle of Glenavon Special Liqueur Whisky, bottled between 1851 and 1858.
- ▶ Actor John Wayne, Sir Winston Churchill, Irish playwright George Bernard Shaw were all whisky devotees while former footballer David Beckham also enjoys a dram.

The arrival of whisky on the Strathearn menu marks the next step for the business, which has grown from its launch on sales of gin produced in a similar way, only this time infusing the spirit with botanicals such as juniper, citrus peel, heather rose and liquorice.

Stuart added: “We are dedicated to quality and not quantity and that is what defines us as an artisan distiller. This year we have 100 bottles ready, most of which will go to collectors around the world, but that number will grow incrementally as we go forward.”

RIGHT PLACE AND TIME

Distiller David Hogg, who gave up a career in the gas industry to pursue his passion, said: “A lot of producers mix whisky of different ages, but you can only call it the age of the youngest one. We are a single malt, single cask distillery.

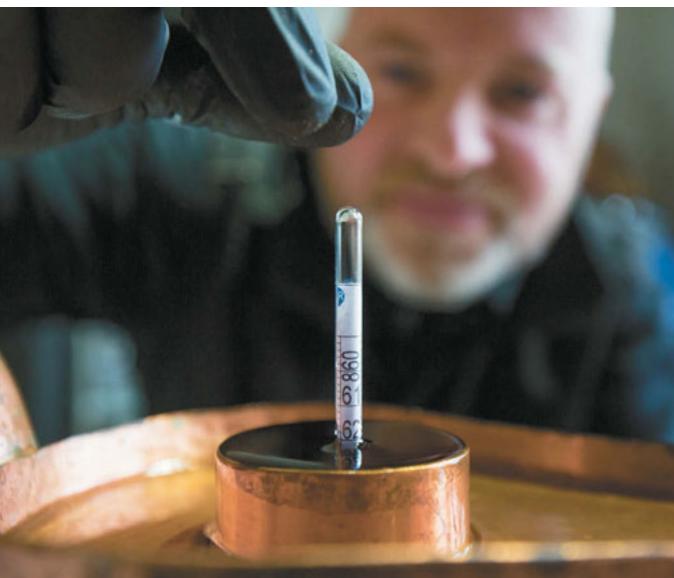
“Three years in a 50-litre cask is equivalent to eight years in a 250-litre cask in terms of maturation and flavour profile, so we're happy to take our time and stay small so we can ensure a better product.”

The distillery, which runs taster sessions, is already exporting gin to Denmark, Belgium, Germany and Japan and can – technically at least – count the Earl and Countess of Strathearn, Prince William and wife Kate, as customers, after they were presented with

a bottle of Strathearn heather rose gin on a visit to the area last year.

So with the future looking bright and genuine Scotch whisky coming down the line in 2017, we asked Tony for his view of the perfect drink.

His verdict: “That very much depends on the place, the time and, of course, the company.”



David carries out quality checks on the distillation



Two of the traditionally made uisge beathas



Keeping a keen eye on the process

Pond weed meets its match

A tiny weevil brought in by National Grid to combat an invasive pond weed at an environmental centre has wasted no time munching its way through the unwelcome visitor.

The main pond at the Iver Environmental Centre in Buckinghamshire, used by children for pond dipping, was inundated with an infestation of Azolla – a type of floating water fern, originally imported from North America in the 1840s as an ornamental pond plant.

SAFETY RISK

Forming a dense mat on the water surface, the weed doubles in size every five days, and deprives other plants and invertebrates of light and oxygen. It regenerates from tiny fragments, making mechanical removal almost impossible.

“The pond had become a safety risk because children could easily mistake the weed’s surface blanket



National Grid turned to CABI for advice on how to eradicate the Azolla pond weed at Iver



Image: CABI UK

for solid ground,” said Cirhan Truswell, a member of National Grid’s Sustainability team.

“The Environment Agency put us in touch with CABI (the Centre for Agriculture and Bioscience International), who have had

success using a weevil from North America called *Stenopelmus rufinasus* to control Azolla.”

Just 2mm long, it only feeds on Azolla, so won’t harm other plants, and can rapidly reproduce, with populations reaching several

million in weeks. Both the adult and larvae feed on the plant.

Cirhan said: “Improvement was visible in a week and the water was clear in two months. We’re now using weevils to tackle Azolla in a pond at Thorpe Marsh substation.”

HEART OF THE COMMUNITY

National Grid – making a difference



All work and no play...

When a local school sent out an SOS for help with some general DIY tasks, employees from BritNed were happy to volunteer their time to make big improvements.

Horsted school in Chatham is close to where BritNed – a joint venture between Dutch company TSO TenneT and National Grid – operates the electricity interconnector between Great Britain and the Netherlands.

With the use of equipment and materials from the company, the volunteers used railway sleepers to

build a new digging pit at the school, along with a larger sandpit, and re-felted and painted the outdoor playhouse.

Event organiser Robert Warburton said: “The reception teachers at the school wanted a mud kitchen built for the children.

“So we put our heads together and in true Blue Peter or Scrapheap Challenge style, managed to create a kitchen fit for Grand Designs (left), which both teachers and children were over the moon with.”

LASTWORD



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Your chance to enter two great competitions

THANK YOU ALL...

... for your continued support in keeping our records of your land ownership up to date every year. As the owner and operator of gas pipelines on your land, it's crucial we maintain effective and timely communication with you so that any changes to land ownership are recorded on our systems to ensure the safety of you, your family and the wider public.

We strive to ensure we communicate with landowners

effectively, so we'd like to hear your views on how we currently do this and your suggestions to help us improve the current process.

We'd appreciate a few moments of your time to answer our Land Ownership Annual Letter survey at **surveymonkey.co.uk/r/YFXZ3WM** or visit **gridline.nationalgrid.com**



WIN

£150 M&S VOUCHERS IN
OUR PHOTO COMPETITION

Grantor Ken Proudley was so quick with his camera to capture this 'moment in time' that you couldn't see him for dust.

One of his team was power harrowing the land beneath one of the last clear blue skies of autumn when Ken took the winning shot.

The farmer, from North Yorkshire, wins £150 worth of M&S shopping vouchers to start the new year in style.

There were some superb runners-up, which we'll be adding to the Gridline website at gridline.nationalgrid.com very soon.

Fancy a chance of winning £150 for yourself? Take a shot on the theme of 'new year, new beginnings' and send it in high resolution to gridline@madebysonder.com. Closing date is 17 February 2017.



WIN AN AMAZON
ECHO SPEAKER

A hands-free speaker you control with your voice to play music, get information, news, sports scores, weather, and even update your shopping list.

Use the wake word 'Alexa' and ask Echo to play dinner party music or advise on your local commute. The device hears you from across the room with far-field voice recognition. It can also answer questions, read audiobooks, report news and traffic, and much more.

Advanced settings mean it can also control your home's lights, switches and thermostats with compatible connected devices. Simply answer this question to have a chance of winning.

Q How many varieties of sprout
does John Clappison grow?

Email your answer, name and contact details to gridline@madebysonder.com or send to Sonder Amazon Echo competition, Victoria Court, 8 Dormer Place, Leamington Spa, Warwickshire CV32 5AE. Closing date is 17 February 2017.

COMPETITION TERMS AND CONDITIONS AMAZON ECHO The winner will be the first entrant selected at random who correctly identifies the answer (to be featured in the next edition) and who is a National Grid grantor at the time of the draw. The editor's decision is final and no correspondence will be entered into. Gridline reserves the right to change the prize without prior notice. The prize is not transferable and cannot be exchanged for cash. Closing date is 17 February 2017. PHOTO The winning image will be the one judged to be the most visually appealing, original and relevant to the theme and will feature in the next edition. The winner must be a National Grid grantor. The editor's decision is final and no correspondence will be entered into. Gridline reserves the right to change the prize without prior notice. The prize is not transferable and cannot be exchanged for cash. The closing date is 17 February 2017.

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