

GREEN

The magazine for National Grid grantors

WINTER 2012



Running with the herd

Scenes that inspired a poacher turned playwright

nationalgrid

LOW PLAINS DRIFTERS

The hobby couple who are living the dream

Top of the tree!

Meet the Elveden helpers who bring Christmas to our doors

PLUS: The apple grower bites back • Model animal rescue • Future-proofing farming • Win a gourmet break

WELCOME TO GRIDLINE

The diversity of grantors **never ceases to amaze** us so make sure you start the new year by sharing your **success stories** with the Gridline team

It's been an eventful year at National Grid, with sustainability in all we do extremely high on the agenda.

A quick look at some of the projects we're working on around the country shows just how seriously

National Grid takes its responsibility to the environment and raising awareness of the diverse work you, our grantors, do to keep the nation flourishing.

Whether it's working with partners to develop wildlife havens, raising children's awareness of farming or sponsoring animal rescue schemes to make a tangible difference to rural communities, we are actively seeking to get involved.

We love to hear from grantors telling us about what they do, and a handful of stories that show off our grantors' diversity appear later in this edition - from the country estate to the apple grower to the New Forest commoner safeguarding centuries of history.

We are immensely proud of the partnership we enjoy with our grantors and would like to hear from more of you to make sure we reflect the nature of the work you do around the nation.



This edition is also a good opportunity to remind grantors of some of the key safety messages we're keen to highlight, including the dangers of growing or pruning trees and vegetation beneath overhead lines.

Talking of trees, take a look at the final feature, which showcases the work of the people who bring Christmas to life each year... and don't forget to make sure you have a wonderful festive season and a prosperous 2013.

Dawn McCarroll
Editor, Gridline

GOT A STORY?

Please contact Gridline if you have any news or stories that you think would be of interest to other grantors.

Tel: 01926 656 325

Email: gridline@uk.ngrid.com

Write to: Gridline,
Summersault Communications,
23-25 Waterloo Place, Warwick Street,
Leamington Spa, Warwickshire CV32 5LA.

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National Grid's Land and Development Group

The Land and Development Group is 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

- North-west and Scotland 0161 776 0706
- South-east 01268 642 091
- South-west 01452 316 059
- East 0113 290 8235.

ELECTRICITY WAYLEAVE PAYMENTS

- For information on electricity 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 654 844 for gas, or email grantorservices@nationalgrid.com.

ELECTRICITY EMERGENCY

- Emergency calls to report pylon damage to National Grid can be made on 0800 404 090. 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 023 270 (local call rate). Website: www.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 688 588 so that searches can be made to determine the exact position of any National Grid assets.

CUSTOMER COMMENTS

- Write to Land & Development, National Grid House, Warwick Technology Park, Gallows Hill, Warwick, Warwickshire CV34 6DA. Or email ld.customercomments@uk.ngrid.com.



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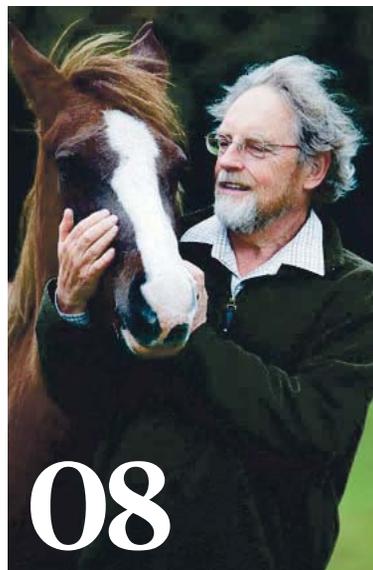
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Spa day competition winner

Congratulations to Peter Sunderland from Framingham Earl in Norwich for winning the spa day competition in the last edition of Gridline. Peter correctly answered 95% to the question: What percentage of landowners respond to National Grid to update contact information? On hearing he'd won, Peter said: "I really am thrilled to have won the competition. It will be a nice break – thank you Gridline!"



Don't plough a lone furrow...

Make sure you keep in touch with Gridline and other grantors by sending us your themed pictures, which also feature on www.flickr.com/photos/gridline/sets/. Then turn to page 20 for the winner from last issue.



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Look out

- ➔ Only low, slow-growing species should be planted beneath conductors or towers.
- ➔ Vegetation must not be planted beneath towers that might impede safe vehicle access for maintenance.
- ➔ Roots can disturb or prevent access to maintain underground electricity cables.

Putting safety first

HALF OF THE 22,000 SPANS ON National Grid's 7,000km network are surveyed every year, with tree cutting carried out on a three-to-four-year cycle by need.

To maintain specified minimum safety clearances between power lines and objects such as trees, National Grid's vegetation management contractors are obliged to remove vegetation to the specified clearance, plus a minimum of three years' growth.

"We always seek to minimise the impact our works have on landowners, and to agree

vegetation management work through negotiation and with grantors' consent," said Wilson Holmes, lands manager east.

"But as a last resort, where works can't be agreed and there is a clear hazard to public safety or our equipment, we must make use of our statutory powers to complete essential work.

Arcing

"Unfortunately, we had to follow this course of action recently in north-east England, where a tree hearing was called by the

Secretary of State for the Department of Energy and Climate Change to address a situation where the safety clearance was at risk."

If a branch gets too close to a line there is a danger of an electrical current arcing across, risking injury, major loss of supply, fire or the tree conducting electricity to the ground.

Threat

National Grid also has a legal responsibility to ensure network resilience in the event of extreme weather, so we have now surveyed all trees running parallel to power lines that could, in the event of a storm, fall on to or disrupt them.

"Dead or diseased trees are being removed and we are now looking at healthy trees that could still pose a threat, such as faster-growing species," said Robbie Miller, lead engineer for vegetation management.

"The aim is to keep visits to a grantor's land to a minimum through more extensive but less frequent lopping."

Only trained staff should carry out clearance work beneath or adjacent to lines, and grantors should not cut vegetation if any part of the tree could come within the minimum safety clearance.

Wise team save owls

THE PROJECT TEAM INVOLVED in refurbishing a major power line, from Cellarhead in Staffordshire to Daines substation near Manchester, have donated and put up nesting boxes for breeding pairs of barn owls away from the overhead line. This is to limit disturbance to the birds and help maintain a recent upturn in owl numbers.



Baby barn owls now stand a better chance of reaching adulthood thanks to the Overhead Line team





Guy Poskitt was named the pick of the crop

Photograph: © Jim Varney



Guy collects the prestigious award

Photograph: © Mark Mackenzie

The future's bright for Guy

CARROT-PRODUCING GRANTOR Guy Poskitt headed off competition from thousands of rivals to be named Farmers Weekly Farmer of the Year.

Guy, one of the largest carrot producers in the country with more than 2,600 hectares of land across Yorkshire, Lancashire and Scotland, also walked away with the trophy for Arable Farmer of the Year. In addition to 500

hectares growing carrots for Asda and other outlets, Guy devotes another 1,600 hectares to arable crops, vital to ensure a sustainable one-in-seven carrot rotation.

Increased yields

All the crops are washed, packed and distributed from one site to ensure control in all aspects of production. Nothing goes to waste - shavings go into soup and

any rejects are processed as ready-to-cook batons.

The latest technology is used to increase yields, including GPS mapping systems for matching fertiliser applications to crop requirements while also reducing pesticide use.

Guy is cutting his carbon footprint too, recycling straw used for protecting carrots over winter and reducing fuel use.

Award for pipeline project

NATIONAL GRID HAS WON AN award from the Campaign to Protect Rural England for high-quality landscape restoration, following the construction of a new 44-km gas transmission pipeline, which runs from Wormington to Sapperton in the Cotswolds.

National Grid was nominated by the Cotswolds Conservation Board, the statutory body that conserves and enhances the Area



Tim Vaughan, National Grid project manager (left) and Viscount Rupert Bledisloe

of Outstanding Natural Beauty in Gloucestershire.

Among a range of activities to protect the environment during the October 2010 works, was the

removal of 60 drystone walls - a distinctive feature of the area - and their careful reinstatement by specialist contractors on completion of the project.

News in brief

ALL SYSTEMS GO

The completion of a pressure reduction installation in Tirley, Gloucestershire, has provided the final element in National Grid's 316km Milford Haven gas pipeline project.

The installation to regulate the flow of gas into the transmission system will enable the pipeline to operate at full capacity, carrying up to 20 per cent of the UK's gas needs. The bulk of the project was completed between 2006 and 2008.

A total of 23,000 bushes and trees were planted as part of the landscaping work at the site, which also included the use of 120,000 tonnes of recycled soil to create a surrounding earth mound to screen the facility.



LINE WORKERS STICK TO THE LEGEND

Legend has it that the kingdom will fall if the ravens at the Tower of London ever depart.

So when ravens, a protected species, were discovered on an overhead line refurbishment in East Sussex, our linesmen took no chances.

Engineers stopped work after finding the birds on four of the 146 towers on the Bolney to Ninfield line. The ravens are rare in Sussex, with only three pairs ever recorded. Also seen on the project were great crested newts, badgers, kestrels and peregrine falcons. The ravens later flew with their young.



One-minute interview



Paul Swinbourne, senior lands officer, south-west

BACKGROUND: I joined National Grid in 2005 following the merger with Transco. Prior to that I worked as a wayleave officer with British Gas.

CURRENT FOCUS: The Milford Haven to Tirley gas pipeline, a project to connect new wind farms to the grid in mid Wales, and a refurbishment of the Severn Crossing overhead power line.

LEISURE INTERESTS: Cycling, walking, surfing.

DREAM JOB: RNLI lifeguard at Croyde Bay, North Devon.

MOST OVERUSED PHRASE: Take care.

SOMETHING THAT NOT MANY PEOPLE KNOW ABOUT YOU:

One of my ancestors helped Charles II escape from the Battle of Worcester in 1651.

SOMETHING I'VE LEARNED FROM MY CAREER:

Treat everyone as you would wish to be treated.

DESCRIBE YOURSELF IN THREE WORDS: Happy to help.

WHO WOULD PLAY YOU IN THE HOLLYWOOD FILM OF YOUR LIFE: Pierce Brosnan – he's got my suave good looks!

IDEAL DINNER GUEST: John Wayne – an iconic American hero – to find out what he was like in reality!

FAVOURITE SONG: Lifted, by the Lighthouse Family.

Link-up set to bring new look to the landscape

A PARTNERSHIP BETWEEN A conservation body and National Grid will ensure essential vegetation management and new sustainable woodland habitat for plants and animals.

The link-up happened after a power line was constructed through Burkinshaw's Covert in Humberside in 2006 to connect a new power station near Immingham. The wood is owned by petrochemical company Total, which operates Lindsey Oil Refinery to the west.

Restructuring

The wood forms part of a precious belt of interconnecting countryside in an industrial landscape.

"The removal of the tree canopy to create the overhead line route corridor has already benefited biodiversity at ground level," said Mike Rockett, lands officer east.

"We have agreed with the Humberside Industrial Nature Conservation Association (HINCA), which manages the wood, to remove some faster-growing tree species from alongside the overhead line. Planted in the 1960s, the trees are in poor condition and could be a threat to power lines."

Alan Jones (inset picture), conservation manager for HINCA,



Conservation volunteers are replanting the wood with native trees

said: "The works will complement a major restructuring of the woodland over the next 20 years in which non-native species are replaced by native broadleaves like oak."

The plan is to maintain the corridor as a linear glade with the outer woodland edge giving way to graduated belts of shrub, longer grass and closely mown areas



Ground-level habitats will thrive

directly under the power line.

Alan added: "The corridor will be one of the richest parts of the wood for biodiversity and we also plan to develop the site as an outdoor education resource."



Investing in the future

TRAINING WON'T BE THE SAME for National Grid apprentices after a new £4-million substation facility (left) was opened.

Based at the Company's state-of-the-art Learning Centre in Eakring, Nottinghamshire, the site will

provide hundreds of learners with specialist training and modern energy skills each year.

The building forms part of a £20-m expansion to the centre.

Mike Westcott, National Grid's global HR director, said: "To continue to grow, we recognise the importance of developing our people, and providing exciting and rewarding career opportunities."



Bombing raids devastated the capital's infrastructure

Computer modelling was used before work on the site began

Bravery in the extreme

THE HEROISM OF GAS WORKERS during a Luftwaffe bombing raid in July 1941 has been relived during an 18-month National Grid clean-up of a former gas works.

Under the headline 'Death rained down, they carried on', a report in a local newspaper spoke of the 'heroism and gallantry' of the men, who risked their lives to put out fierce fires at the works caused by incendiary bombs.

The efforts of the gas workers

saved the gas works in Bromley-by-Bow, East London, from destruction, and it continued to operate until the discovery of North Sea gas in the 1960s.

Recognised

The workers' efforts were recognised in articles published at the time in the Stratford Express.

During the clean-up, National Grid removed 60,000 tonnes of

material from the below-ground base of a former gas holder. The massive underground structure measured almost 60 metres in diameter and 11 metres deep.

"Before excavations began, we used advanced computer modelling to assess the damage and discovered a 40-metre section of the gas holder wall had been destroyed in the bombing," said National Grid regeneration manager Sarah Rea.

Project watch

The Humber Gateway Project



WHY? National Grid has completed enabling works to connect a new 220MW wind farm, constructed by E.ON some 8km off the East Yorkshire coast.

WHAT? The wind farm will transmit electricity to E.ON's onshore high-voltage direct cable (HVDC) converter station at Salt End via subsea cables and a 30km onshore cable. Here power will be converted to AC (alternating current) and fed to the adjoining 275kV National Grid substation, where the voltage is stepped up for onward transmission.

Connection to the network is through the existing Salt End to Creyke Beck overhead power line. The project witnessed National Grid's first use of a 41.6-metre temporary mast to divert one circuit while two new pylons were being constructed to link up with the substation.

The mast was an extremely cost-effective alternative to a new temporary tower, which would have involved piled foundations to take account of unstable ground conditions.

WHEN? National Grid was on-site from February to October 2012 preparing the temporary mast structure (above). The farm is due to go live in 2014.



Dom daren't look down as he's joined by the line trainers

Dick and Dom high in da sky!

CHILDREN'S TV PRESENTERS Dick and Dom spent a day at National Grid's training centre as part of a programme explaining how power is generated.

The small screen stars were at Eakring filming a new series called Genius, which will be broadcast next spring on the CBBC channel.

The 10-part series, aimed at 8-12 year olds, looks at some of the world's most important inventors and scientists.

The filming focused on the work of

Michael Faraday, the 19th century physicist and chemist who discovered electromagnetic induction - the basis of electric power generation.

Safety messages

In the episode, Dick and Dom will explain how overhead linesmen use Faraday principles to keep themselves safe.

They will also give some important safety messages about staying away from high-voltage pylons and substations.

Dom climbed one of the training pylons and, although nervous, he was reassured by the specialist overhead line trainers who accompanied him.



THE MANE ATTRACTION

Grantors **Keith** and **Lesley Cromar** are the proud owners of ponies that graze the unique landscape of the **New Forest National Park**



Hobby farmers Keith and Lesley Cromar delight in being labelled commoners, because for them the title is a dream come true.

They are among 600 or so landowners in the New Forest who exercise their right to turn out their ponies to graze. Their presence shatters a widely held misconception that the ponies are wild. In reality, all are privately owned by commoners whose property has common rights enabling them to depasture their animals to graze.

The commoners keep around 6,000 New Forest Ponies, and a smaller number of donkeys, cattle and pigs, in a landscape shaped by the activities of its inhabitants since the time of William the Conqueror. The animals roam in 90,000 acres of woodland and open heathland, stretching from Bournemouth in the west to Southampton in the east. The area became Britain's eighth national park in 2005.

The Cromars have leased 20 acres of land at Marchwood in the New Forest since the early 1990s. Their smallholding lies largely within an overhead power line corridor constructed 40 years ago to connect Fawley power station.

"We'd always dreamt of having our own small piece of the Forest to keep and ride ponies," said Lesley.

Keith, a retired director of a community and adult education centre, explained: "To qualify as a commoner you must own or rent property in the New Forest and have backup land if for any reason the ponies need to be taken off the Forest."

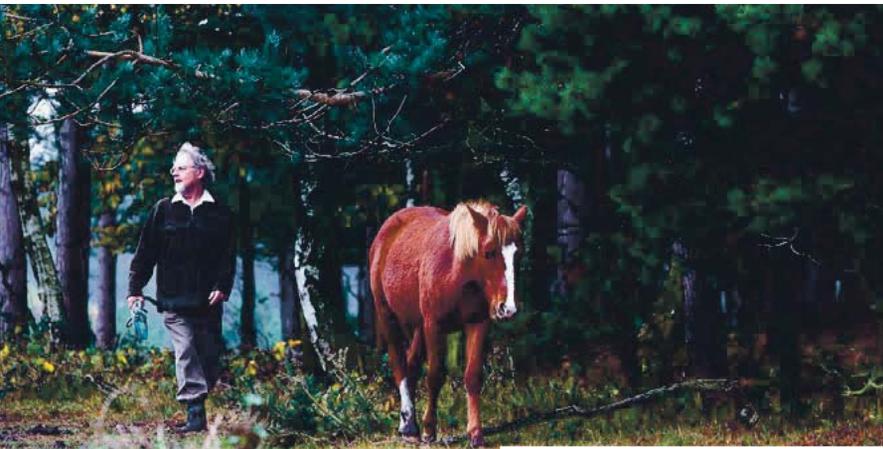
Keith now works part-time as a registrar, while his wife is a receptionist for a local vet. The couple have nine ponies turned out in the National Park, centred on a 'haunt' of more than 10 square miles that provides food, shelter, water and shade.

Ancient traditions

"We're hobby farmers," said Keith. "We don't have enough land to farm and there's no money to be made from breeding with ponies selling at auction for as little as £10."

Today only the finest stallions are allowed to run in the Forest and for only a brief period in June. "Limiting the size of the herd and improving the quality of foals born will, in time, hopefully result in higher sale prices," said Lesley.

Of late, outsiders have been buying up property in the New Forest, and a lack of affordable backup land and



It's a fact

- Today, about 10 per cent of commoners own around 80 per cent of the ponies in the Forest.
- Each year pigs are released into the Forest to eat the green acorns that can be poisonous for ponies (known as the pannage season).
- Hardy, fast for their size and good tempered, New Forest Ponies make excellent riding mounts.
- The Forest is the largest remaining area of lowland heath in Europe.



“As commoners we believe it’s more important than ever to maintain the ancient traditions”

housing means many of the children of commoners have had to move away from the area.

“As commoners we believe it’s more important than ever to maintain the ancient traditions that have gone on for centuries,” said Keith. “If you don’t exercise these rights, you lose them.”

Architects of the Forest

The commoners pay an annual fee for each animal on the Forest and elect their own representatives to an assembly called the Verderers’ Court, which regulates and protects commoners’ rights.

The Verderers employ five agisters, expert horsemen, who monitor livestock in specific parts of the Forest and attend the all-too-frequent road accidents. Sadly, dozens of animals are killed and injured each year despite a 40mph speed limit on minor local roads.

Once a year, between August and November, a series of spectacular round-ups take place - called drifts - in which up to 100 ponies at a time are driven across the

landscape, cowboy-style, into special pounds.

“Frustratingly, our older mares sometimes sense when a drift is about to happen and make themselves scarce, only to appear later at another drift we’re not at,” said Lesley.

After a drift the ponies receive a health check, with any that have lost condition pulled out before the harsh winter months. All the ponies have their tails cut or marked in a way that’s unique to each agister, signalling the owner has paid their annual fees.

Colts are removed and often sold as riding ponies. While some fillies will go on to spend their entire lives in the open, others will be taken home, weaned and sold at one of the regular Beaulieu Road Pony Sales in the Forest.

Sometimes known as ‘the architects of the Forest’ the ponies create the close-cropped lawns between wooded areas and the browse line on the tree edge, so distinctive of the landscape. The conservation grazing role of their ponies is a source of pride for the Cromars. Keith said: “It’s great to think we’re doing our bit to preserve the unique wildness and tranquillity of this very special place.”

In numbers

6,000

New Forest Ponies and 600 active commoners across the 90,000 acres

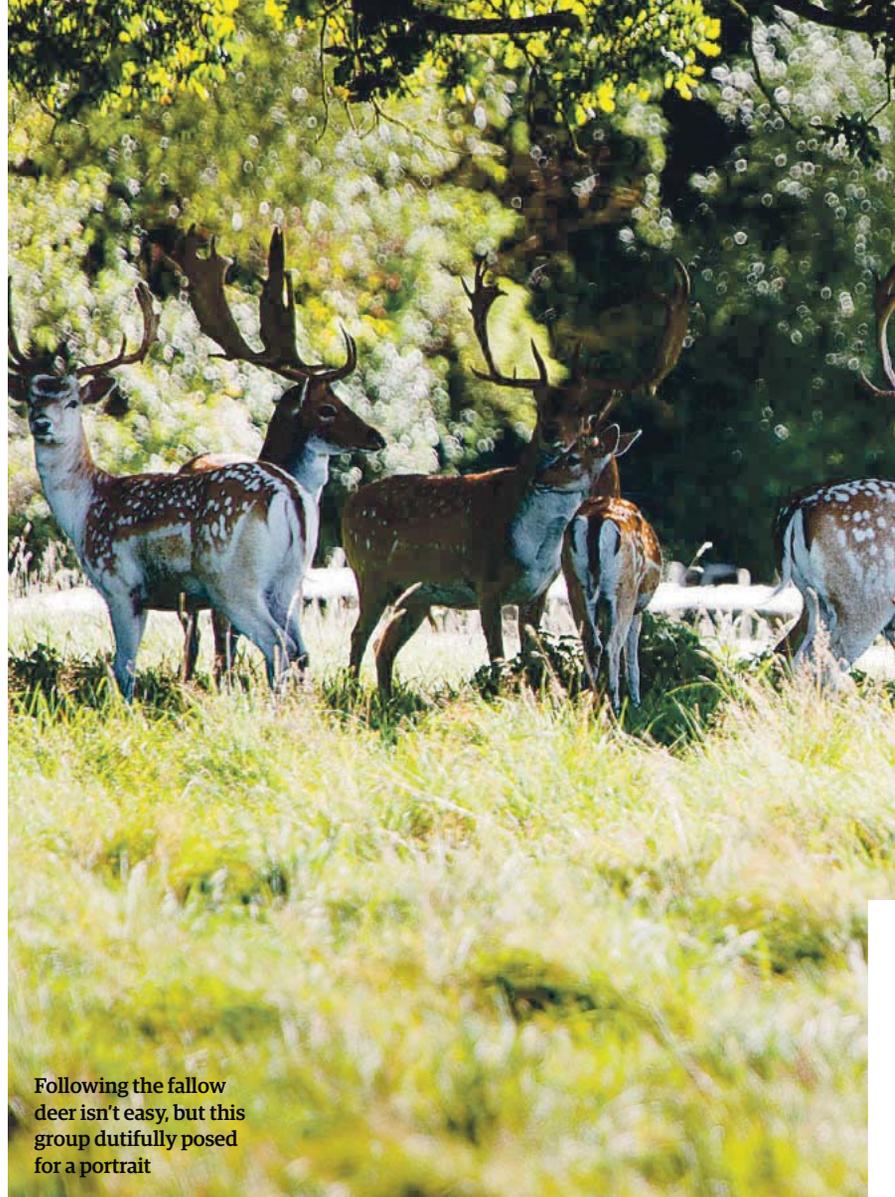
For more information...



... on the New Forest visit
<http://www.thenewforest.co.uk>



The view of the house from across the lake where kingfishers make their nests



Following the fallow deer isn't easy, but this group dutifully posed for a portrait

In the heart of England, where **Shakespeare** spent his early years, lies an estate **untouched by the world** where the deer roam freely and **time stands still** for enchanted visitors

INSPIRING THE BARD

Gardener-turned-gamekeeper Paul Smith's adoring gaze is fixed somewhere in the distance as he pauses during a safari with a difference.

His misty-eyed reverence, and that's no exaggeration, is reserved for a herd of a dozen deer that have temporarily gathered beneath a tree in a setting that may once have inspired Shakespeare.

These magnificent creatures are among 190 fallow deer that roam freely in 250 acres of Charlecote Park, a few miles from Stratford-upon-Avon in Warwickshire.

Paul has been managing the herd on the rolling banks of the River Avon alongside Park warden Simon Goodson for

three years and doesn't hesitate when asked to describe his fleet-footed charges.

"Phenomenal, fantastic, graceful - take your pick," he said, his eyes firmly fixed on the deer, identifying them instantly by their colour and antlers.

The incredible natural beauty in harmony with these majestic beasts is said to have inspired Shakespeare, who was once caught poaching in the Park as a young man.

Centuries on and Paul, who has worked at the estate - redesigned in the 1750s by Capability Brown - for 14 years, admits that over time he has learned to think like a deer. That's just as well as he manoeuvres his Land Rover around



In numbers

150,000

visitors this year

once

a year, the deer shed their antlers and replace them with larger ones, leaving a ring that helps to tell their age

30mph and 6ft

is the deers' speed and jumping ability



the tree-shaded corners of the estate, coaxing the deer into place for our photographer.

"They are my passion. I could watch them all day, but it's not all deer safaris. Simon and I manage the herd and that means taking care of the cull," he said.

"You feel remorse, but you know you are making the herd even stronger."

Paul, 30, is part of the three-strong team that run this jewel in the National Trust crown. He's also the head gardener, but will turn his hand to anything.

Feast for the senses

He and Charlecote Park and Garden manager Lisa Topham have ensured the Park bucks the national trend - no pun intended - of declining visitor numbers by putting an emphasis on year-round family attractions.

Winter walks and Christmas workshops, as well as the warm fireside lure of the 1558 Sir Thomas Lucy-built house, have made it a heart of England destination, whatever the season.

The grantor upped its game three years ago when visitor

Paul Smith (above) has learned to think like a deer

The Jacob rams (above left) are a popular attraction

The sun-kissed dahlias (above top) have been chosen to attract butterflies

numbers hovered around the 80,000 mark, with a seven-day-a-week drive to promote the Park as a year-round destination, which will see visitors top 150,000 this year.

Mystical spell

Beautifully arranged and constantly changing collections of flowers in Jubilee year red, white and blue adorn the parterre terrace to the rear of the house.

At every turn, the estate is a feast for the senses that entices growing ranks of visitors to return as things change season by season.

"If you see it, reach out, pick it and eat it," prompted Lisa as she showed off the gardens: "We want people to be part of the Park and really live it."

Several exquisite mulberries and the scent of cherry pie from the sun-warmed heliotrope flower, and the Park is already beginning to cast its almost mystical spell.

Paul has added dahlias to attract butterflies and is developing a wildflower meadow next to beautifully





The parterre terrace arrangements are updated twice every year



Paul and Lisa are constantly evolving the family garden

After the devastating foot-and-mouth epidemic, the deer are now one of the National Trust's flagship herds

maintained, yet natural, gardens. The centuries-old brewery, with its original flagstone floor, beehives creating honey for the shop and the work of renowned sculptors all vie for attention along with the stunning red-brick house itself.

Administered by the National Trust since 1946, the building - approached through an original Elizabethan gatehouse - hosted Queen Elizabeth I for a night in 1572.

The Lucy family extended the property in the Victorian era, making it one of the finest examples of an Elizabethan-style revival in existence.

Breathtaking collections in each room, from the ornate Grand Hall to the Drawing Room and panelled library, give the house a just-lived-in feeling.

Devastating

But it's the grounds that take the breath away. Designed to be part of the distant landscape, to please the Victorian ladies of the house, they are home to the fallow deer.

Clusters of these seemingly delicate beasts - confront one of the master bucks and he'll think you're a predator before unleashing 70 kilos of power against you - skip away at the sound of man, their only true predator.

Paul said: "I have the dream job, but there are negatives."

Like the mass cull of the Park's 74 red and 300 fallow deer during 2001's foot-and-mouth epidemic: "It was devastating, but it made us more determined to build it all up again."

Years on, Peter Green, one of the nation's leading vets, recently hailed the Charlecote deer as one of the Trust's

Park life

➤➤ The Park was landscaped by Capability Brown in around 1760.

➤➤ A 1654 letter from Cromwell summoning then-owner Richard Lucy to the Barebone's Parliament is on display.

➤➤ Trees in the Park have a 'browse line' left by deer eating low-hanging fruit and foliage.

➤➤ In April 2012, Charlecote was host to Antiques Roadshow.

➤➤ Shakespeare mocked resident magistrate Sir Thomas Lucy I, who tried him in the Great Hall on a charge of deer poaching. The Bard gained revenge for his fine and flogging by making Lucy a figure of fun in Henry IV Part II and the Merry Wives of Windsor, branding him Justice Shallow and scoffing at his coat of arms.



Stress-prone deer relax in an area of land kept free from the public glare

flagship herds. They are truly pampered here, with a sanctuary for when the public's glare becomes too much for the easily stressed creatures.

Lisa said: "We've successfully made the Park a year-round attraction by diversifying to give people almost total access.

"In October we have the rutting, in spring we have the lambing, and year-round there is Art in the Park as well as in the house itself, and some wonderful walks with herons and kingfishers by the river. Oh and the bees."

The dramatic impact Lisa, Paul and Simon have made has quite rightly attracted financial investment from the Trust to build on the success.

But Lisa added: "There are only three of us so we owe a huge debt to our volunteers and to those from local businesses like NFU Mutual, who also come in to help. It works so well and strengthens our relationship with the community and local companies."

The Bard would undoubtedly approve.

For more information...



... about everything from bee-keeping and brewing to deer watching at Charlecote Park, visit www.nationaltrust.org.uk/charlecote-park

WE'RE ALL IN THIS TOGETHER

A new audience is discovering how **efficient and profitable farming** goes hand in hand with **caring for the environment** at a demonstration farm

A growing network of demonstration farms is bringing sustainable farming principles to a wider audience.

The 40 farms are working with Linking Environment And Farming (LEAF) to show schools, agricultural groups and conservation groups how the needs of food production are balanced with conserving valuable natural resources, including water, landscape and wildlife.

One of them, Hainey Farm, two miles south of the cathedral city of Ely, grows a variety of salad and vegetable crops, including celery, beetroot, wheat and lettuce, for G's Growers Co-operative.

Sponsored

The 1,600-acre farm operated by JB Shropshire & Sons embraces the concept of Integrated Farm Management (IFM) advocated by LEAF and demonstrates how high productivity can be achieved with low environmental impact. The farm has also welcomed more than 3,000 visitors to National Grid-sponsored Open Farm Sunday in the past five years.

"The fenlands are the bedrock of our farming business. We place a high value on preserving and developing our soils, and the wildlife and fauna that contribute to this diverse environment," said John Shropshire, the farm's chief executive.

LEAF's IFM principles run through the farming business. The farm's crop rotation is based on the use of winter



Youngsters get up close to the land action

Visitors get the inside track on sustainable farming



Farm chief executive John Shropshire



wheat and sugar beet as break crops to improve soil structure and reduce the build-up of crop-resistant disease and pests.

The nutrient value of the soil is tested annually to ensure that fertiliser applications are targeted to the soil's needs and

to identify the most disease-resistant crop varieties. Habitat has been created for a number of Biodiversity Action Plan key species, including skylark, water vole, grey partridge, reed bunting and pipistrelle bat.

Regular hedge maintenance and tree planting take place, and the land is managed within an Entry Level Stewardship scheme that helps fund 120 miles of grass margins, blocks of wild bird seed to help birds overwinter, and pollen and nectar mixes for bumblebees.

The farm has become more water efficient by installing winter rainfall reservoirs to help its irrigation needs, and aims to cut energy consumption by a third, reduce waste sent to landfill, and introduce more recycling in the production and packaging process. An anaerobic digester is also

being built to turn green waste and maize crops into renewable energy.

For more information...

... on demonstration farms and Open Farm Sunday visit LEAF at www.leafuk.org



Open Farm Sunday 2013

- Register now for next year's event on 9 June.
- Lots of free help and support is available.
- Come along to one of the free Open Farm Sunday workshops from February to April 2013.
- Visit www.farmsunday.org for more information.



"You often get a bounce back after a bad year so we're keeping our fingers crossed for a bumper harvest in 2013"

ENGLISH TO THE CORE

Despite this year's **weather-hit harvest**, the long-term **future of the English apple** industry is rosy, says Cotswolds **grower Nicholas Dunsby**

This year has proved to be a crunch time for English apples, with one of the coldest and wettest summers for a century playing havoc with the harvest.

With the main crop up to three weeks late and apples smaller and weather-marked, supermarkets were forced to relax their cosmetic standards to obtain sufficient supplies.

"Blossoms were hit hard in May just when the fruit was setting," said Nicholas Dunsby, MD of Cotswold Orchards, near Broadway in Worcestershire, which recorded its worst harvest since 1977 with yields down 60 per cent.

"The wet weather meant there were fewer bees to cross-pollinate the flowers. On top of that, apple trees are very temperature-driven and if it's too cold, the pollen tubes that fertilize the flower won't develop."

Family involvement

The family-run firm manages 130 acres of orchards, and packs and sells around 2,000 tonnes of apples a year for Morrisons supermarket, including fruit from seven other growers in the area. It has supplied Morrisons on an exclusive basis for the last 10 years, having previously been contracted to Safeway for 17 years. The supermarket chain sells 400 tonnes of English apples a week in its stores at the height of the season.

The orchards were first established by Nicholas's grandfather more than 60 years ago when he left the army at the end of World War II and decided he didn't want to work for anybody else.

"People thought he was mad when he planted the orchards because the soil here is heavy clay, whereas apple trees prefer a sandy loam," said Nicholas. "It's true the trees do take a bit longer to establish, and you need good drainage, but once the roots are down they do fine."

The whole family remains very much involved today. Nicholas's father Paul is still active in the business, Nicholas's mother looks after the accounts, his wife

Apple facts

➤ Apples originated in the Middle East 4,000 years ago.

➤ They have been grown in the UK as a cultivated crop since the Roman occupation.

➤ Apples are an angiosperm (a flowering plant whose seeds are protected by fruit) and a member of the rose family Rosacea.

➤ Most of the beneficial antioxidants in apples are found in the skin.

➤ China is the largest producer of apples (40 per cent of the world's total).

➤ Apples are rich in fibre, cholesterol-free, sodium-free and fat-free.

➤ Gala has pipped Cox to the title of bestselling UK-grown apple.



Tall, closely packed trees give higher yields than traditional orchards

manages the pack house and one of his daughters helps out with the harvest.

The right balance

Six varieties of apple are grown to span the season, starting in the first week of August with Discovery and Worcester Permain, followed by Spartan, Egremont Russet, Cox and Gala right through to February and beyond.

A local bee-keeper brings in around 40 hives prior to the critical pollination period in May, with the apples harvested within a four-week period in August and September.

As apples ripen, starches in the fruit begin the conversion process into sugars. "We harvest when tests show the starch content is below 70 per cent, just the right balance between acidic notes and sweetness," said Nicholas.

In the pack house, the apples are floated along a water-borne conveyor belt where they are graded



The apples are graded into five sizes ready for the shelves



Nicholas hopes the next harvest beats the crunch



electronically by weight into five sizes, before going into cold storage until required. "Some of the apples are stored in a Gas Controlled Atmosphere in which oxygen levels can be reduced to as low as two per cent," said Nicholas. "This puts a break on the natural ripening process so they can be preserved right through to Christmas and beyond."

High-yielding

These storage techniques are enabling British growers to extend the marketing period for apples further into the season - a strategy known as import substitution.

"It's letting us claw back some of the market share that has been progressively lost since high-yielding foreign varieties like Golden Delicious and Granny Smith flooded the market after we joined the EEC in 1973," said Nicholas.

During that time, many English growers were forced to grub up orchards when low profits left them unable to reinvest in new trees. "When I first started 30 years ago, there were 1,400 registered commercial apple growers, but this has declined to around 300 today," said Nicholas.

A fight back began in the 90s when English growers started planting high-yielding orchards of popular imported apples, such as Gala and Braeburn, developing other new varieties and investing in highly productive orchards. The market share of English apples sold in supermarkets rose from 23 per cent in 2003 to 38 per cent in 2011.

Little pips

- An apple has a more complex genetic make-up than any other fruit.
- Planting the pips from an apple won't produce trees bearing identical fruit to the original.
- Cross pollination means every pip is a potential new variety.
- Trees are kept true to type by grafting cuttings on to root stocks.

Bumper harvest

Nicholas's personal favourite apple variety is Cox. "It's a full-flavoured apple with a lot going on, like a fine wine," he said. "But many youngsters like Gala, which is sweet and juicy, like a bottle of fizz."

Although significant numbers of Cox have been planted at Cotswold Orchards over the last 20 years, the intention is to move towards a 50/50 balance with the popular and higher-yielding Gala variety. This year the business has harvested its most recent intensively planted orchard, featuring 1,100 trees per acre (normally 300 per acre). Planting a 'hedge' of taller more closely packed trees on a wire support system enables more light to reach the fruit, resulting in higher yields per hectare.

The supermarket chains responsible for more than 80 per cent of sales are often criticised for promoting a small range of higher-yielding apples with a long shelf life at the expense of diversity.

"But the fact that only 30 of the 2,000 or so English varieties are commercially grown is for a very good reason," countered Nicholas. "Many of the heritage varieties no longer appeal to British consumers."

Despite this year's poor harvest, Nicholas is optimistic: "Generally, you get a bounce back after a bad year so we're keeping our fingers crossed for a bumper harvest in 2013."

In numbers

50bn the number of apples Britons munch through or cook up each year

For more information...



... on English apples and the history of the industry visit www.englishapplesandpears.co.uk



Fire crews are shown how to use specialist hoists to right the stricken horse



The crews keep the head still as they begin the rescue



It's up and away to safety after the careful rescue

Large **animal rescues** are rising across the country so National Grid is **playing its part**

RAISING SADDLES IN A CRISIS

An innovative new technique to train firefighters in how to rescue large animals has won support from National Grid.

Crews will be better prepared to rescue large rural animals thanks to a pioneering sponsorship deal with a college in the Midlands, and a mannequin horse.

National Grid has joined forces with Warwickshire College and three fire services to sponsor a life-size equine model to be used in training courses from next year.

Fire crews have been stretched to the limit as the number of large animal rescues has soared during this year's freak weather, with horses, deer, sheep, cows and bulls falling foul of the boggy, swampy landscape.

One rescue happened in Ross-on-Wye, Herefordshire, where 24-year-old Welsh Cob Cora had fallen down a steep hill on grantor Jan Cole's land.

Jan, who runs Barcol Liveries, said: "It's great that National Grid is supporting training aids like this because if you're dealing with large animals, there's always a risk."

Strength and stability

The model horse's steel frame, weighing in at 200kg, is designed for strength and stability, as well as to provide protruding axles on which the folding legs can pivot.

The legs are lockable using pins that can be removed to recreate some of the most common situations

horses might find themselves in on grantors' land.

Debs Coxall, the college's employment engagement manager for animal welfare and veterinary nursing, said: "One incident involved a horse crossing a wooden bridge, which gave way. The horse's legs went through and its belly was resting on the bridge itself."

Scenarios like that will be recreated with students learning about horse equipment and equine behaviour.

Powerful

Debs said: "We will be showing the firefighters how to take the tack and bridle off, how to rescue a rider if he or she is stuck and how to reassure the animal throughout."

"It's crucial because horses are so powerful and if they're not handled correctly, people can be killed or seriously injured. This will help make the rescue as real as possible."

Around 30 Herefordshire and Worcestershire firefighters will attend the courses each year, eventually offering cross-border assistance to colleagues in Warwickshire.

Since 2009, the county service's crews alone have handled 265 incidents, but this is the first opportunity they will have to practise on an actual-size victim. Mark Frost, Hereford and Worcester Fire watch commander, said: "This link-up will definitely save lives."



Welsh Cob Cora is on the mend after her rescue

For more information...



... about the specialist animal management courses visit www.warwickshire.ac.uk

SPRUCCED UP FOR SANTA

Next time you perch the **angel on the tree**, spare a thought for Kieran Jones and his aptly named Elveden helpers who brave **freezing snow and aching arms** to make it a **Merry Christmas**



The traditional festive image of a snow-coated Christmas tree surrounded by rosy-cheeked carol-singers is the end of a very long story - ask Kieran Jones.

He's in charge of the team that lovingly maintains the 100,000 pines and spruces that end up in department store foyers, city centre squares and our living rooms.

And the picture postcard image doesn't even begin to convey the back-breaking work that goes into bringing each spruce to the market.

"When it comes to felling, you're working beneath the canopy, and every movement brings a shower of freezing ice and snow down on you," said forestry manager Kieran.

"By the end of the day your back aches, your arm is dead, and you're soaking wet and cold. It's not the most pleasant part of the job."

November and December are an inevitable frenzy, with

Kieran and his team often working 90-hour weeks to meet orders from around Britain.

The 22,500-acre Elveden Estate on the Norfolk border, a short sleigh ride from Norwich, is home to 12 growing areas for trees in ascending sizes.

Quest for the perfect tree

What began as a forestry diversification activity four decades ago has developed into the number-one supplier of corporate display trees to more than 200 local authorities.

The Estate includes St Paul's Cathedral, Edinburgh, Glasgow and Cardiff, and celebrity chef Jamie Oliver among its regular clients.

The quest for the perfect tree sets Kieran and his team



In numbers

14 feet

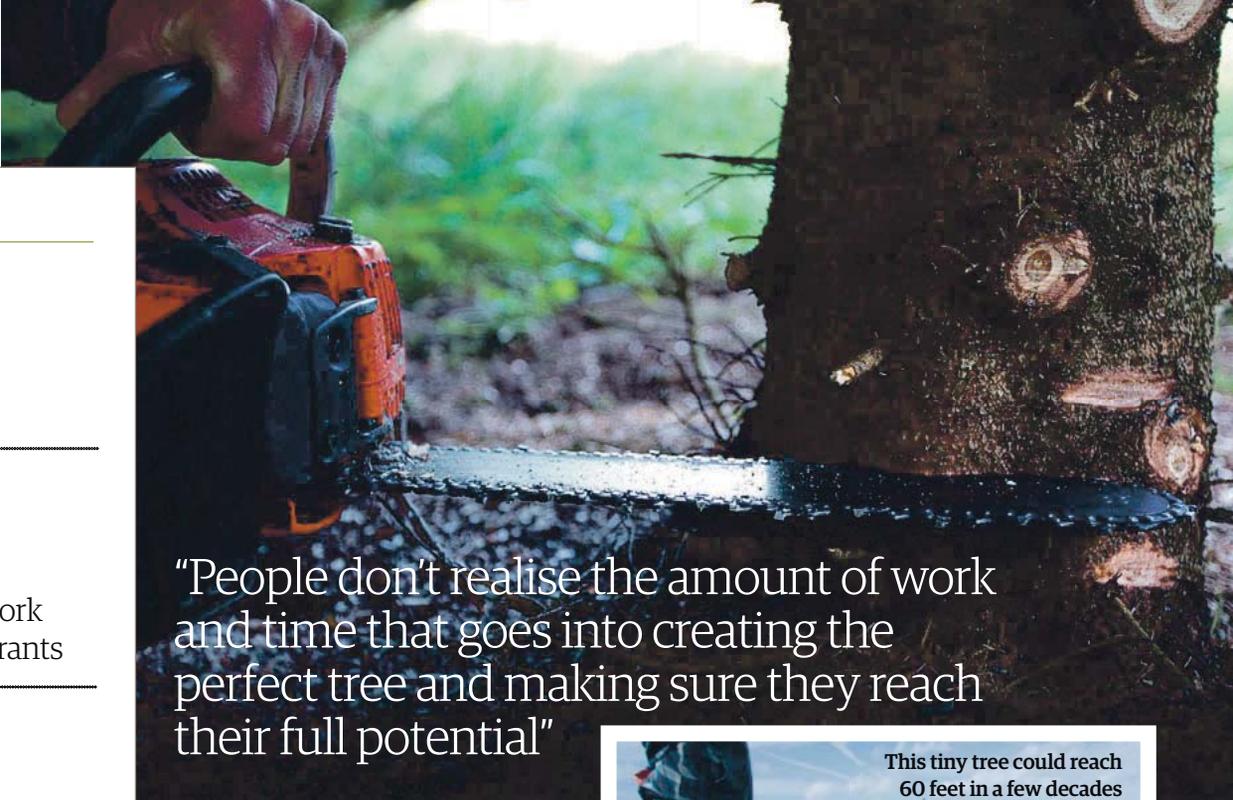
the height most trees are shaped to

200

the number of Elveden staff who work on the land, farm, shops and restaurants

5,000

the number of retail trees sold to the public each year on top of the 900 wholesale



“People don't realise the amount of work and time that goes into creating the perfect tree and making sure they reach their full potential”

time that goes into creating the perfect tree and making sure they reach their full potential.

“Trees drink around a pint of water a day so they have to be constantly checked. If you ever pick up a light tree in a garden centre, put it back and walk away.”

The whole process

Elveden, the first producer to be UK Woodland Assurance Standard certified by the Soil Association, offers a full service to customers needing trees over 20 foot tall, from harvesting, transportation and installation right through to illumination of trees up to 75 foot.

Before the labour-intensive festive rush, Kieran and the guys start work at 5am to beat the summer heat as they tend to their crop.

Colleague Wayne Howe said: “It's hard work and occasionally dangerous because of wasps and adders. I once put my foot down and there were adders basking everywhere. We got out of there quick. It gets very busy in winter when we cut, net the trees, load them on to articulated lorries and deliver them, before overseeing their installation. It's nice to see the whole process through.”

It's a specialised operation, with an 80-foot tree needing a 40-tonne stand to meet stringent safety regulations in our major city centres. Kieran said: “You often hear people saying that £25 is a lot for a tree that you'll only have for a month, but if they considered the work involved in getting it there, they might think again.”

For more information...



... on special Christmas events at Elveden visit www.elveden.com



This tiny tree could reach 60 feet in a few decades



The stamp of approval goes on all the best-quality trees once they're measured

apart as they shear the tiny Norway Spruces, Nordman Firs and Scots Pines from bulbs to guarantee their shape.

“As the tree starts to grow, we trim it into a cone shape so it fills out and looks perfect when it gets to a few feet tall,” he said.

Foot-high trees are planted with a constant computer-assessed water supply as Kieran and his eight-strong team spray them to prevent potentially devastating aphid and red spider outbreaks, which can strip a tree in days.

The shearing continues annually until the tree reaches 14 feet and achieves a full body and perfect cone shape. From then on it's left to grow and keeps its shape naturally.

The average tree then puts on around two feet every year and, with the giants of Elveden nudging 60ft, it's very much a long-term business.

Kieran said: “People don't realise the amount of work and

The trees

➤➤ Norway Spruce – a short-needled tree capable of growing to 180 feet.

➤➤ Scots Pine – a long-needled tree, it normally survives for up to 300 years, but recorded specimens in Scandinavia have reached 700 years.

➤➤ Nordman Fir – a wider tree, popular for its low needle drop.

➤➤ Sitka Spruce – grown only at the sister estate in Northumberland. It's taller and popular with corporate customers for its vandal-proof qualities.

Lastword

Your chance to enter two great competitions

GEOFF'S PIC'S A SHIRE THING

Congratulations to Geoff Johnson from Melton Mowbray in Leicestershire who won last issue's photo competition.

Geoff, who collects £150 in M&S vouchers, said: "It's wonderful and so nice to win. I always enjoy reading Gridline so to win is just great."

LET US KNOW YOUR STORY

Strawberry farms, lavender growers and even quad bike racers... we've had a range of diverse grantors on these pages this year. Now we want to hear from YOU.

If you have diversified or do something different on your land, let us know and we'll share your success with 35,000 other grantors – think of it as free PR!

Email Dawn.McCarroll@nationalgrid.com
Call us on 01926 656325



Photo competition



JOHN LEWIS VOUCHERS

Grab yourself a pre-holiday bonus by winning £150 in John Lewis vouchers with the Gridline photo competition.

Variety is the spice of life and the department store certainly provides that with scores of items to choose from, whether it's clothes or technology that interest you.

The great news is, if you would rather save the vouchers for a new year treat, you can – vouchers are valid for 12 months.

If you'd like to scoop the prize, worth £150, then get your camera out and snap a winning shot for Gridline's photograph competition.

The theme for this issue's competition is 'Winter warmers'.

Send in your photo to Gridline Photo Competition, 23-25 Waterloo Place, Warwick Street, Leamington Spa CV32 5LA, or email it to gridline@uk.ngrid.com.

The competition closing date is 25 January 2013. Only National Grid grantors are eligible to enter and, regrettably, prints cannot be returned.

WIN!

A luxury gourmet getaway



A night of luxury with a gourmet meal thrown in could be yours if you win Gridline's fantastic competition.

Not only will the winner and their guest luxuriate in a deluxe double room at one of 85 hotels around the UK, they will also

enjoy a sensational evening meal as well as breakfast for two.

To be in with a chance of winning this amazing prize, simply answer the question below and send it to the address below. Good luck!

Q How many acres does Charlecote Park near Stratford-upon-Avon cover?

Send your answer to Gridline Gourmet Competition, 23-25 Waterloo Place, Warwick Street, Leamington Spa, Warwickshire CV32 5LA.

You must be a grantor to enter. Closing date is 25 January 2013.

Contact Gridline



Tel: 01926 656 325
Email: gridline@uk.ngrid.com
www.nationalgrid.com

nationalgrid