

Backwell Environment Trust

Bulletin 26 - Spring 2013

www.backwellenvironmenttrust.org



A very warm welcome to our latest spring bulletin

The BET volunteers have once again been very busy over the winter season improving and maintaining The Fern Way as well as coppicing small patches of woodland to let in just a bit more light. The Cabin restoration project is also now well underway and hopefully should be on target for completion later on this year.

To help you find your way around our action-packed bulletin the contents are listed below:

BET Membership

Ash Die Back

Woodland Report

Dinosaur Tales!

BET Bird Box Survey

Woodland Diversity

Renewable Energy?

Cabin Update

Membership Renewal Time!

Well, it's that time of year again when we hope you will consider renewing your BET membership for another 12 months, so with your Bulletin you should receive a 2013/14 membership renewal form. We try to make renewal as easy as possible for you, so if there is no change in your circumstances please write '**No Change**' across the form. But please remember to confirm your gift aid status.

If you want to pay by electronic transfer then please identify the payment with your name and again write 'Gift Aid Yes' or 'Gift Aid No' in the message space.

You can hand deliver your form to any of four addresses on the form or post it to Andy Smith who is our new membership secretary.



Membership Renewal



The membership year runs from April 1st to March 31st and renewals for 2013/14 are now due. We really hope you will complete and return the enclosed form.

The size of our membership is a very important factor when applying for grants etc, so although we seem to be very well established, we do still need to demonstrate a wide base of support across the community.

Gift Aid is also a very important source of income for us so, if possible, please tick the relevant box and don't forget to sign the form.

If you have joined or rejoined since November 2012 then please ignore this notice as your membership will go to March 31st 2014. Thank you for your continued support



Ash Die-back Disease

The Ash tree is the UK's third most abundant species of broadleaf tree (after oak and birch), covering 129,000 hectares of woodland. The appearance of Ash die-back (*Chalara fraxinea*) in the English countryside is a worrying development. The loss of our tree cover could be comparable with the demise of the Elm tree in the 1970s.

Ash die-back was first identified in 1992 in Poland, and has now spread across Europe. An estimate in 2010 showed that between 60 and 90% of the Ash trees in Denmark have been affected by this disease and may eventually be killed. Natural resistance seems to be found in (at most) 5% of the Ash trees studied, but the process of selection and testing resistant Ash trees to replace those lost to the disease is likely to take decades. Vegetative propagation of disease resistant Ash trees is costly and time consuming, since cuttings apparently do not root easily. Micro-vegetative propagation is capital intensive and requires skilled operatives. At present the only suggested remedy is to remove and destroy any infected trees, since there are no known means of treating the disease once it has entered the plants.



The reason why this disease has arisen at this time is still unknown, but it may be due to hybridization of two related fungi, normally geographically separated but which have been allowed to interact due to the common practice of global plant translocation. Climate change may also be implicated. Of course with hindsight it would have been wise to ban imports of Ash trees several years ago, and the same should be said of many of the other plants now being imported without good reason. Indeed my own garden is full of Ash seedlings, so there is no justification for this. However even without importations, the disease might have entered the country by wind-blown spores, and the present distribution, which is mainly to the east of England close to mainland Europe, seems to support this.

If we are unable to control this disease, with the predicted demise of the Ash tree in England, one might ask 'What can be done to mitigate the projected loss in tree cover?' If we can afford to be patient, natural regeneration is cost effective, but it may take many years to restore our Ash trees. It is possible that Ash may be replaced by semi-native plants like Sycamore, although this much maligned tree has much to

commend it, since it grows fast and has good timber and it supports a large biomass, which in turn supports many of our native wildlife species.

It is suggested that other hardwood trees could be propagated to fill the spaces, at least temporarily (for the next 50 - 100 years!).



Species which might be candidates for Ash replacement in addition to Sycamore are Beech, English Oak, Cherry, Silver Birch, Rowan and Small-leaved Lime, which are all fast growing and produce good timber. Apart from Lime, most can be grown from seed, but cuttings of Small-leaved Lime taken from epicormic growth in May or June are said to root readily. I would encourage others to consider propagating these trees as alternatives to Ash so that we are prepared for any major loss of our tree cover.

The Woodland Trust is working on *Chalara* but they are not yet able to finalize their conclusions.

Together with the Forestry Commission (FC), they are debating which trees should now be planted, in view of the prevailing tree diseases and of global warming. The FC is considering sourcing seed from countries to the south of Europe where the trees may be more tolerant of hotter conditions.

Other notable tree diseases and pests listed by the Forestry Commission include –

Acute oak decline - a condition affecting oak trees in parts of England and Wales, in which bacteria, including one species previously unknown to science, are believed to be involved.

Asian longhorn beetle - A wood-boring insect that can cause extensive damage to a range of urban and forest broadleaved trees.

Bleeding canker of horse chestnut caused by the bacterium *Pseudomonas syringae* pathovar *aesculi* - a bacterium that kills many horse chestnut trees.

Chestnut blight, a highly damaging disease caused by the fungus *Cryphonectria parasitica*, which was confirmed in sweet chestnut trees in two nut orchards in Warwickshire and East Sussex in 2011.

Dothistroma needle blight - Formerly known as red band needle blight, and caused by the *Dothistroma septosporum* fungus. Causes mortality and loss of timber yield in pine trees. Main host is Corsican pine, but lodgepole and Scots pine also increasingly affected.

Great spruce bark beetle (*Dendroctonus micans*) - is present throughout much of the Eurasian region, practically everywhere that spruce trees grow. It was first discovered in Britain in 1982.

Horse chestnut leaf miner (*Cameraria ohridella*) - first found in Britain in 2002 in London, this moth's range has expanded to much of England and Wales.

Oak pinhole borer (*Platypus cylindrus*) - once rare in Britain, populations grew in the south after the 1987 gales, when it took advantage of the glut of suitable breeding material.

Oak processionary moth (*Thaumetopoea processionea*) - severely defoliates oak trees and can weaken them, making them susceptible to other pests and diseases. Outbreaks in west London and Berkshire.

Phytophthora austrocedrae - Confirmed as the cause of dieback and deaths of juniper bushes in Northern England in 2011, this pathogen had previously been almost solely associated with Chilean cedar trees in South America. Juniper's conservation importance makes this a potentially serious development.

Phytophthora kernoviae - so far confirmed only in Britain, Ireland and New Zealand, and only in a very few trees. However, the fact that it can infect beech and oak, as well as woodland under-storey species such as bilberry and rhododendron, makes it a forestry concern.

Phytophthora lateralis - usually kills most Lawson cypress trees that it infects. First recorded in UK, in Scotland, in 2010, now present in Devon, Yorkshire, Northern Ireland and Republic of Ireland.

Phytophthora ramorum - a fungus-like organism which attacks many trees and plants. The economically important larch is a host, and large numbers have had to be felled.

Pine tree lappet moth (*Dendrolimus pini*) - has been discovered breeding in Inverness-shire pine plantation forests. It can be a serious defoliator of pines and other conifer trees in some parts of its native range in Europe and Russia.

Woodland Report

The winter working season in the BET woodlands will often see us coppicing small sections of the woodland where tree growth has become too dense and is having a detrimental effect on the forest floor flora. Although it may be a bit nippy for the volunteers, the dormant winter landscape allows us to make any necessary alterations without disturbing any of the reserve's many plants and animals.

Woodland Coppicing

Badgers Wood has some superb patches of bluebells very close to the Fern Way, but you could be forgiven for not really noticing that they exist. In a typical year, only around 10% of them actually come into flower which is almost certainly due to the heavy shading they endure by the ever-thickening tree canopy high above. So to redress the woodland balance once more, some of the tall, spindly ash trees towards the top end of the Fern Way have now been selectively thinned to give the bluebells a bit more light and also to make them more visible to passing visitors. Over the next few years we'll keep a close eye on the number of plants that come into flower to monitor the success of the thinning.



Jubilee Stone Wood has also seen some small sections of woodland selectively coppiced, again to allow more light to reach the forest floor to hopefully improve the ground vegetation to be found there. As this area is on the lower boundary of our dormouse habitat, all 'dormouse-friendly' trees have been left undisturbed.

Fallen Trees

This winter has had its fair share of high winds and over-soggy soil, the combination of which has brought down quite a few large trees and branches, especially in Badgers Wood. Not surprisingly, tall trees carrying a lot of ivy and the evergreen Yew have been worst affected. Luckily for us though, virtually all the affected trees have fallen close to, but not on our network of trails making their removal easier. A few trees have leaned precariously over Cheston Combe Road but the volunteers have managed to get to them before they actually fell.



Clearing scrub next to Geological Features (BW)

Badgers Wood has some truly amazing geological features, some of which was being hidden by scrubby vegetation. This year some of this has been removed to expose the limestone cliff faces.

Posters

When the BET volunteers undertake some of their larger projects, especially when they are close to the paths, you may notice that explanatory posters are now being put up explaining just what we are doing, what we are hoping to achieve and how long the work should take. This should keep you

better informed about what we are up to and allow you to better track its progress over the coming years. We are also in the process of putting this information on our website.

Fern Way Improvements

This winter the steep steps leading away from the pond have been improved by putting in additional smaller steps to make the climb just that bit easier as well as crushed stone being added to the step surfaces to improve the grip. The extremely wet weather this year has also made some sections of the trail fairly muddy and a start has been made to add yet more crushed stone to the path to improve things.

Restored Meadows - Second Year

We have restored quite a few more meadows in 2011 which means that they will be on their second season this year. Usually a newly restored wildflower meadow will be pretty cautious in the first year of re-growth but by the second, the plant seeds and seedlings that have survived in the soil for many years should finally start to germinate so we'll be watching with great interest this summer just what wildflower surprises may await us.



BET Volunteers

The BET volunteers continue to go from strength to strength and are now meeting **every** Monday morning as well as the usual fourth Saturday of each month. We regularly get about 10 to 12 volunteers turning up to help us out each week - come rain or shine. Thank you all for all your hard work over the winter season, especially by turning out whatever the weather!

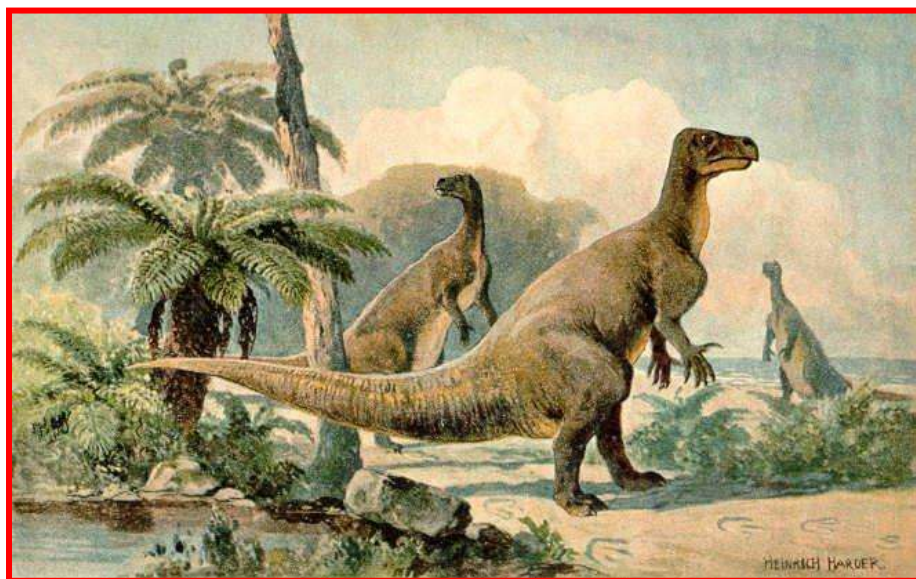


C : Nick Upton

Just some of the trusty BET volunteers

Dinosaur Tales!

How many people remember feeling a slight 'frisson' of fear when watching Steven Spielberg's "Jurassic Park" film some years ago, and the huge Tyrannosaurus Rex chased the terrified people and children? A dinosaur like this was 35-40 ft (10-12metres) long, 16 ft (5 metres) tall and weighed over 8 tons - a rather frightening creature, and they had more powerful arms and legs than previously thought, so ran much, much faster!



When dinosaur bones (fossils) were first found, they were thought to be remains of mammoths or giants. By the 16th/17th centuries however, they were recognised as remains of sea creatures millions of years old, thus reinforcing the idea of a universal deluge (Noah's Ark) or series of catastrophes. In 1780 at Maastricht, Holland, quarrymen in an underground chalk mine found jaws and part of a skull 4 ft (1.2 metres) long. The landowner, Canon Dr.

Godin claimed the skull for his own museum, and there it stayed until 1795, when the town was besieged by the Republican French Army. No shots were fired near the museum, so Godin suspected troops were after the skull as a war trophy, and hid it nearby. The French Commanding Officer offered a reward of 600 bottles of wine for its 'capture' and it was soon found by a very happy party of grenadiers! Later it was sent to Paris and identified as jaws of a giant lizard.



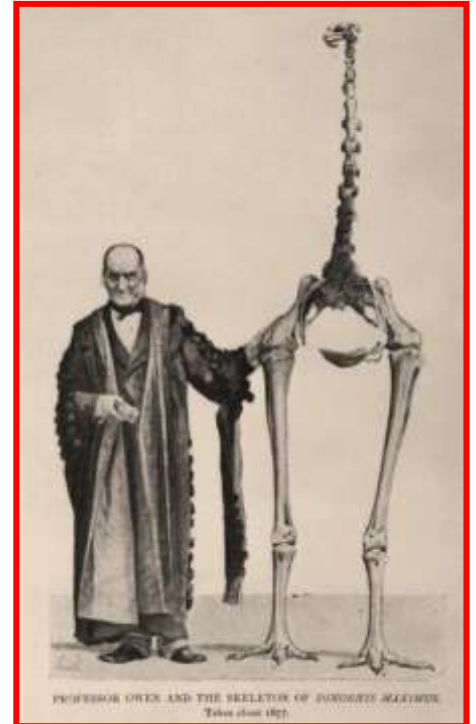
Some of the earliest dinosaur discoveries in England were made in 1811 by Mary and Joseph Anning at Lyme Bay, Dorset, with Ichthyosaur (sea lizard) and Pleisiosaur bones. Two naturalists in the 1820s found more giant lizard remains - William Buckland, Dean of Westminster, and Dr. Gideon Mantell, physician from Sussex. In 1822 whilst Mantell visited a patient, his wife found in a heap of stone for road repairs, a rock with curious teeth embedded in it. Having a passion for fossils, Mantell explored the nearby quarry, finding many more bones. By chance he met a zoologist working on Central American lizards, who said the teeth, although larger were similar to

iguana lizards - hence the dinosaur was named 'Iguanodon'. After studying many bones, including the best specimen from a Maidstone quarry, Mantell published his research and findings in 1825.

Over 50 years later at Bernissart, Belgium, a dinosaur graveyard of 31 complete Iguanodon skeletons were found by coal-miners 1,000 ft underground. From discoveries like these, it was better understood what it looked like - an elephant-sized dinosaur, 4-5 tons in weight. It could crouch on all fours to eat vegetation, or stand on hind legs to browse on trees, and rear up to 14ft (4.3metres) high.

Richard Owen, another Englishman, anatomist and interpreter of fossils, gave dinosaurs their name - 'Dinosauria' - terrible lizards. A favourite of royalty and aristocracy, he wrongly took credit for their discovery, causing a bitter feud between Mantell and himself, as it was Mantell who had spent years digging and researching dinosaurs, not Owen.

The Crystal Palace exhibition opened in May 1851 on 20 acres of Hyde Park, and had 11 miles of stands including artwork, silks and flowers, and when it closed in 1854, the exhibits were transferred to a 200 acre site on Penge Hill, Sydenham. In recognition of Mantell's hard work, he was asked to mastermind a project to recreate life-sized dinosaurs for it, but as he was very ill and dying, Owen took over. He employed Benjamin Waterhouse Hawkins, a sculptor, modeller and builder, who first made clay models, some weighing 30 tons, then a mould, then a metal cast. The iguanodon imagined by Owen was a four-footed brute, stumpy pillar-like legs and squat bulky body, though Mantell said it was totally wrong, as the forelimbs were shorter and used like arms, and it was more slender all over - Owen refused to change it.



Hawkins gave a spectacular dinner party inside the unfinished iguanodon model (still supported by hoists, ropes and pulleys), and invited 21 leading scientists along, on New Year's Eve 1853. They ate an 8-course meal, with sherry, Madeira, port, moselle and claret, then after midnight the drunken group staggered off to the station, sounding like a herd of bellowing iguanodons themselves! Hawkins then travelled to America to make dinosaurs for New York's Central Park. However he fell foul of local politics, and those he had already made were condemned, and buried in the Park. Some day an archaeologist will find them, and wonder what on earth went on there!

No large dinosaurs have been found in our area, although mammoths were at Wookey Hole, and Banwell Cave remains include reindeer, bison and brown bear. Gough's Cave had extinct giant oxen, antelope, lemmings, and 10,000 year old Cheddar Man, but the most interesting remains came from a Cave at Westbury on Mendip, found through quarrying. They dated from 500,000 years ago, and along with giant hyena, brown and cave bears, jaguars, lions and 6 species of bats were woodmice, lemmings - and hamsters! So why did dinosaurs die out? Theories range from the 'wrath of God', to plagues of caterpillars eating all the foliage, to supernova star explosions, destroying life with lethal



radiation. More realistically, possibly Ice Age conditions cooled the land, and dinosaurs with their naked or scaled skins could not easily adapt, whilst towards the end of the Cretaceous period (between 144 & 66 million years ago), furry mammals who now existed could hibernate, and birds had warm feathers to insulate them, which is why they survived, and dinosaurs did not.

Gideon Mantell in the 1820s at Tilgate Forest, Weald of Sussex uncovered not only dinosaurs, but a whole landscape from that period: "...a mighty river flowing in a tropical climate over sandstone rocks...through a country clothed with palms and arborescent ferns..." In the river delta giant ferns would have emerged out of the mists, and it was in surroundings like these that dinosaurs once ruled the earth, for over a hundred million years.

Jenny Greenslade



Archaeology Walk



On Saturday July 20th at 10am, as part of the Council For British Archaeology (CBA) Festival of Archaeology Fortnight, we are holding an archaeological walk through the BET reserves. Starting from St Andrew's Church & then up through Jubilee Stone Woods which will include the 'humps and bumps' from 17th/18th century lead and iron mining, a 19th century lime kiln and a 14th century warrener's cottage. On the hilltop (magnificent views) is the Jubilee Stone, erected for Queen Victoria in 1897, and in the adjacent field are traces of four Bronze Age barrows. We then cross over Cheston Combe Road to Badgers Wood (more views!) and walk down past ancient trees, ferns and cliff faces to the Burial Cave, with remains dating from the Neolithic period 5,000 years ago, and finally back to the Church.



BET Bird Box Survey 2013



I volunteered to help with this year's nest box inspection, little realising just how many nest boxes there are now! Jubilee Stone Wood has 19 boxes and 2 owl boxes and Badgers Wood around 28 plus 2 owl boxes. I say 'around' as some remain very well concealed and one or two were rediscovered!

The number of boxes with nests was remarkably similar to last year, though this year there were more boxes in BW than last. In JSW there were 8 nests, as last year, with nest material in 2 more. The majority were of the tit family, but one may well have been a nuthatch. Another had lots of leaves and a very surprised mouse! One of the owl boxes contained lots of bedding material suggesting squirrel use.

In BW only 8 of the 28 had nests (again the same as last



year but with a greater choice of boxes) with 4 more containing material. The most interesting find was a dormouse nest nestled on top of a tit nest! One owl box had definitely been used by squirrels (corpse!) but the other is too high for the ladder.

This year we were lacking Trevor Riddle of the RSPB so the survey was undertaken by Bill, Brian Campbell, Derek Seddon and me over 4 very chilly mornings, sustained by Bill's very welcome hot coffee and hobnobs. All the boxes we could find were checked, emptied and, where necessary, minor repairs effected as best we could with numb fingers - replacing staples was particularly challenging! Three boxes were taken down and significantly refurbished by Bill before being replaced.

Carrie Riches



Shedding Light on Woodland Diversity

Although Britain is one of the least wooded parts of Europe, the area of woodland cover is at its highest level for 250 years - about 12%. It could realistically reach 15%, which would be the highest level since the Domesday Book. But Plantlife, the wild plant conservation charity, highlights that the Lesser Redpoll population declined by 78% between 1966 and 2000. The Pearl-bordered fritillary butterfly population has declined by 80% since 1985, with more generally a 56% decrease in woodland butterflies, and 1 in 6 woodland flowers is threatened with extinction.

How can these declines be occurring when things appear to be 'on the up'?

As Oliver Rackham points out, the time since the last glaciation (and so the age of our woodland) is only six times as great as that since Julius Caesar. Sir Arthur Tansley, pioneer of the science of Ecology, described ecological 'succession', a process in which vegetation colonises bare ground in successive waves of species and eventually form a stable 'climax' vegetation. He concluded that Britain in pre-history was covered in a vast wildwood, with woodland 'provinces' dominated by one or two key species.

This picture was challenged in 2000 by Francis Vera in his book 'Grazing Ecology and Forest History'. He argued that an endless wildwood could never have had the chance to develop while deer, bison, wild horses and oxen grazed on it. Grazing animals will do almost anything to munch on the leaves of trees. Elm, Lime and Ash are among the favourites. Instead, Vera argues, woodland developed as groves of trees surrounded by grassland, with scrub of hawthorn and blackthorn at the edges protecting the young Oak and Hazel trees from being grazed. Succession continued within these groves, with Lime and Beech replacing the Oak and Hazel. Eventually with age a grove decayed at its centre and was grazed once again. The patchwork effect of our wildwood then looked more like moulds travelling a petri-dish than anything resembling the Amazon.

More than of stone, clay or metal, ours is a history of woodworking. Almost all of our tree species will grow again (spring) from a cut stump or root system. Maple, Oak, Lime, Hazel, Ash, Wych Elm, Alder, Hornbeam and Yew are among those that it is almost impossible to kill by cutting alone. Cut Oak can grow up to six feet tall and one inch thick in a season. Through all our history, humans have distinguished between the 'underwood' of coppiced stumps and standing timber trees and this form of woodland management was once almost universal. Pollarding a tree at 6-15 feet high keeps the useful growth away from grazing animals. The Sweet Track in Somerset, dating from the

Neolithic, included Oak, Ash, Lime, Hazel, Alder and Holly used for different functions within the structure and most of it grown, on purpose, by coppicing woodland trees.

Survival depended on the sustainability of this woodmanship. A Bristol baker was only granted coppice of Leigh Woods in 1667 on condition that it was done '*...only at seasonal times of the year...'* so that *...ye same woods may be saved and preserved according to ye custome of ye country.'* Charcoal, despite increasing competition from coal, remained the main fuel for iron works and other industries, which usually located close to the source of their fuel. Shipbuilding seems never to have been the cause of woodland destruction we once thought. Masts were nearly always imported, and shipbuilders much preferred park and hedge oaks with their natural bends to the rather plain woodland trees. Of far more importance was the leather boom from the 1780s. Leather products became all the rage, but tanners required the tannin from Oak bark to tan their hides, and began demanding bark from all sources - wood and hedge. The leather industry which grew between 1780 and 1850 became a larger user of Oak than the naval dockyards and coppiced oak underwood thrived as renewable resources.

It was the Victorian engineering spirit that led to the death of woodmanship. The building of the canals and then railways brought cheap coal to the countryside for the first time. The small, competing woodland business that had produced charcoal and other products woodland for centuries could not compete with this cheap fuel. Nor could they mount a campaign against the new international competition that the railways brought, and the cheap imported wood products that arrived. To add insult to injury even the railways sleepers were of imported Pine.

The Stock Markets gave the Victorians the ability to predict income, and modern forestry was imported to Britain under the tutelage of German-born forester William Schlich. In 1904 he published *Forestry in the United Kingdom*, and later, *Afforestation in Great Britain and Ireland*. The destruction of our woodlands during the 20th century has not been a loss of woodland cover (OS maps show that woodland cover remained stable even between 1914 and 1950), but a change in its composition through afforestation, and from ancient to plantation. Between 1945 and 1975 there was unprecedented loss of at least a third of our ancient woodland. Agriculture, quarrying, housing, roads and industry have also played their part.



Within 5 days of the great storm of 16 October 1987, the UK government announced £3 million for woodland replanting. The devastation was seen as a complete disaster, and 5 million trees were believed lost and were cleared as quickly as possible. Woodland organisations now look back on the response with a bit of embarrassment. Far from being a conservation disaster, the benefits for woodland biodiversity of the storm were immense. It opened up canopy to light in a way that had not happened in many woods for a hundred years. In hindsight very few ancient trees fell. It was young planted trees that had not the strength to stand; the six of the Sevenoaks lost in Kent had been planted in 1902. But even the fallen trees continued to grow (or would have had most not

been cleared in a rush to tidy up). This rare wildlife event allowed woodland biodiversity to flourish. But instead of recognising it for what it was, we hurriedly imported trees from overseas and planted them in our ancient woodlands, as if they could ever belong there.

Increasing globalisation of disease brings new threats to our woodlands; *Chalara* dieback of ash is the latest, but Acute Oak Decline, Oak Processionary Moth and Asian Longhorn Beetle are some of a list of new threats. These threats are being tackled, and woodlands benefit from a far greater research budget in the UK than do amenity trees in towns. But the charity Plantlife argues that the more chronic threats are much closer to home. The three biggest threats to our woodlands today are, they say:

- 1) **Lack of or under-management**. The almost complete loss of coppice and pollard rotation management in our woodlands has created dark and dense 'high forest' that has a far lower biodiversity. In 1947, 49% of our broadleaved woodland was coppice or scrub, and 51% high forest. By 2002 97% of that woodland was high forest. The solutions are a return of sustainable cutting, grazing and wood fuel production.
- 2) **Nutrient pollution**. 93-98% of our woodland has excessive Nitrogen which is captured from atmospheric pollution or as run-off. Nitrogen favours monocultures of plants such as nettle, bramble and wild garlic. Once a diverse woodland flora is lost, so too are many of the animals which depend upon them. Sustainable coppice management over a number of years can help reduce Nitrogen levels by removing it in the wood products.
- 3) **Deer**. We have more deer in our woodlands than at any point in the last 1,000 because we now rarely hunt or control them. The woodland shrub layer on which many bird species depend is diminished, and regenerating woodland trees can rarely grow beyond 2 metres. Coppicing can sometimes become a waste of effort because the re-growth is eaten.

The history of our woodland is a short one, but in that time our dwindling ancient woodland has developed a rich diversity. The character of our woodlands is equally diverse, and is the result of



Vera's model of the wildwood might look like this scene, rather than our traditional idea of continuous dense forest.

devastating storms, disease epidemics, and human activity since the ice last receded. Climate change will further alter their character, and we may come to depend on species that we'd previously considered non-native. But unless we can control pollution and deer, and bring management back into our woodlands (which means felling trees and letting them re-grow) the diversity of our woodlands will continue to decline. The difficult task is to overcome our emotional resistance to felling trees, and to focus on properly managing the woodlands we have rather than simply planting more. Biodiversity depends not on the quantity of woodland, but on its quality.

Ian Monger

Ian Monger is a former Senior Tree Officer of North Somerset Council and now runs his own tree consultancy, Ian Monger Trees. www.ianmonger.co.uk



The subject of Climate Change and Renewable Energy never seems far from the headlines these days, so in this edition we have included a thought-provoking, challenging article on the subject. Although this is a very personal point of view and doesn't necessarily reflect the views of BET, the article is designed to make people think about the way we generate our energy now, and in the future.

Renewable Energy - A Personal Point of View

There has been much controversy and many objections made at the prospect of a solar park at Downside, and a 100ft wind turbine on Grove Farm in Backwell.

The point I would like to make in addition to those already made by local people is that not only are these proposed projects in the wrong place, but anywhere would be the wrong place. After all we live on a small crowded island, so wind and solar farms will always upset people and wildlife somewhere. Also it is common knowledge now that not only does the renewable energy industry receive incentives through huge government subsidies, but these subsidies are pushing a substantial number of families into fuel poverty through ever increasing energy prices, as well as being an enormous burden on industry.

We are also well aware that some landowners are making eye-watering sums from subsidies. We hear, for instance, that David Cameron's father-in-law, Sir Reginald Sheffield is paid taxpayer subsidies to the tune of nearly £1,000 a day for the eight wind farms on his estates. This is a scandal. It is time that we took a real hard look at whether these renewable projects are in fact sustainable in the long term, when



we know that they require large areas of land and will always need to be paid for by the tax payer. In addition, it has been proved that wind and solar produce risible amounts of intermittent, unreliable energy which is totally inadequate in a modern technological world.

Another factor of extreme importance is that it is impossible to have wind turbines without fossil fuels, especially gas. Hydrocarbon-fired backup generators must run constantly to avoid blackouts and grid destabilisation owing to constant surges and fall-offs in the electricity to the grid caused by the vagaries of wind. According to Robert Bryce in his book 'Power Hungry', Kent Hawkins, a Canadian electrical engineer, published a detailed analysis on the frequency with which gas-fired generators must be cycled on and off in order to back up wind power. He discovered that the frequent switching on and off results in more gas consumption than if there were no wind turbines at all. Hawkins concluded that wind power is not an effective CO2 mitigation strategy *"because of inefficiencies introduced by fast-ramping (inefficient) operation of gas turbines."*

Why haven't our politicians seen the light by now, and invested in the well explored science of thorium nuclear technology, which the Chinese are now racing ahead with, and been more enthusiastic about the prospect of Britain's large shale gas deposits which have cut energy costs by half in America? The answer of course is that not only are we committed to renewables by the EU because of their obsession with avoiding fossil fuels, (even though it has been recently admitted that there has been no global warming since 1998, and the most obvious explanation for climate change is natural variability - the cycles of change in solar activity and the movements and temperatures of the oceans) but we have in place since 2008 our very own Climate Change Act. This crazy Act goes even further than the EU legislation in place, by legally binding us to a target of an 80% cut in greenhouse gas emissions by 2050 from 1990 levels. The target set for 2020 in this Act is a 34% cut, going beyond the EU's target of 30%.

As the journalist and author Christopher Booker stated back in 2010,

"In reality there isn't the faintest chance that these targets will be met. But the massive diversion of resources that it is doing its best to encourage will not help when it comes to filling the looming 40% gap in our electricity supplies, as many of the older nuclear and coal-fired power stations are forced to close. There is virtually nothing, then, in these plans to ensure that we can keep Britain's lights on."

This is truly frightening.

Also, Steve Goreham writes in his book 'The Mad, Mad, Mad World of Climatism'



"The government wants to spend a staggering £100 billion by 2020 to reach its goals for renewables. In a report by the Centre for Policy Studies, analyst Tony Lodge pointed out that the 2020 renewables goal would cost the average UK household £4,000. When British citizens realise that mankind isn't destroying the climate - think they'll go for this plan?"

Of course the whole renewable industry worldwide is being pushed on by the continuing acceptance by our politicians of the still unproven theory of Catastrophic

Anthropogenic Global Warming, but the other big lie that is put out by the renewable energy lobby

is that it is so much more eco-friendly. However, wind turbines are a disaster for the environment, not only killing bats and birds on an industrial scale, (the extent of the carnage worldwide having been shamefully concealed by the wind industry) but also due to the requirements of enormous quantities of rare-earth metals and energy intensive concrete and steel. These rare-earth metals, essential for the so called 'green technology', also present a problem in that they are almost exclusively mined in China. We will be totally reliant on China then for these imports.

Now we learn that Russia won't join the second phase of the Kyoto Protocol, which started on January 1st 2013. Moscow decided to discontinue its participation in the protocol because the world's major producers of greenhouse gases - the United States, China and India - are still refusing to commit themselves to any reduction. When we also consider that Spain has called a



halt to subsidies in order to curb huge debts, that Estonia may abolish renewable energy subsidies from 2021 and that Germany has announced that it will phase out support for solar panels by 2017 - where do we go from here? It has been estimated that Germany will have spent more than 300 billion euros on green electricity by 2030. Consumer groups are complaining that about 800,000 German households can no longer pay for their energy bills. So just how is the European Commission going to enforce it's totally unachievable targets?

As Matt Ridley (writer of *The Rational Optimist*) wrote in *The Times* Jan. 2nd. 2013

"Using the two tools of bureaucracy and superstition, we Europeans seem intent on making our future as bad as we can. It is entirely possible that ten years from now the world as a whole will be 50% richer, but Europeans will be 50% poorer."

Common sense tells us that we cannot live in a modern society without consistent and affordable energy, and yet there are those committed to the belief that energy usage must be drastically reduced, and even rationed if necessary.

These are the chilling words of Steve Holliday, UK National Grid CEO March 2nd. 2011

"The grid is going to be a very different system in 2020/2030. We keep thinking that we want it to be there and provide power when we need it Families will have to get used to only using power when it was available, rather than constantly."

Is this really the future we want for our children and grandchildren?

Anne-Marie Smith

Cabin Update

The restoration work is continuing at the Cabin, albeit slowly and mostly out of sight. Several more

trees which could have eventually fallen onto the building and caused damage have now been felled, two of which we found were in quite an advanced state of decay.

The Cabin in 2012



Leaning Trees!



A new concrete block north wall and doorway are under construction behind the protection of the present timber wall/cladding. Although this arrangement does mean the volunteers are working in a rather dark environment inside the Cabin for the building work, at least the effects of inclement weather, especially frost, have been avoided.

Don & Gerry Digging the Wall Foundations



Access to the Cabin is difficult, particularly for the delivery of bulk materials such as concrete blocks, sand and cement. Our thanks are due to members David and Jean Glasson who have kindly allowed our delivery vehicles to use their private driveway.



Delivery Day

Deliveries have cunningly been programmed for 10am on Monday mornings when the full muscle power of the weekly volunteers has been available to quickly move the supplies up to the Cabin.



The Volunteers get stuck in



Re-positioning the loose block

David and Jean have also allowed us to get water from their house needed for the mixing of the concrete and cement mixing. **Once again many thanks from BET.**

Gerald Wilcox