

# Conservation Grade

## Nature Friendly Farming

### Autumn 2010

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## BUSINESSES TO SEEK SUSTAINABLE BIODIVERSITY SOLUTIONS

Loss of biodiversity is set to eclipse the economic impacts of climate change and businesses can and should take a key role in stemming biodiversity loss around the world..... **'business as usual' is not an option!**

This is the conclusion of the latest report from The Economics of Ecosystems and Biodiversity (TEEB) project. The three year UN-backed project presented the results of its Deliverable 3 report 'TEEB for Business' at the first Global Business of Biodiversity Symposium, held at the Excel Centre in London's Docklands on 13<sup>th</sup> July.

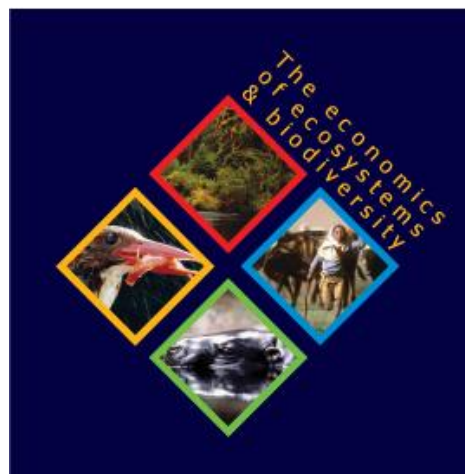
The global annual cost of biodiversity loss is put at \$2-4.5trillion and the report highlights **Conservation Grade** certification as one of the key market opportunities in the biggest emerging market for biodiversity and ecosystem services, i.e. sustainable food from agricultural products. PricewaterhouseCoopers (PwC) currently value this sector at \$40billion, equivalent to 2.5% of the global food & beverage market, but by 2020 it is estimated to have grown to \$210billion, equivalent to more than 13% of the global food market.

The report also points out, "Smart business leaders realise that integrating biodiversity and ecosystem services in their value chains can generate substantial cost savings and new revenues, as well as improved business reputation and license to operate."

Gavin Neath, Senior Vice President of Communications & Sustainability with Unilever commented, "Biodiversity management has to be carried out as **THE** baseline for the supply chain."

Whilst Professor Brian Collins, Chief Scientific Advisor for BIS, pointed out that businesses are used to taking social responsibility for the impact of their work on local communities but now need to take environmental responsibility.

Government recognise the importance too, as Bob Watson, Chief Scientific Advisor for Defra, stressed that "we need to integrate biodiversity into every acre of farmland, it's not enough just to conserve small pockets of land as national parks". The Rt Hon Caroline Spelman, MP, Secretary of State for Defra said that governments must set achievable biodiversity targets for the next ten years at the biodiversity summit in Japan this October.



## REGIONAL UPDATES - SUMMER 2010

In May and June we held our summer regional updates. The combination of great hosts, great habitats and great weather led to three enjoyable and informative days. At each meeting Brin Hughes ran through the changes to the CG protocol, gave us an update on the CG PR campaign, and highlighted changes to the regulations concerning herbicide use on conservation crops (see article on page 14). Richard Barnes, from Kings Seeds, gave some topical advice on the management of wild bird food mixes, while Peter Thompson provided advice on establishment and management of habitats during our walk-about.

### Southern Region Update



The Southern region update was held at Lordington Farm, near Chichester, which is run by Andrew and Rosie Elms. Situated in the glorious countryside of the South Downs, Lordington Farm is home to the only commercial lavender crop in Sussex. The oil from this crop is infused into a range of different beauty products and sold under the name of Lordington Lavender. Lordington Lavender became a CG licensee in June of this year and you will be able to read more about the business in the next issue of the CG newsletter. The lavender



field is bordered by CG pollen and nectar habitats, which make for some

striking photographs....



CG members were impressed with Barn Field, a fine example of a recently created wildflower meadow absolutely packed with wildflowers. We visited another important habitat on the farm - the old water meadows (left). These species-rich meadows are grazed by Andrew's pride and

joy, his herd of Sussex cattle.



### Central Region Update

Roger Mann's Littleworth Farm, near Warwick, was the venue for the Central region update. Roger runs a mixed 900 acre farm with 80 dairy cows. 70 acres of the farm is an SSSI with a superb range of wildflowers in the water meadows.

Roger is currently putting the farm into HLS and this will help him to further improve the already impressive flower meadows with extra grazing and fencing.

Roger's habitats were extremely good, showing good stands of wildflowers and wild birdfood. Some of the heavier soils have been a bit of a struggle and Peter Thompson

*(Continued on page 3)*



(Continued from page 2)



Central Region Members



Roger Mann



Wildflower meadow at Littleworth Farm



New bee hives at Hall Farm

### Eastern Region Update

was able to provide some valuable advice on establishment and management.

The Eastern region members met in the sumptuous surroundings of a hunting lodge belonging to a neighbouring estate, which the Honeywood's contract farm. Under sweltering heat, we had a tour of Hall Farm's conservation habitats. Robert has recently become the proud owner of two new bee hives (*left*) and is diligently caring for his new brood! The farm boasts some fine wildflower areas so the honey crop should be good.

topical advice on management of Wild

Bird Seed mixes, including practical approaches to the control of the invasive rogue millet that has turned up in one of Steve's bird seed areas (*right*).



Rogue millet in a WBF mix

The many excellent hedges on the farm include some good examples of ancient pollarded oak trees and form a network of wildlife corridors linking the many CG habitats like these floristically enhanced grass margins (*left*).

The farm business diversified in 1986 and began production of bespoke horsefeeds, created from the straw of the CG oats grown for Jordans cereals (*see article on page 6*).



Thank you to all the hosts of this Summer's updates. See back page for dates and locations of Autumn regional updates.





## **BIODIVERSITY RECOGNISED AS CRITICALLY IMPORTANT**

Back in 2002, the world's leaders agreed to achieve a significant reduction in the rate of biodiversity loss by 2010. But now, having reviewed all available evidence, the third edition of the *Global Biodiversity Outlook*<sup>1</sup> - the latest report from The United Nations Environment Programme (UNEP) - concludes that the target has not been met.

Moreover, it warns, the principal pressures leading to biodiversity loss are, in some cases, intensifying; for example, we continue to drive species extinct at up to 1,000 times the natural background rate.

The consequences of this collective failure, if not quickly corrected, will be severe for us all because biodiversity underpins the functioning of the ecosystems on which we depend for food and fresh water, health and recreation, and protection from natural disasters.

The results of an independent review of The Economics of Ecosystems and Biodiversity for Business (TEEB D3)<sup>2</sup> were made available in July 2010 (*see article on page 1*). This D3 report advises governments and policymakers of the value of a society associated with ecosystems and the services they provide. We will start to see how businesses will embed biodiversity into their operations. Conservation Grade as a business model has already been reviewed by TEEB.

### ***Biodiversity declines***

A report<sup>3</sup> from the European Commission on the conservation status of over 1150 species and 200 habitat types protected under EU law claims that only a small proportion of these vulnerable habitats and species have achieved good conservation status, and Member States will need to strengthen their efforts if this situation is to improve.

The report, which covers 2001-2006 and is the most comprehensive survey of EU biodiversity ever undertaken, provides an invaluable reference point for measuring future trends. Grasslands, wetlands and coastal habitats face the greatest threats, mainly due to the decline of traditional patterns of agriculture, tourist development and climate change.

Only 17% of the EU's most threatened habitats were found to be in a favourable state and only 7% of agriculture-related habitats are in a favourable condition.

### **Sources:**

<sup>1</sup> Global Biodiversity Outlook 3 <http://gbo3.cbd.int/>

<sup>2</sup> TEEB D3 Report [www.teebweb.org](http://www.teebweb.org)

<sup>3</sup> EU Habitats Directive, [http://ec.europa.eu/environment/nature/knowledge/rep\\_habitats/docs/conservation\\_en.pdf](http://ec.europa.eu/environment/nature/knowledge/rep_habitats/docs/conservation_en.pdf)



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 **defra** wants ***YOUR opinion on environmental policy.***  
Department for Environment  
Food and Rural Affairs

The "Big Society" approach of the new government has filtered into its environment policy plans. The department has pledged a "bold & ambitious" White Paper on the natural environment by spring 2011.

But first, you can have your say about what the priorities should be in their consultation process. They have launched a discussion document that asks questions about which policies work most effectively. If you would like to air your views and make a difference, have a look at the discussion paper and answer their questions at <http://bit.ly/natenv>.



## NEW INTERGOVERNMENTAL PANEL ON BIODIVERSITY

History was made on 11<sup>th</sup> June 2010, when governments gave the green light to an Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES). <http://ipbes.net/>

This independent platform will in many ways mirror the Intergovernmental Panel on Climate Change (IPCC) which has assisted in catalysing world-wide understanding and governmental action on global warming.

The IPBES will conduct periodic assessments of Earth's biodiversity and 'ecosystem services' — ecosystems outputs, such as fresh water, fish, game, timber and a stable climate, that benefit humankind. These assessments, based on reviews of the scientific literature, will answer questions about how much biodiversity is declining and what the implications of extinctions and ecosystem change might be for humanity.

The new body will help to bridge the gulf between the wealth of scientific knowledge and the decisive government action required to reverse these damaging trends.

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## NEW RESEARCH INTO POLLINATOR DECLINES

A £10 million research project, the **Insect Pollinators Initiative**, is to examine the ecology of pollinating insects in the hope that biodiversity and the natural pollination of crops can be protected. Nine different projects will explore the causes and consequences of threats to insect pollinators and ask questions about the decline of honeybees and other pollinating insects over recent years. The aim is to inform the development of mitigation strategies that will ensure that the pollination of agricultural and horticultural crops is protected and biodiversity in natural ecosystems is maintained.

It is a joint initiative from the Biotechnology and Biological Sciences Research Council, the Department for Environment, Food and Rural Affairs, the Natural Environment Research Council, the Scottish Government and the Wellcome Trust, and is funded under the auspices of the Living With Environmental Change programme.

Each of the partners has a different mission and remit but all share a common agreement that there is an urgent need for innovative research to provide a solid evidence base with which to inform new policies and approaches to reverse the decline in pollinator insects. Researchers funded under the initiative will engage early with farmers, growers, agri-food industry and other organisations with an interest in insect pollinators to ensure a strong network to apply the outcomes of research.

Conservation Grade will be working with the University of Reading, who are involved in 3 of the projects, and will aim to provide some of the key farm sites for the trials.

### Projects funded under the initiative:

- **Sustainable pollination services for UK crops** University of Leeds
- **Modelling systems for managing bee disease: the epidemiology of European foulbrood**, Food & Environment Research Agency
- **Investigating the impact of habitat structure on queen and worker bumblebees in the field** NERC Centre for Ecology and Hydrology
- **An investigation into the synergistic impact of sublethal exposure to industrial chemicals on the learning capacity and performance of bees** University of Dundee
- **Linking agriculture and land use change to pollinator populations** University of Leeds
- **Urban pollinators: their ecology and conservation** University of Bristol
- **Impact and mitigation of emergent diseases on major UK insect pollinators** Queen's University of Belfast
- **Unravelling the impact of the mite *Varroa destructor* on the interaction between the honeybee and its viruses** University of Warwick







# BEE-EATERS NESTING AT VITACRESS FARM IN PORTUGAL

Brin Hughes reports....

Vitacress, Europe's largest packer and grower of watercress and leaf salads, have successfully encouraged bee-eaters to nest on their watercress farm in Portugal, as part of their commitment to CG habitat creation.

Ludo farm is in Almancil, in the Algarve, and during the summer the watercress area is regularly visited by several species of birds including mallard, cattle egret, little egret, swallows and crested larks. The warm temperatures and wet watercress beds encourage plenty of insects which provide food for the visiting birds. Sandy slopes have been sown with flowering herbs which provide valuable pollen & nectar habitats and to prevent erosion .



Conservation Grade's Tim Nevard suggested that bee-eaters could be encouraged to nest by creating nesting holes. The method adopted was based on a design which had been shown to be successful with Sand Martins (a BAP species) at the River Lee & associated waterways in the Olympic Park in London as part of the sustainability objectives for London 2012. The target species are the Eurasian bee-eater and hoopoe.

About 18 holes were drilled and plastic pipes packed with sand were inserted.

On the 8<sup>th</sup> April the Vitacress farm manager spotted the first pair of bee eaters nesting: look closely, you can just see one in the photo below right.....!



### Did you know.....?

The European bee-eater, *Merops apiaster*, is a near passerine bird in the bee-eater family *Meropidae*. As the name suggests, bee-eaters predominantly eat insects, especially bees, wasps and hornets which are caught in the air by sorties from an open perch. Before eating its meal, a European Bee-eater removes the sting by repeatedly hitting the insect on a hard surface. It eats some 250 bees daily and lizards and frogs are also taken. It has sometimes nested in the UK.





## RARE ARABLE PLANTS THRIVE ON CG FARMS

0.5% Annually Cultivated Natural Regeneration (ACNR) is part of the original habitat requirement for Conservation Grade accreditation. That is because it can allow the re-establishment of some of the UK's rarest arable annual wild flowers. The best areas for this habitat are where soils are light and low in fertility and field edges and corners are ideally suited. The single annual soil cultivation takes place once a season and can be varied between autumn and spring to provide the maximum opportunity for the widest range of plant species, but not during bird nesting season (1 March – 31<sup>st</sup> July).



This year's farm habitat assessments, conducted by Peter Thompson, have identified some interesting rare species on the CG farms:

### Farms Partnership, Hertfordshire

Matt Doggett has many fine examples of the rare 'rough poppy' *Papaver hybridum*, growing in amongst the more common corn poppy *Papaver rhoeas*. Rough poppy is a dwarf poppy with a black centre and round, bristly seed-heads.

Also identified during the assessment was the equally rare Night flowering catchfly *Silene noctiflora*. This flower grows about 30cm tall with pale yellow flowers opening late into the evening. It has a fragrant smell to attract night flying insects, and is a food plant of Champion and Marbled Clover Moths.



### Red House Farm, Hampshire

Peter Boyle (*left*) has successfully encouraged the Corn marigold *Glebionis segetum* in his areas of natural regeneration. The corn marigold is a food plant of the Chamomile Shark Moth. It must have been a serious weed during the 13th-century in Scotland as a law of Alexander II states that if a farmer allows so much as a single plant to produce seed in amongst his crops then he will be fined a sheep!



### Lark Hall Farm, Suffolk

Charlie Fenwick (*bottom left*) farms with his father near Newmarket where the soil is light and chalky. This makes it ideal for annually cultivated natural regeneration and they have successfully encouraged some good examples of the rare fine leaved fumitory *Fumaria parviflora*. Although it is native to Europe, Asia, and Africa, and is common and widely distributed in many other parts of the world, in the UK it has become quite rare. The small flowers are dull white with purple tips and the fruit is a rounded nutlet with a central crest which contains alkaloids, potassium salts, and tannins. It is also a major source of fumaric acid and was traditionally thought to be good for the eyes, and to remove skin blemishes.





## CAMPAIGN FOR THE FARMED ENVIRONMENT (CFE) – AN UPDATE

It is now a year since it was announced by Defra that the CFE was the preferred approach to retain and exceed the environmental benefits provided by set-aside. Over the past twelve months the partnership has been working with farmers and advisers and many of you have probably attended events to find out more about the initiative. Many of you are renewing your schemes, and have asked how you can take part in the CFE.....

### TAKING PART IS EASY

**You can support the Campaign by doing the following:**

1. If you are not in ELS, join the scheme and choose some key **in-field options**, such as sowing pollen and nectar or wild bird seed mixtures. These can be located on areas like field corners or wet holes.
2. If your ELS agreement is coming up for renewal please renew it. In order to achieve your points take up **in-field options**. Also consider skylark and lapwing plots, especially useful where you need to find extra points following the withdrawal of the old management plans.
3. Retain your former set-aside and any other areas of uncropped land and record these on your Annual Defra June survey returns.
4. Put areas of productive land or just difficult places to cultivate, drill or spray, outside of ELS into a Campaign voluntary measure.

### **Voluntary Management**

Remember to record your voluntary management in the personal farm record at the back of your copy of **'A farmer's guide to voluntary measures'** (*every farm was sent one of these booklets last year*) By the end of this summer you will be able to record your voluntary management on the Campaign website [www.cfeonline.org.uk](http://www.cfeonline.org.uk), giving you the opportunity to demonstrate what you put in place on your holding.

### **New Resources**

**Helping growers do their bit for the Campaign** – you can download the newly available leaflet for growers from the CFE website (<http://www.cfeonline.org.uk/x45120.xml>) or e-mail [cfeonline@nfu.org.uk](mailto:cfeonline@nfu.org.uk) for your copy.

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## CG FARMER WINS FARM BUSINESS AWARD



*CG Farmer Andy Boesen wins Norfolk Award*

Congratulations to mid-Norfolk CG member Andy Boesen who was voted this seasons reserve supreme champion in the recent Norfolk County Farm Business championship.

The 31<sup>st</sup> annual competition was organised by the members and supporters of the Aylsham Agricultural Show Association.

Andy not only farms 177ha at his own CG accredited Westwood Farm, but also runs a contracting business and looks after the main field operations at neighbouring CG farm, Pensthorpe Estate.

His farm business was assessed for the competition under various categories including 'Approach to Business, Enterprise Management and General Management, all of which he scored highly. But his highest points came in the category 'Approach to Conservation & Landscape' where he scored 93%!



## **WILDFLOWER SOWING: DRY WEATHER DELAYS SEEDLING EMERGENCE**

As reported at our recent CG Technical update meetings, our CG wildflower trials were sown in seriously dry weather. Many of you may well have done the same and be wondering if your plants will make it. To check our trials we asked Richard Brown from Emorsgate Seeds ([www.emorsgateseeds.com](http://www.emorsgateseeds.com)) to have a look during July and fortunately he confirmed we had a good number of our expected plants.

Afterwards he was prompted to write the following advice regarding how to assess the results of your sowings and whether remedial seeding might be advisable...

### **Wildflower sowing advice from Emorsgate Seeds**

This year Britain has experienced the driest spring seed beds of any year since 1929 and the second driest in 100 years. There was a distinct absence of April showers and May and June remained dry. To make matter worse this abnormally dry spring followed almost without pause from a long cold harsh winter.

### **What does this mean for sown wildflower and grass seed mixes?**

Complete failures are rare as native wild flowers and grasses are adapted to cope with our changeable weather. Fortunately wild seeds are quite resilient: most are able to sit dormant in the soil for months waiting for the right conditions to arrive. Germination and establishment of seedlings may be delayed, but most sowings will eventually fill in to produce an acceptable result. A bit of patience is usually all that is required.

### **What can I expect to see now?**

**Autumn sowings** of 2009 are producing mixed results. Seed frequently struggled to get established through the winter, a significant proportion of sown seeds remained dormant through the cold weather until spring finally arrived when a second flush of germination occurred. This staggered germination is evidenced now (in July) as populations of young plants: half being well established and near to flowering, the other half seedlings barely 1cm across.

**Spring sowings** in 2010 are also producing variable results. Seed sown early enough in the spring in settled seedbeds generally found enough moisture to get started. Later sowings into dry or loose seedbeds have been slow to show any signs of growth. In such situations germination will be sporadic and may not fill in until we next get significant rain.

**Grass seeds** are generally less resilient than wild flowers and decay away more quickly in the soil. As a result what you typically find with spring sowings in dry conditions is that the grass establishment is poor and thin. Amongst this thin open grass the wild flowers germinate sporadically, but finding little competition and having deeper roots are then able to grow unimpeded. This scenario, with the wild flowers having the advantage, can sometimes be quite advantageous towards establishing a good balance of wild flowers.



*Wild garlic and selfheal*



*Knapweed*



*Yarrow*

*(Continued on page 11)*



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Of course growth in dry seasons will be slow and any seedlings that have emerged will remain small. Sward structure will as a consequence remain open and ground cover incomplete. For perennial species like the grasses and flowers in meadow mixtures this is not a problem: just a cause of delay until rain arrives to revive them (unless of course the site is subject to extreme drought and everything dies - a rare occurrence on normal soils in the UK).



*Weeds on site however can sometimes show a surprising show of growth - how is this?*

Sown perennial plants may 'decide' to sit it out, conserve resources and wait for better conditions rather than risk exposure to drought. Annual weeds by contrast cannot afford this luxury as they need to complete their life cycle and produce seed before the end of the season: they will commit all their available resources to growth and flowering and seeding with a 'do or die strategy'. Annual weeds are opportunists adapted to exploit temporary bursts of moisture, nutrients or space. A number of seedbeds this spring, for example, have produced a flush of annual sowthistle seedlings after showers which are then able to quickly grow into the space left by the more conservative grasses and perennials. The growth of weeds in dry conditions will not be as vigorous as in a wet climate; however it pays to continue to manage these by mowing as advised, although the number and frequency of cuts will probably be reduced.

### **Remedial action?**

Whilst wild flower sowings are quite resilient, the growth and establishment of seeds sown in difficult seasons will not be as complete as that in a good season. Furthermore some sowings this year will have experienced a double hit of both a harsh winter followed by a dry spring. Complete failures are unlikely, but sowings may not have achieved the full results expected.

Assessment of the degree of success or failure is best undertaken in September, preferably after there has been a period of rain to restart growth (assessment of crispy dry vegetation is difficult and misleading as grasses can look superficially quite dead but be capable of revival). Autumn rainfall may also stimulate a fresh flush of germination of sown wild flowers. A September assessment is early enough that it leaves time to consider remedial seeding.

If you are able to find grass plants (however small) every 25-30cm or so, interspersed with 5 -10 or more wild flower plants per square metre, you probably have enough to produce an acceptable result.

**Over-seeding** in the autumn after establishment is an option where you have a thin open take of either grasses or flowers, or have significant (> 1m<sup>2</sup>) bare patches. Prepare the site for over-seeding by mowing the established vegetation and any weeds, and remove any arisings. Do not cultivate but simply broadcast seed into the gappy sward.

Either sow the same complete mixture as sown originally, or add seed selectively to make up for observed short-falls. If, for example, after a long delay to germination the grasses have failed but the wildflowers seem to be coming through, a partial over-seeding of just the grass component of the mixture may be considered (this option is cheaper than the full mix including wildflowers).

This is also a good time to add or boost the yellow rattle component of the sward.

**Re-seeding** may be the only option if conditions have been so harsh that a complete failure has resulted, or where unforeseen perennial weed problems appear which can only be dealt with by starting again. Before you spray off all growth and start again do make sure that you have properly assessed the results and any avoidable causes of failure or partial failure so that you can avoid simply repeating them the following year. To reseed repeat all stages of site clearance and ground preparation and sow fresh seed.

Thanks to Richard Brown of Emorsgate Seeds for this information. <http://wildseed.co.uk/>

# EMORSGATE SEEDS





## THOMPSONS TOPICAL TIPS!

### **Elm trees and Dutch Elm disease**

While visiting Conservation Grade farms, it has been brought to my notice that a number of you have mature Elm trees that have escaped the ravages of Dutch elm disease. So I thought it might be of interest to you to have an update on the subject.

This disease was imported into this country in the late 1960s on infested elm logs. By the 1980s most of the Elms from lowland England had been lost. Our main native elms, English elm *Ulmus procera*, Wych elm *U. glabra* and the non native Smooth-leaved elm *U. carpiniifolia* or *U. minor*, and are all susceptible to this disease.

In lowland central and southern Britain, with predominantly English elm, the new epidemic took rapid hold during the early to mid-1970s, leading to the death of most mature English elms by the early 1980s. There were scattered escapees. Even pockets of mature elm survived occasionally, as in Brighton and Hove where the geographic situation has facilitated an effective and continuing sanitation control programme. However, once most suitable breeding material (inner elm bark) had been used by the beetles the disease virtually disappeared from many southern and south-western areas in the 1980s.



During this period suckers growing from surviving roots of English elm and some smooth-leaved elm types appeared in enormous numbers, together with occasional young seedlings of Wych elm. Many small hedgerow elms that escaped the disease have been allowed to mature, in some cases through careful husbandry but often through absence of hedgerow maintenance. Consequently there developed a numerically massive and increasing elm resource, mainly of small to semi-mature English Elm, across much of southern Britain. From Essex to the Welsh borders they probably numbered many tens of millions.

Now however, the disease is back across most of the old 1970s English Elm disease-outbreak areas. In many areas c.50—90% of elms are dead or dying. Indeed the current disease situation is often remarkably reminiscent of the mid-1970s, except that the affected elms are much smaller. About 20 years separates this second wave of disease from the initial outbreak.

In the early 1970s the rate of disease progress was markedly slower in the smooth-leaved elm populations of East Anglia and the Cornish elm *U. carpiniifolia* var. *cornubiensis* populations of the south-west peninsula. The majority of mature Cornish elm and East Anglian smooth-leaved elms have now been killed by the disease.

However smooth-leaved elm is highly variable and even now certain local East Anglian smooth-leaved elm clones have suffered only limited losses, with some isolated trees or significant groups of mature trees surviving. Many examples are in woodlands or on woodland edges. Some of these clones are being propagated by local authorities as possible sources of resistant material for replanting. They do not necessarily possess a higher level of resistance to the Dutch elm disease fungus: many factors can lead to reasonable 'field performance'.

All smooth-leaved elm varieties are believed to be introduced into Britain from central and southern Europe and some, being beyond their natural climatic range or site conditions, may be growing rather slowly and producing smaller springwood vessels restrictive to the fungus. Good field performance may also involve resistance to beetle feeding or breeding, or involve a natural biological control of the fungus or beetle. Some smooth-leaved elm types have very pendulous twigs when mature, a feature which could make them unattractive to the beetles for feeding.

So the mature Elms you have are most likely to be Smooth-leaved or Wych Elm, not the English Elm.

(Continued on page 13)



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**Horse Chestnut trees and their problems!**

While I'm on the subject of trees – many of you will have noticed your conker trees looking decidedly dodgy – so here is an update on them too! They are currently undergoing three main problems;



- A moth called *Cameraria ohridella* or the horse chestnut leaf miner that lays its eggs in the leaves. The larvae that hatch from these eggs eat and tunnel their ways through the tissues of the leaves. In consequence, the leaves turn brown in early summer and may be shed from the tree.
- A Leaf Blotch fungus, *Guignardia aesculi*; this attacks the leaves so that reddish or brown blotches with yellow borders develop. The blotches may, at a distance, look similar to the damage done by leaf miner.



- Bleeding canker is caused by the presence of a bacterium *Pseudomonas syringae* pathovar *aesculi*. The same bacterium is known to infect the Indian Horse Chestnut *Aesculus indica*; it is possible that the bacterium was introduced on imported trees. The Netherlands and Germany also have horse chestnuts with bleeding canker, and have also demonstrated the presence of *Pseudomonas* in infected trees.

They have been reports in the press of a new treatment for horse chestnuts with bleeding canker. The treatment involves infusing the tree with Allicin. Allicin is derived from garlic *Allium sativum* and has anti-bacterial and anti-fungal properties. The treatment is presently offered by a Yorkshire based company - JCA, working in conjunction with Allicin tree company, which is based in the Netherlands. (This is NOT a recommendation!).

Leaf blotch fungus is not that serious to the tree, and the leaf minor is usually only a problem if the tree is suffering from something else as well, however the Canker can kill fully grown trees.

**Nesting Boxes**

A good number of Conservation Grade farmers have put up all sorts of nest boxes for a range of different species, and many of these are now occupied with owls, kestrels, stock doves, tits and sparrows. Putting boxes up for both birds and bats can be one of the simplest and yet, one of the most rewarding things to do on the farm in the name of “conservation”.

A good time to put these boxes into position is now – during the autumn and winter months. Many species will take to roosting in these boxes over winter, prior to nesting in them come the spring. There is some evidence for instance, that tree sparrows may actually choose where they will nest in the Autumn, some six months before the breeding season.

So, if you haven't got any boxes up yet, how about trying some this year? Many companies produce boxes, but of course they are easy to make yourself. Some species however, especially perhaps the raptors such as the barn owl, are quite specific in their requirements, so it is worth looking at a website such as the Hawk & Owl Trust site which is very good – you can also buy ready made boxes from them – take a look at this link: <http://www.hawkandowl.org/Shop/NestboxesToOrder> .

It would be great if next summer we could say that x number of boxes on Conservation Grade farms had x number of different species nesting in them – this is the sort of statistic the marketeers love!

**Bee Hives**

Many Conservation Grade farms have bee hives situated around the farm. It is an intended goal of Conservation Grade that ALL farms that grow CG accredited produce have active bee hives on their farms. This is a hobby that is growing rapidly and perhaps all that is needed is an approach to the local bee keepers association – and they will do the rest! Take a look at this website:

[http://www.britishbee.org.uk/local\\_associations\\_about\\_us.php](http://www.britishbee.org.uk/local_associations_about_us.php)



## NEW RULES FOR HERBICIDE USE ON 'CONSERVATION CROPS'



The Chemicals Regulation Directorate (CRD) recently announced that crops grown for conservation purposes, e.g. wild bird seed mixes and nectar flower mixes, can now be classed as 'Green Cover'. This means that some herbicides are now legal.

Crops grown for conservation purposes will now be covered by the phrase '**Green cover on land not being used for crop production**' under the Crop Hierarchies.

**'Green cover on land not being used for crop production'** is defined as 'Areas of land with a vegetation cover that have been removed (temporarily or otherwise) from production'. For example some types of set aside. Including fields or non-crop field margins covered by natural regeneration or by a planted green cover crop that will not be harvested.

It does **NOT** include use in industrial crops or inter-row use within a crop (edible or non-edible). Although this doesn't specifically refer to these types of crops, they are included under '....by a planted green cover crop that will not be harvested'.

As a result, any product that specifies this use can be used in such situations. Details of approved products can be found on The Pesticide Register Database at <http://www.pesticides.gov.uk/approvals>.

However, please note that this definition covers a wide range of situations and **the commercial risk is entirely the grower's own responsibility** if the product label does not specifically refer to the crop/species mix you are treating.

The old Long Term Arrangements for Extension of Use and SOLAs for use on crops grown for game cover **do not** cover these situations.

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## SNAP IT UP!

### Society of Biology Biodiversity Photography Competition

2010 has been designated the International Year of Biodiversity by the United Nations. To celebrate, the Society of Biology has launched a major photography competition. Entrants are free to interpret how they capture photographically images that celebrate, explore, comment on or reveal aspects of biodiversity from around the world. The winning photograph will be used as the cover image for the Society's leading Journal Biologist, and the winner will receive £1,000! There are four award categories; Land, Air, Water and Close Up and the Society is giving away lots of prizes to the winners and runners up in each category. Full details are available on the Society's website or by emailing [photo-comp@societyofbiology.org](mailto:photo-comp@societyofbiology.org)





## ***NEW CG AUDIT FEE***

We have been advised by NSF-CMi that the annual CG audit fee is to be increased next year. The new prices will be as follows:

**For ACCS members :** £180 + VAT

(i.e. AUDIT FEE @ £115 + VAT + CG MEMBER FEE @ £65 + VAT)

**or**

**For non-ACCS members :** £230 + VAT

(i.e. AUDIT FEE @ £165 + VAT + CG MEMBER FEE @ £65 + VAT)

The annual CG membership fee remains the same at £65 p.a.

NSF-CMi will send invoices for the audit year 2011 to all CG members in October 2010.



## **Chance to Win €15 000 in Biodiversity Award**

European farmers have the opportunity to win awards up to a total of €15 000 in the Syngenta Biodiversity Awards. CG farmer members should be well placed, and we encourage you to have a go.

You need to submit details of farm projects that have helped the enhancement of biodiversity. Participation is open to individuals and groups based in Europe that have worked together on the farm to preserve or produce a diverse flora and fauna.

Submissions can be made in three different categories: soil regeneration, restoring natural habitats and farmland biodiversity, and enhancing environmentally-friendly farming practices.

To participate, fill in the submission form, including pictures taken throughout the course of your project. Present an overview of your activities, describe your motivations and inspirations and provide them with the result of your initiative – whether ecological, economic or social.

Submissions to the Syngenta Biodiversity Award 2010 can be made until 15 September 2010.

For more details : <http://www.syngenta-biodiversity.eu/about.shtm>



# BUTTERFLY SURVEYING – YOU COULD TAKE PART

The **Wider Countryside Butterfly Survey** (WCBS) was formally launched in 2009 following four years of pilot studies. It is the first UK-wide survey of butterfly abundance based on random sampling (see [www.ukbms.org/wcbs.htm](http://www.ukbms.org/wcbs.htm)).

The survey was co-ordinated by the BTO and Butterfly Conservation and based on the BTO's Breeding Bird Survey (the 'BBS'), counting along two parallel 1-km long transects subdivided into 10 sections, located within randomly selected 1-km squares. The differences being that butterflies are counted in a more restricted area than for birds and at different times of the day. Only 2-4 visits are required compared to 26 on transects.

In total **1642 visits** were made to **763 1-km squares** by **611 recorders**, who collectively walked 3300 km of survey line, counting 119,000 butterflies of 47 species. The most widely recorded species over the core July and August period was the **Large White**, occurring in nearly 90% of squares, whilst the most abundant species was the **Meadow Brown** with approximately 15,000 individuals counted. Two Browns (Meadow Brown, Gatekeeper) and three Whites (Large White, Small White, Green-veined White) accounted for two thirds of all butterflies counted.

The full feedback newsletter can be downloaded on their website: [http://www.ukbms.org/Downloads/Wider\\_Countryside/Feedback%20Newsletter\\_2009\\_Final.pdf](http://www.ukbms.org/Downloads/Wider_Countryside/Feedback%20Newsletter_2009_Final.pdf) Butterfly Conservation and its partners are committed to continuing the survey in 2010 and new recorders are very welcome. Here's how to take part:

Contact the WCBS co-ordinator via email [survey@butterfly-conservation.org](mailto:survey@butterfly-conservation.org) or phone 01929 552486 to receive information in the post or to receive a copy of your route map.

Butterfly Conservation Manor Yard East Lulworth Wareham Dorset BH20 5QP

Tel: 01929 552486 Email: [survey@butterfly-conservation.org](mailto:survey@butterfly-conservation.org)



*Large White*



*Meadow Brown*



*Orange-tip*

## DATES FOR YOUR DIARY!

The next round of regional updates will take place in November and December 2010.

- 17th November** Peter Boyle's farm in Hampshire
- 24th November** Michael Skinner's farm in Leicestershire
- 8th December** Robert Rand's farm in Hertfordshire

**SEE YOU THERE!**

