



WILDLIFE GARDENING FORUM

E-newsletter: November 2018

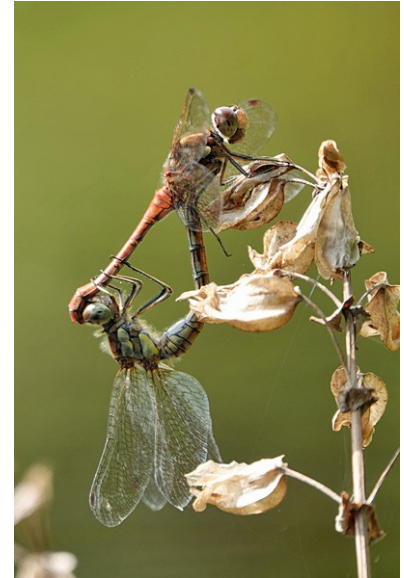
www.wlgf.org

@WLGForum



Headlines

- **Bristol conference success** We were delighted with both the content and attendance at our autumn Conference in Bristol, which had a strong 'wildlife gardening science' focus. For those new to the Forum, we host two conferences a year, so the next is due spring 2019 - more information soon.
- **Forum Facebook reaches milestone** At the time of writing, we are about to pass through the 2,000 member mark on the Facebook page. Whether you want to use it as a Forum to ask questions (as many do) or if you have expertise that means you can help provide the right answers, we'd love to see you on there.
- **New Forum website content** Under the leadership of Steve Head, we are continuing to build the content on our website. This quarter, we focus on the new education content, including full academic references.
- **Newsletter dates** This newsletter is now shifting its production by a month, and will appear in February, May, August and November each year.



Mating Common Darters, usually the last dragonfly on the wing into November in warmer parts

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You are receiving this newsletter because you are a member of the Wildlife Gardening Forum. If you would like to be removed from our membership list and cease receiving this newsletter, please email members@wlgf.org.

Forum News

Great turnout for Bristol Conference

The Forum's one-day event in Bristol (29 Sep 2018) was based around recent scientific research relevant to wildlife gardening. We were privileged to have eight researchers presenting and discussing their work, which covered a wide range of topics including pollinators, the effect of domestic cats, and the effects of bird feeding.



This was the Forum's first event to be held in the West of England, and we were pleased with the attendance (of about 80 people). The venue was the Trinity Centre, a spacious community centre with a large garden located close to the city centre.



Conference photos: Steve Head

Feedback from those of you who attended was overwhelmingly positive and we hope to hold more events in the Bristol area in the future.

Summaries of the speakers' presentations from the Bristol conference will be made available on the Forum website within the next few weeks.

We are actively thinking about how and where to hold more conferences and events away from London and the south east, in other parts of the UK.

Website update: Education, education, education

The first group of our pages on wildlife gardening and education have been posted on the [Wildlife Gardening Forum website](#), after a great deal of research, with help from Ruth Staples-Rolfe of [Learning Through Landscapes](#). [Here](#), you can find a simple introduction as to why this is an important topic – and a link to Chris Packham's *Desert Island Discs* account of how garden wildlife inspired him as a child.

This page links you to another on activities and educational resources, and the most substantial section on the evidence base for the importance of gardens and the natural environment on children and education. There is a full review of the evidence with 80 academic references that make the importance abundantly clear at many levels.

Finally, we have a page on [Case Studies](#) where we ask you to contribute accounts of how you have used school gardens or grounds to help education goals. We have three detailed case studies already; please consider submitting one of your own. We would also like to hear from you if you have any experience of successes or overcoming problems in making use of school grounds.

Trustee away day

With several new trustees now on board to help drive the Wildlife Gardening Forum, all but one of us were able to meet up on 15 August to discuss our way forward and our respective roles in that (and enjoy some very fine food prepared by Steve Head's partner, Jen).

In particular, we refined our mission as "helping everyone make their gardens better for wildlife by:

- raising understanding of the importance of gardens for wildlife and people
- providing impartial evidence-based information and advice
- and inspiring and supporting the wildlife gardening community."



L-R: Forum Trustees, 15 August 2018. Adrian Thomas, Marc Carlton, Rosi Rollings, Ken Thompson, Steve Head, Judith Conroy, Andy Salisbury, Deborah Smith, Adam Cormack, David Perkins, Morag Shuaib. Unable to attend: Caroline Ware.

WLGf field trip

On 22 July, the Forum tried out its first field trip, a visit to the Rosybee nursery at East Hanney, Oxfordshire, where Rosi Rollings grows her bee-friendly, peat-free plants, and also has her trial beds where she tests out different plants in what is an impressively rigorous study.

We were pleased that ten people turned up, and Rosi guided us all around the trial plots, showed us several species of solitary bee using the trial beds, and produced very welcome cake and drinks on what was a swelteringly hot day.



Rosi shows the Forum Field-trippers her trials beds, where each bee-friendly plant is grown in a square metre plot, so that bee counts through the seasons can be compared like-for-like.

National Gardens Scheme and wildlife-friendly gardens

There was a time when the National Gardens Scheme was sniffy about gardens that were managed with wildlife in mind, but all that has been changing! However, last year the scheme launched a new website, which was excellent except that you couldn't search for those which are managed with a wildlife-friendly ethos.

So the Forum contacted them, and we are delighted to say that the situation has been remedied. If you go onto the [website](#), go to 'Find a Garden', and click on 'Advanced filters' you can now bring up all those gardens which are tended with wildlife in mind.

Our thanks to NGS for that improvement.



Forum Facebook milestone

By the time you read this, we expect our [Facebook](#) page will have passed through the 2,000 member mark. As well as people sharing inspiring moments from their own gardens, or seeking identification of wildlife or garden plants, there have been some excellent discussions.

For example, this question from Nicky Hewitt generated 22 replies:

" I have just created a new bit of tatty grass in my back garden. The standard advice in most books is to let the herbs flower and seed then cut down and rake off the grass to allow for a 'tidy' winter lawn.

"But if you do that, you are going to destroy the pupa or over-wintering caterpillars of all the butterflies that use rough grass and its herbs, and surely that is a bad thing? So would it be better to keep the short paths short but leave the long grass completely alone - never cut it at all, just hand-weed any tree seeds? Then the butterflies would be safe, the ant nests can develop etc. Discuss..."

You know where to look if you want to see what people had to say about it...

Events and calendar

2018

- 26 Nov–4 Dec [National Tree Week](#)

2019

- 26–28 Jan [RSPB Big Garden Birdwatch](#)
- 20–28 Jul [National Moth Week](#)

Would you like your event to be featured here? Email news@wlgf.org

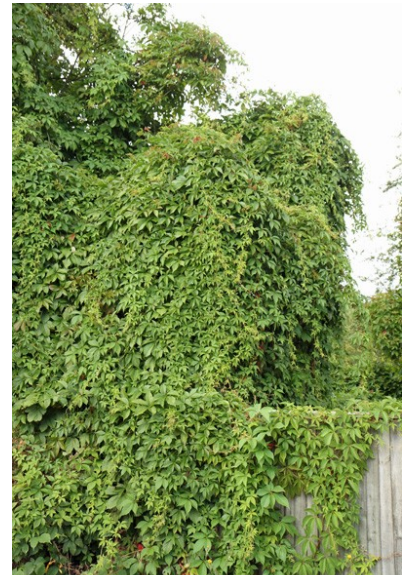
Wildlife gardening research

Invasive plants are mutable pioneers

We are used to the idea that invasive plants must be able to adapt to new environments, to spread the way they do. But a new study has suggested they are even more adaptable than we thought, posing a potentially greater risk. Until now, the assumption has been that invasive plants are limited by climate conditions, ie that they need similar climates to their native locations. However, it seems that invasive plants can actually change their ecology to survive in a wider range of climates

The study, conducted in North Carolina State University, and reported in [Science Daily](#), looked at 800 plant species worldwide, and, in the majority of cases, found evidence that the species' climate niche shifted to adapt to new locations. This makes it difficult to predict the precise impact that an invasive species might have in a new place.

There are no specific findings for UK gardens, however, the researchers are continuing to work to understand how the range of an invasive species may increase and which areas are vulnerable to invasions.



Virginia Creeper from eastern North America, now classified as a Schedule 9 Invasive Non-native Species in the UK, here showing its ability to leap the garden fence.

The tale of the town bee and the country bee

A [study](#) by Royal Holloway and Imperial Colleges has shown conclusively that, for some wildlife species, urban environments can be better habitats than impoverished agricultural landscapes. The work is newly published in the prestigious Proceedings of the Royal Society.

The team collected foraging Buff-tailed Bumblebee queens in early spring of 2016. After screening for parasites, 43 colonies were placed in gardens and farms in sites between central London and Basingstoke. The sites represented an urban-rural gradient from business areas, through suburban gardens to agriculture. The sites were assessed and divided into land classes, and the success of the colonies monitored over the annual colony life cycle.

Agriculturally-sited colonies stored less food than colonies in city or village sites. As a result, city and village colonies remained active for longer, and produced significantly more sexual offspring (which can go on to found new colonies) than agricultural colonies.

It has been considered in the past that abundant flower-rich gardens and the presence of patches of semi-natural habitat allowed urban bees to do better, but the fact the dense urbanised inner-city colonies did as well as the low-intensity suburban areas suggests that gardens may be crucial – although further studies would be needed to prove this point conclusively. Another factor could be lower exposure to agrochemicals in urban areas.

Most significantly, the authors considered that increasing urban expansion may be good for generalist bumblebee species, and that urban areas are increasingly a refuge from a landscape dominated by intensive agriculture. It is even possible that queen bees migrate from urban areas to maintain populations in the countryside.

Bio-engineered pheromones set to replace dangerous pesticides

There is little doubt that the widespread use of agricultural pesticides, together with habitat loss, are the major factors behind the frightening [decline of insect biomass](#) in Britain and beyond. But as farmers try to win even more produce from intensively farmed land, it will be hard to avoid pesticide use unless some novel alternatives become available.

A major €1.8 million [EU project](#) could offer a solution. The multi-national team is working to give plants and yeasts the ability to synthesise pheromones, which many female insects use to help attract males for mating. Disrupting the system by flooding the environment with pheromones or luring males to traps is an effective way of stopping pests breeding, but the chemicals are very hard and expensive to synthesise from scratch. Genetically engineering plants or yeasts to produce the chemicals in their cells would be very much more efficient and much cheaper.

While some people remain set against genetic modification, this particular approach has some real benefits. The organisms engineered to produce the chemicals will not be the actual crop plants – so no-one will have to eat GM material. Furthermore, they only need to be used for very short periods when the adults are flying, and finally the chemicals are species-specific, so it is thought won't interfere with non-pest species in the area.

A pilot project called '[The sexy plant](#)' based in Valencia has already shown how this can be done using modified tobacco plants to control the Cotton Bollworm moth larva, and the new project will take this much further. Although this won't work for all insects, it could drastically reduce use of pesticides like neonicotinoids which have pernicious lethal and sub-lethal effects on beneficial non-target species.



Cotton Bollworm moth larva (Gyorgy Csoka, Hungary Forest Research Institute, Bugwood.org via [Wikimedia Commons](#))

Addicted to pesticides

A [study](#) by Imperial College London looked to see if bumblebees preferred to drink sugar solution laced with pesticides or without.

At first, the bumblebees weren't keen on the pesticide mix, which felt a good result. However, once they had got a taste for it, they increasingly returned to it, and it is thought that they actually became addicted to it, with the pesticides acting on nerve sensors much as nicotine does.

Trials of a new device to track the Starling

Many will have witnessed the boisterous antics of young Starlings fighting it out on bird feeders. An [RSPB project](#) in Bristol is trialling a new portable tracking device which they hope will enable greater insight into the reasons for the species' decline, which has seen breeding numbers fall by about 89% since 1967. As well as static receivers in local gardens, other 'roving' volunteers will be given a device to track the birds' movements further afield.

Of interest is how far fledglings move away from their home territory so the RSPB might deduce what extra survival pressures young Starlings face in the quest for their own patch. We'll be watching the results of this study closely to see if there are any lessons for us as wildlife gardeners.



New chemical threat to bees

There is [early evidence](#) from a recent trial that sulfoximine-based pesticides, hailed as a potential alternative to the neonicotinoids (some of which are now banned), reduce the size of bumblebee colonies and the number of male offspring produced. The fear is that such colony-depleting effects will be damaging to their long-term survival. We hope that such "sub-lethal" effects are taken seriously and that much more research is done before the UK grants a licence for these chemicals.

How good is a man-made meadow?

A [study](#) by the University of Liverpool and Natural England investigated the relative numbers of moths (and moth species) on arable farmland, on arable farmland restored to grassland with wildflower meadow mixes, and on semi-natural chalk grassland. Their findings have interesting implications for those of us trying to create wildflower meadows in gardens.

The researchers found that, for moths associated with chalk grassland, the restored meadows were pretty much as good as semi-natural habitats, and were eight times better than arable farmland. Also,

the restored meadows did best when they included indicator plants of chalk grassland, and it took as little as three years for the new meadows to support strong populations of the moths.

While the much-reduced scale of garden 'meadows' is likely to have a considerable impact on the range of species which colonise, it nevertheless gives us wildlife gardeners hope that turning our lawns into something more akin to meadows can yield great results.



Is there a university out there that would like to study that? We'd love you to take up the challenge!

Wildlife gardening policy

Europe takes action to address wild pollinator population decline

We were pleased at the news, announced this summer, of a [new 12-year EU initiative](#) focusing on arresting the decline of wild pollinators. Although it is known that one in ten bee and butterfly species are on the verge of extinction and a third of them in decline, it seems there is a lack of data about half of all bee species and many other pollinators in other insect groups.

Earlier in the year the EU conducted a consultation to inform the initiative. They received 66,000 responses, the vast majority from individuals. It is heartening to know that the UK was the third largest respondent after France and Germany. There was huge consensus about the seriousness of these insects' decline. About 80% of all respondents believe that pesticides are at the root of the problem, closely followed by agricultural intensification, invasive alien plants and grazing and mowing regimes. Promoting education and knowledge both about wild pollinators and how to protect them was seen by all groups as one of the most vital and pressing actions required.

This feedback has informed proposed actions such as developing a list of habitats important to pollinators and the Initiative intends to start monitoring systems (to establish the status and needs of pollinator species, and to measure the presence of pesticides) almost immediately. Ironically, these critical steps will gain full momentum next year, just as the UK leaves the EU!

However, even if the UK is 'out' of the initiative, there is hope that the UK will still tackle the issue. The long-awaited new Agriculture Bill has been published this autumn and advocates a new system of landowner remuneration for England, which would pay for the delivery of environmental and ecosystem services. This would include improving the health of the soil, which necessarily involves a serious rethink about use of pesticides, fertilisers and other land management regimes which affect 'pollinator services'. It may not be a recognition of these animals' intrinsic value, but it is a step in the right direction as long as the new system moves away from the current situation where isolated wildlife-friendly islands exist in a sea of monoculture. Separate schemes, also involving radically new systems of landowner remuneration, are being proposed for Wales and Scotland by their respective governments.

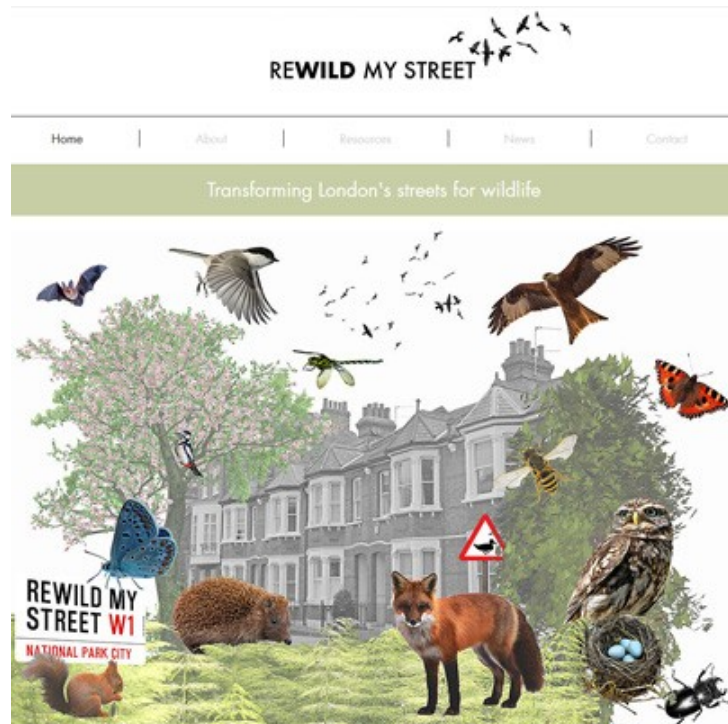
Wildlife gardening resources

Rewild My Street

A new and stylish [website](#), called Rewild My Street, has been created by a team led by Siân Moxon at the Cass School of Art, Architecture and Design, London Metropolitan University. It provides guidance for people wishing to adapt their homes, gardens and streets to encourage wildlife.

Although targeted at London, the website is relevant to urban gardens and greenspace everywhere. Rather than trying to reinvent the wheel, it provides targeted hyperlinks to advice from a range of organisations such as the RHS, RSPB, The Mammal Society and Susdrain.

Content is arranged into Species, Habitats, Products and Activities, and it pulls together hyperlinks to step-by-step activities.



Flora Locale to close

[Flora Locale](#) has announced that it will cease to exist at a date in 2018 yet to be specified. Trustees of the charity have agreed that Flora Locale has met its primary objective in raising the profile, and highlighting the benefits, of native planting. There are ongoing talks with the Society of Ecological Restoration aimed at preserving the information and guidance currently gathered and kept in the [Restoration Library](#). For now, the Library continues to be available on the Flora Locale website.



Flora Locale was founded in 1998, evolving from a subcommittee of the Botanical Society of Britain and Ireland, which included representatives of the then Royal Society for Nature Conservation, Department of the Environment, Royal Botanic Gardens Kew, Plantlife and the seed industry. It worked with land owners and managers, as well as community groups and individuals, to restore habitats using native wild plants.

Garden wildlife

Watch out for the Zigzag Elm Sawfly

The Zigzag Elm Sawfly *Aproceros leucopoda*, first spotted in the UK in 2017, has continued to spread in 2018.

In 2017, plant recorders in Surrey noticed a strange zigzag marking on some elm leaves. They sent them off to the Royal Botanic Gardens Edinburgh and the culprit was identified. This year, the characteristic leaf-chomping pattern has been found in the east Midlands as well as in south east England, according to [Forest Research](#).

The sawfly appears to feed on all three species of elm found in Britain, already severely affected by Dutch Elm Disease. At this stage it is not clear how bad the impact of the Zigzag Elm Sawfly will be, as the UK's relatively cooler climate means the sawfly's lifecycle is longer and there may be less risk of defoliating the trees. However, elms support a large variety of insects, including the White-letter Hairstreak butterfly, and these could be affected by competition from the Zigzag Elm Sawfly larvae.

The leaf markings are most likely to be seen when the larvae emerge from April onwards. If you think you have seen these, report them to Forestry Commission with their [Tree Alert](#) tool.

Wildlife gardening and citizen science

Hedgehog housing census

Hedgehog Street, the joint project of the People's Trust for Endangered Species and the British Hedgehog Preservation Society, has [released the results](#) of its national hedgehog home survey. Over 5,000 people completed the citizen-science survey.

81% of survey respondents found hedgehogs using their nests for resting, 59% for hibernation, and 28% for breeding, which probably reflects the relative time spent in these activities. Hibernation nests tend to be much better constructed than daily resting houses. More significantly, while DIY houses – nests constructed by the animals themselves – were more favoured, artificial nests were still used, but the hogs needed to get used to them before venturing inside. Providing bedding for the hedgehogs as well as feeding them increased the chances of hedgehogs taking up residence in a garden.

Back gardens were favoured most by hedgehogs – they are usually larger and less disturbed, and they were not put off by household pets or nearby badgers.

Hedgehog Street provides useful guidance on making homes for hedgehogs [here](#), and on improving your garden for hedgehogs [here](#).



Titbits

The final word on slug deterrents

So which organic methods really work to deter snails and slugs? The RHS has undertaken the first [scientific study](#) of the relative merits of barriers such as copper tape, sharp horticultural grit, pine bark mulch, wool pellets and egg shells. Initial results show that many of these remedies don't give good control and living with some damage or removing slugs by hand may be as effective.



The newsletter is sent to all the members of the WLGf; you are welcome to forward it to friends or colleagues. Do encourage them to join the Forum (it's free!) by visiting www.wlgf.org and filling in the simple form.

The Wildlife Gardening Forum is a consortium of the UK's leading wildlife, conservation, gardening and horticultural organisations, from both the private and the public sectors. We now have over 1,000 members. Formed in 2005, our core aim is to help gardeners and decision-makers understand just how important our gardens are for wildlife.

Newsletter edited and compiled by Adrian Thomas, with Marc Carlton, Steve Head, Andy Salisbury, Morag Shuaib, Deborah Smith and Dr Ken Thompson. All photos by Adrian Thomas unless stated.



Dock Bugs on Rhubarb