



# WILDLIFE GARDENING FORUM

E-newsletter: Autumn 2015

[www.wlgf.org](http://www.wlgf.org)



## Forum celebrates 10th anniversary

Yes, it's ten years since the Forum chipped its way out of the eggshell of destiny and emerged into this big, wild world. We like to think we are well and truly fledged now! You can now follow us on Twitter (@WLGForum) or join our [Facebook page](#).

We are delighted that Chris Packham has sent a message of congratulations:

*"I believe that gardens and other urban green spaces are vital in getting people close to wildlife and inspiring them to care. It was certainly there that my emerging fascination was sealed. Congratulations to the Wildlife Gardening Forum on the first 10 years – more than ever, we need to champion wildlife gardening for the good of everyone."*

*Chris Packham*

We hope to see many of you at our 10th Anniversary Conference on Tuesday 17 November at the Natural History Museum. Invitations are due to be emailed soon, and we are expecting it to sell out, so book early when the invite arrives.

Sadly, the future of the Wildlife Garden at the Natural History Museum is seriously at risk. See 'Save the Natural History Museum's Wildlife Garden' on page 12 and join the petition if you feel strongly about this important resource for science, people and wildlife.



Delegates at the June 2015 WLGf Conference, exploring the hidden world of mites. (Steve Head)

---

## We know a lot; we don't know even more!

Have you checked out the WLGf's fast-developing website? We have the ambition to make it one of the most definitive and authoritative sources of information on wildlife gardening. In the world!

In the first of an ongoing series, we highlight one of the new pages to check out, starting [here](#) where the Forum's Trustees have identified what they feel are still big gaps in our knowledge about wildlife gardening. See if you agree, or have more to add: let us know via the [Comments](#) button on the website.

---

## Record membership

The greater the number of members the Forum has, the greater its impact and reach will be, so we are delighted that, largely through the success of the website, we are gaining new members regularly. We now stand at a record level of 723, but there must be many more people out there with a passion for the subject.

That's where you come in. Remember, you are the Forum, and we like to think that the Forum's work is complementary to all the wonderful work that NGOs and other organisations do out there. So help us raise our membership and our profile: forward this e-newsletter, and invite all your friends and colleagues to join. It's free and its easy – just get them to visit [wlgf.org](http://wlgf.org) where they will find the simple instructions to join.

---

## Formalising the Forum's annual calendar

The Trustees felt it would be useful to have a regularised calendar, so from now on we intend to have Conferences each June and November, e-newsletters each April and October, and conference proceedings will be distributed within two months of each Conference.

---

## Give us your news

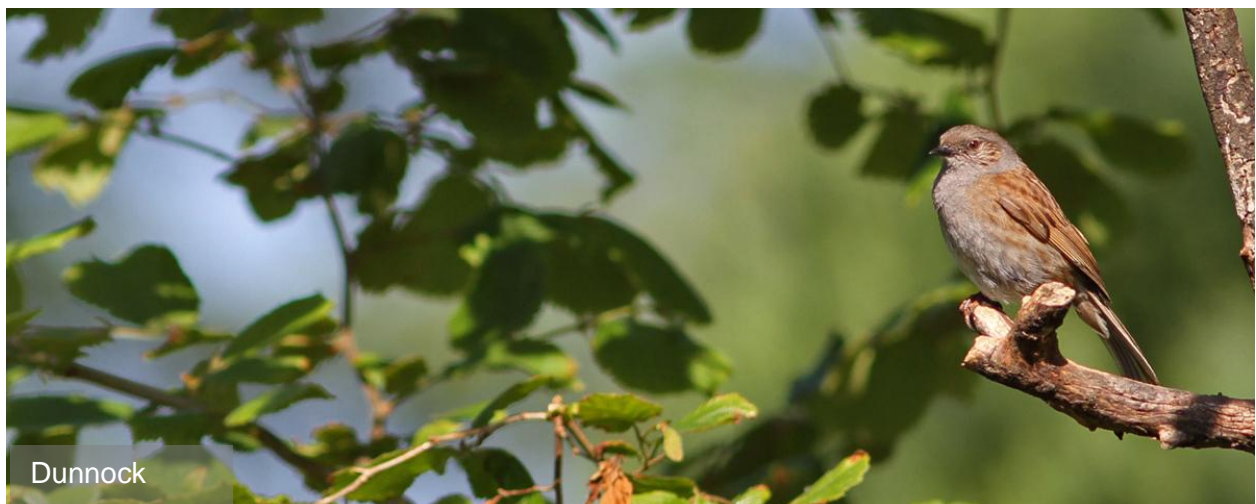
If you are part of an organisation, charity or research facility, please get your press team to add us to their press release distribution list for relevant topics. And, to all Forum members, if you see any wildlife gardening related news, send it through. Email [news@wlgf.org](mailto:news@wlgf.org).

---

## Survey Monkey

In the next few days you will receive a 2-minute Survey Monkey questionnaire from us which is designed to help us shape the future of the Forum and make it better for all our members. The more people who respond the better, so we hope you can find the time to complete it.

---



Dunnock

# Wildlife Gardening Research

## Plants for Bugs releases first paper

The Royal Horticultural Society's major research project, [Plants for Bugs](#), which was developed with the help of the Forum, has released its first peer-reviewed paper of the results.



Bumblebee visiting *Mirabilis jalapa*  
(Helen Bostock/RHS)

*Plants for Bugs* sought to understand the relative benefit of native and non-native plants for different groups of garden wildlife.

This first report reveals that a mixture of native and closely related (Northern Hemisphere) non-native ornamental plants probably provide the best resources for pollinating insects in gardens.

It also showed that native plants aren't always the first choice for pollinators visiting gardens, and that exotic (Southern Hemisphere) garden plants can prolong the flowering season providing an additional food source.

So, while there should be an emphasis on plants native to the UK and the Northern Hemisphere, plants from the Southern Hemisphere such as *Lobelia tupa* and *Verbena bonariensis* can play an important role in supporting some pollinators. By tending to flower later than native and Northern Hemisphere varieties, Southern Hemisphere plants provide much needed nectar and pollen long after other plants have gone to seed.

RHS scientists also found that regardless of the origin of the plant (native or non-native), the more flowering plants a garden can offer throughout the year, the greater number of bees, hoverflies and other pollinating insects that will visit.

Speaking about the study, RHS lead researchers (and Forum Trustees) Dr Andrew Salisbury and Helen Bostock said: "The UK's 1500 species of pollinator are thought to be under increasing pressure due to the loss of habitat and food sources. Now, for the first time, gardeners can access robust, evidence-based information on the most effective planting strategy they can adopt if they wish to attract and support pollinators. These findings will help gardeners to confidently pack their borders, window boxes and allotments with flowers without getting hung up on the idea that they are somehow doing the 'wrong thing' if the plants are not all UK natives."



The Vortis 2 insect sucker in action!  
(Helen Bostock/RHS)

This first paper looking at pollinators was published in the Journal of [Applied Ecology](#), where it was editor's choice. Subsequent RHS Plants for Bugs papers will focus on terrestrial arthropods (above-ground invertebrates) such as beetles.

The RHS maintains excellent [webpages](#) on the project, including a full plant list, an interpretation bulletin and links to the paper. You can also [download](#) the RHS Perfect for Pollinators Plants of the World and other lists.

---

### Flower-rich field margins only help bumblebees and Honeybees...

In a piece of research that has interesting implications for planting advice in gardens, a study by The University of Sussex and The Game and Wildlife Conservation Trust found that farms that have planted flower-rich margins as part of agri-environment schemes did not support richer communities of bees and wasps.



Their [findings](#), reported in *Biological Conservation* (Volume 187, July 2015, Pages 120–126) showed that those farms where the flower-rich margins had been created did indeed show significantly greater floral abundance, but although they were attractive to bumblebees and Honeybees, they benefitted few other bee and wasp species.

It was considered that solitary bees and wasps preferred plant species not in the sown mixes, such as Umbellifers.

It seems possible – and the Forum's *Plants and Planting Group* is looking to examine this – that advice for gardeners aimed at benefitting pollinators might similarly be skewed towards the 'charismatic' Honeybee and bumblebees.

---

### ...while flower-rich field margins boost bumblebee reproduction.

Again, although undertaken in an agricultural context, the [study](#) by Carvell, Bourke, Osborne and Heard and reported in *Basic and Applied Ecology* has potential implications for wildlife gardening science.

It sought to establish whether agri-environment schemes aimed at pollinators had an effect on the reproduction of target species, in this case measuring reproductive success of bumblebees.

It found that "targeted flower mixtures can enhance bumblebee reproduction by providing locally attractive forage resources to bumblebees of all castes and sexes from nests within foraging distance". An interesting second conclusion was that if the sown flower patches were large enough, it could lead to a detectable spill-over of bumblebees into surrounding landscapes.

---

## Which flowers contain the most nectar?

The Agriland Project, a collaboration funded by the UK Insect Pollinators Initiative, is seeking to answer the question of what is driving the declines in pollinators and wild flowers.

One of the factors they have been studying is which common plants flowering in the British countryside (native or otherwise) produce the most nectar, a key piece of information in recommending the best plants for pollinators.

At the project's final stakeholder workshop at the headquarters of FERA (Food and Environment Research Agency), Professor Jane Memmott from the University of Bristol presented some of the initial findings.

The [powerpoint presentation](#) reveals fascinating results. Of the 220 plant species sampled:

- The best species per unit of area cover in terms of mass of sugars were (in order) Marsh Thistle, willow sp., knapweed sp., Bell Heather and comfrey sp.
- The best plant species in terms of nectar production per flower were (in order) Himalayan Balsam, Yellow Flag, gladiolus sp., Common Comfrey and Bramble.
- The best habitats for pollinators were calcareous grassland, broadleaf woodland and neutral grassland.



Brimstone on Marsh Thistle

Clearly, these results should not be the only basis on which planting recommendations are made – if that were the case, imagine the reaction of those people currently trying to eradicate Himalayan Balsam!

Nevertheless, it would also be fascinating to see a study like this done for garden plants.

---

## Which insects are the best pollen 'posties'?



Dorset heathland

A [study](#) by the University of Bristol and the University of St Andrews has ranked bees as the most effective pollinators.

While other studies have looked at the number of times pollinators visit flowers, this research, undertaken on Dorset heathland and published in Proceedings of the Royal Society B, looked at the how well those visitors deposit pollen.

It found that bumblebees were the main flower visitors at the study site *and* the most successful pollinators of the five most common plant species.

Other insects which were effective pollinators of those flower species were the Honeybee and solitary bees.

However, the research warned against focusing attention solely on bees to solve conservation and biodiversity concerns. They concluded that attention must be paid to a wider network of insects if food production and biodiversity are to remain stable.

---

### American study says cats not a problem...in rural areas, at least

A [study](#) by North Carolina State University of free-ranging cats in the U.S. and published in the Journal of Mammalogy found that feral cats don't tend to roam beyond urban and suburban habitats, helping limit their impacts on birds in wilder green spaces.

Using trail cameras in a wide range of habitats to collect millions of images, the results showed that cats were 300 times more likely to pass through 'backyards' as through nature preserves. One theory is that Coyotes, which are rare in gardens, are a deterrent to cats straying into more natural habitats.

In the UK, *Cats Protection* estimates that there are nine million stray cats and one-and-a-half million feral cats in the UK, on top of the Pet Food Manufacturers' Association's (PFMA) 2014 estimate of 7.9 million *owned* cats.

---

### Gardening is creating sex-change frogs

As surprising and improbable as the headline sounds, a study by Yale University and reported on their [website](#) and in the journal, *Proceedings of the National Academy of Sciences*, has concluded that a mix of clover in well-kept lawns together with garden chemicals used by gardeners *may* be creating a rise in oestrogen in the environment that is disrupting frog hormones and leading to some undergoing a sex-change.

The research, in Connecticut in 2012, found that the ratio of female frogs in suburban ponds was double that of male frogs.

Apparently, the clover in lawns is believed to produce phytoestrogens (plant oestrogens). Hormonal impacts on gender in certain wildlife have also previously been reported in areas with pesticides and sewage contamination.



Common Frogs

# Wildlife Gardening and Citizen Science

## Introducing the Buzz Club!

The University of Sussex has launched an initiative to garner support for large-scale citizen science projects to discover more about bees and other pollinating insects.

The [Buzz Club](#) invites members of the public, including children, families, schools and adults, to join the Club and undertake surveys and experiments, with data to be collected by volunteers and analysed by Sussex scientists.

Questions for which answers are being sought include: Why are some species disappearing, and how quickly? How many are left, and where are they found? And what can we best do to help?

Membership involves a small annual or monthly fee. For this, the University sends everything you need to take part in whichever of their nationwide surveys you would like to join. 100% of this money goes to running these projects.

---

## Which 'bee-friendly' garden plants are best for bees?

Taking inspiration from the research methods established by Garbuzov and Ratnieks at the Laboratory of Apiculture and Social Insects (LASI) at the University of Sussex, Rosi Rollings at the Rosybee Nurseries in Oxfordshire set out to investigate which of the 45 garden flowers growing on the clay soils there were best for bees.



Viper's Bugloss

Bees and other pollinators were counted weekly for 24 weeks during 2014 on plants grown in square metre blocks over a two-year period. All the plants, with the exception of a range of commonly-sold garden centre annuals, were chosen because they were reputed to be beneficial to bees.

Some plants proved to be 100-times more attractive to pollinators than others, and there was also considerable variation in the length of time each plant flowered, the duration ranging from three to 20 weeks.

Combining the average number of bees attracted per square metre and the length of the flowering season allowed Rosi to rank the plants in terms of their overall value for bees.

The top ten were:

1. *Echium vulgare*
2. Borage
3. *Helenium autumnale*

4. *Hyssopus*
5. *Helenium* 'Sahin's Early Flowerer'
6. *Veronica spicata*
7. *Origanum vulgare*
8. *Echium* 'Blue Bedder'
9. *Verbena bonariensis*
10. *Veronicastrum*.

Bottom of the list was *Leucanthemum vulgare*, Ox-eye Daisy. However, it did attract flies and hoverflies, a good reminder not to write off plant species just because they are not attractive to certain 'high profile' wildlife species.

---

## Wildlife Gardening Policy

### Link suggested between common weedkiller and cancer

Studies in America, Sweden and Canada have found a possible link between glyphosphate weedkillers, including the widely-used *Roundup*, and cancer.

It has prompted the World Health Organisation's cancer agency to conclude that it is "probably carcinogenic to humans" and recommend that gardeners consider carefully whether or not to use it.

The news has prompted the French government to announce that non-Hodgkin lymphoma will now be recognised as an occupational illness among farm workers and that there will be an over-the-counter ban there of products containing glyphosphate from 2018. Meanwhile, in California the pesticides will be labelled as 'cancer-causing'.

Manufacturers, such as Monsanto, have defended their products, saying they have been extensively tested.

---

### Major garden insecticide loses its neonics

*Contributed by Matt Shardlow, Buglife*

Bayer have replaced Thiacloprid, a neonicotinoid, with Deltamethrin, a pyrethroid, in *Provado Ultimate Bug Killer* because Bayer foresees more measures will be taken to restrict neonicotinoids in the future.

Statistics on garden pesticide use are not collected, but it is likely that *Provado Ultimate Bug Killer* was the main neonicotinoid used in gardens and is perhaps the biggest selling garden insecticide. Scott's *Bug Clear* incorporating the neonicotinoid Acetamiprid is still on sale.

Clearly, Buglife would rather there were no powerful insecticides used in gardens, or only *in extremis*.

---



## Guidelines published to help homeowners with bats

A new set of [guidelines](#) has been produced by the *Chartered Institute of Ecology and Environmental Management* (CIEEM), aims to help homeowners and other developers understand the steps they need to take if they wish to develop premises where bats are living.

The presence of bats rarely stops development taking place; however, home improvements may need to be adapted or carried out in a certain way to ensure the bats are safeguarded and the homeowner stays within the law.

This document, although not a guide to undertaking bat surveys, explains why a survey needs to be carried out, who needs to do it, and what is involved during and after the survey.

---

## Government should ensure planning policy protects greenspace

The Committee on Climate Change's [2015 report](#) to Parliament 4 has as one of its priority recommendations that the Department for Communities and Local Government should, by 2017, put in place a process for monitoring and evaluating the effectiveness of planning policy in

- (i) achieving a high uptake of SuDS in new development and
- (ii) limiting the paving-over of front gardens with impermeable surfaces.

It reported that the number of urban front gardens that are paved over jumped from 28% in 2001 to 48% in 2011. Only 4% of all residential paving sales in England were of permeable design in 2013. It also concluded that, "The land-use planning system is also not doing enough to improve the resilience of densely built-up areas to the increasing risk of heat stress, for example by strategically planning urban greenspaces".

The total area of urban greenspace has declined by 7% since 2001, though the rate of decline has slowed since 2008. Two-thirds of this decline has been caused by the paving over of front gardens. It identified the benefits of green infrastructure as including:

- Urban cooling;
- Sustainable urban drainage (SuDS);
- Biodiversity, and
- Enhanced well-being.

The RHS [Greening Grey Britain campaign](#) aims to get 6000 pledges of greening a grey space by 2017.



## Can Great Crested Newts and developers work together?

Great Crested Newts have long been seen by many developers as a costly and time-consuming barrier to development. As a European Protected Species, it is illegal to capture, kill, injure or disturb the newts without a licence from Natural England.

Now, however, Natural England has [announced](#) the launch this autumn of a pilot scheme that will seek to enhance the populations of Great Crested Newts *and* reduce delays to major building projects. By adopting a more strategic and pragmatic approach, key populations of newts can be safeguarded while licensing can be made more straightforward on sites where they are present.

The idea is being trialled by Natural England and Woking Borough Council in Surrey, and is using a new survey technique which tests for Great Crested Newt DNA in water bodies.

The plan is to identify where the most important populations are found, and then link and enhance them in advance of development work, creating targeted new habitat, but also identifying areas where development will have the least impact.

---

## Wildlife Gardening in Practice

### RSPB and Barratt 'move in together' on major housing project

Barratt Developments has joined forces with the RSPB to try to set a new benchmark for nature-friendly housing developments.

The first development to pioneer the new approach will be at Kingsbrook, Aylesbury Vale, where 2,450 new homes, schools and community facilities will be designed in three 'villages' with nature at the heart of the proposals. Planning approval for the first village was granted last November and the first houses will be built this winter.

Around 50 per cent of Kingsbrook will be green infrastructure, including orchards, hedgehog highways, newt ponds, tree-lined avenues, fruit trees in gardens, bat, owl and swift nestboxes and nectar-rich planting for bees.

The development will also include 250 acres of wildlife-rich open space, accessible to all residents of the Vale.

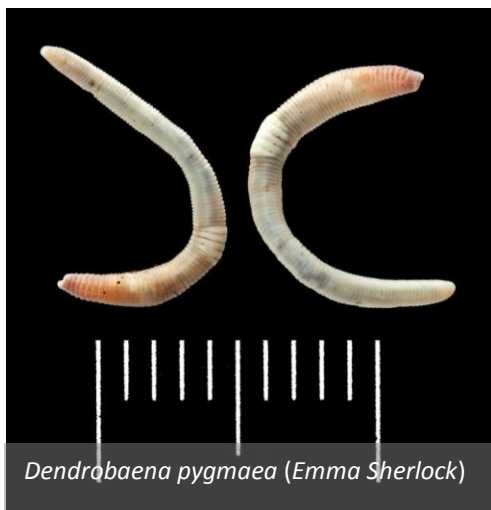
Barratt Developments and the RSPB have signed an agreement to incorporate some of the principles developed for Kingsbrook across its future developments. This will include reviewing its landscaping and planting guidance to enhance wildlife habitats.

---

## Garden wildlife

### 'Missing' worm turns up in Natural History Museum garden

Earthworms are critically important ecosystem engineers. There are 27 earthworm species recorded from natural habitats in the UK. One of these species, *Dendrobaena pygmaea*, a tiny worm found in leaf litter or under/within rotting logs has not, however, been found for 32 years. In fact it has only been recorded four times, despite the establishment of the Earthworm Society of Britain and the resulting increase in the recording of earthworms across the country. The last sighting was from Ramsholt (Surrey) in 1983.



During the June 2015 WLGf Conference on soil biodiversity,, while looking for worms in rotting Sweet Chestnut logs in the wildlife garden of the Natural History Museum, London, two tiny, pale worms (approximately 1.2 cm long) emerged from inside the rotting wood. Despite being so small the worms could be seen to each have a saddle (the fleshy band showing they are adults, and hence identifiable) and a pink-coloured head end. Thanks to the skills of Emma Sherlock, Senior Curator of *Annelida* and *Porifera* at the Natural History Museum and Chair of the Earthworm Society of Britain, they were indeed identified as *Dendrobaena pygmaea*.

It is thought that, because the find was as part of an event showing a group of wildlife gardening enthusiasts and the general public how we sample, the log was scrutinised in the sun for far longer than would normally happen in a regular microhabitat search. The tiny worms, clearly able to hide themselves in the tiniest of crevices, were allowed time to show themselves and were spotted by sharp eyed members of the crowd.

This discovery shows the worm is not extinct in the UK, as feared, but rather that it is very likely we have just been looking for it in the wrong way. We need to establish the best way to search for these little creatures that were thought to have disappeared from these shores. However, it also shows the value of the Natural History Museum's wildlife garden!

---

### Caterpillar threat to Box increases

Reports of the caterpillar of the Asian Box-tree Moth to the Royal Horticultural Society have increased from 20 in 2014 to over 200 in 2015. First reported from mainland Europe in 2007, adults were found in the UK as early as 2008. Larvae however, were not reported in private gardens in the UK until 2011; this species from east Asia can defoliate Box plants.

In appearance, the larvae are somewhat similar to the familiar caterpillar of the Large White butterfly, being sparsely hairy with yellow and black stripes.

Reports have come in largely from London and the Home Counties but appear to indicate a rapid spread of the species. The RHS has [online advice](#) regarding the threat.

---

# Wildlife Gardening campaigns

## Save the Natural History Museum's Wildlife Garden



The Moorhen family in the NHM Wildlife Garden (Steve Head)

The beautiful Wildlife Garden at London's Natural History Museum will be familiar to many Forum members who will have visited during our conferences. Much more than just an urban garden, it is a mini nature reserve containing representatives of many British lowland habitats, and the perfect 'field centre' for the new Angela Marmont Centre for UK Biodiversity, which is the hub for serious UK biodiversity citizen science.

The site has been maintained lovingly for 20 years. About 3,000 species have been identified, including 500 Lepidoptera, and it supports a resident pair of Moorhens and a family of Foxes. At the last conference, a rare species of earthworm was found not seen in Britain for 32 years. (see p11) The Wildlife Garden is the high point of what is otherwise a remarkably boring and uninspiring set of grounds.

Scientifically, the 20 year history of the garden makes it of high and increasing value for monitoring ecological change, succession, and response to climate change. Twenty year databases are rare, especially for a site so diverse and in so deeply urban a location.

Unfortunately, as part of a major rethink of the Museum's displays and grounds, the garden is under threat. The proposals for the grounds include relocating Dippy the Diplodocus cast into the eastern end, set in a sort-of Jurassic planting, and turning a boring area of lawn into a wildflower meadow. Nothing wrong with these aims. The problems come from the proposal to drive a sweeping path right through the wildlife garden, as a way to let queues of visitors in through the western as well as the central entrance. There will be a Chelsea garden-style terrace area and a large pond, but most of the habitats in the garden will be lost.

It would be so easy to consider alternatives that would not threaten the wildlife garden, such as an raised walkway at tree level that would be much more exciting for visitors. Really the last thing a national centre for natural history and biodiversity should do is to provide a model for trashing biodiversity for logistic convenience.

Forum Trustee Ken Thompson has written a typically [sensible piece](#) about the proposals for the Telegraph.

The Forum is doing what it can to change the mind-set of the Museum administration, and you can play your own part in this through a [National Petition](#).

## At least Hedgehog events are on the increase!

This autumn sees not one but two major Hedgehog conferences.

The [Day of the Hedgehog](#) is the People's Trust for Endangered Species conference on Saturday 21 November 2015, 9.00am – 4.30pm, at Telford, with talks, stalls, refreshments and a sandwich lunch. Cost £35.

Meanwhile, Surrey Wildlife Trust and RHS Wisley are running a [Help for Hedgehogs Conference](#) at RHS Wisley on 26 October, 9.30am – 1.35pm. A range of talks will cover the secret lives of these creatures, their homes and how we can ensure that they remain a familiar part of our lives. Cost: £30 non-members and £25 members of SWT and RHS, including refreshments.

Communities and schools are also being encouraged to take part in hedgehog related activities this October Half Term as part of Wild About Gardens Week, run jointly by The Wildlife Trust and the RHS. Resources and to sign up for events [here](#).

---

## Schools invited to win wildlife-friendly mini gardens

As part of its project to connect half a million children with nature, Aldi – in collaboration with the RSPB – is running a [competition](#) to give 25 schools all they need to create their own mini wildlife garden.

The winning schools will be able to create their own wildlife-friendly garden in a planter (approximately 2m x 1m), however small their grounds. The kit (*shown in the photo*) comes complete with peat-free compost, a pond, shrubs, plants, wildlife-friendly seeds and helpful instructions from the RSPB.

Entry is child's-play! For the chance to win a wildlife garden for their school, teachers just need to post or tweet a photo of where their school garden will be on Aldi Facebook or @AldiUK, using the hashtag #AldiwildlifeWatch.

The competition is open to schools across England, Wales and Scotland until 11 October 2015. The results of the draw will be announced in October.



---

*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.wlqf.org](http://www.wlqf.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 620 members. Formed in 2005, our core aim is to help gardeners and decision-makers understand just how important our gardens are for wildlife.

*Newsletter compiled by Adrian Thomas, with contributions from Helen Bostock, Marc Carlton, Steve Head and Jan Miller. All photos by Adrian unless stated.*