

# The importance of school grounds for wildlife



***Dr Steve Head***  
***Wildlife Gardening Forum***



# The importance of school grounds for wildlife

School grounds are gardens

Gardens are biodiverse

Gardens are important

Why the WLGF wants to promote school grounds





# School grounds are gardens

## Managed Space for:

- exercise and relaxation
- for beauty and appreciation of the natural world
- growing food
- looking and learning
- wildlife to flourish and be enjoyed



# How many species live in gardens ??

## Exercise

*Name any species of animal !*

*British Gardens contain only about*

Forty species of birds

Five or six species of mammals

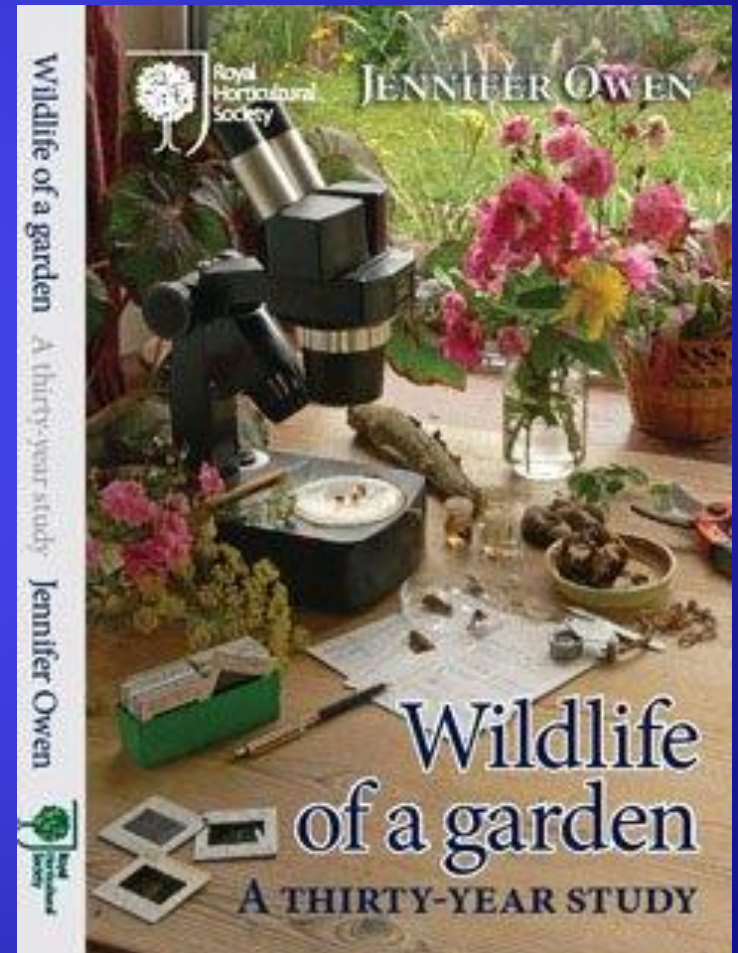
Six species of amphibians and reptiles



# So why are gardens thought important for wildlife?



Jennifer Owen  
Studies 1972-2009





# Jenny Owen studied wildlife in her ordinary detached garden in Leicester



# Jenny Owen studied wildlife in her ordinary detached garden in Leicester

In the groups she could study she found

- 422 species of plants
- 364 species of butterflies and moths
- 251 species of beetles
- A total of 2,204 species in 34 groups

Allowing for the many obscure groups she *couldn't* study, she estimated that about **8,450 species of insects alone** could be found in gardens.



# Invertebrates

These are the little things that run the world

They are important and fascinating in their own right

And they are the food for everything else in the garden



Blue tit chicks are estimated to eat  
35,000,000,000 caterpillars in Britain  
each year



# How do gardens compare with other habitats ?

In plant species alone, gardens contain more per unit area than the African rainforest

The garden habitat contains between 5 and 40% of all our animal species (by group).

No other British habitat type is so diverse

WHY ??



# Gardens are biodiverse because:

Contrived plant diversity

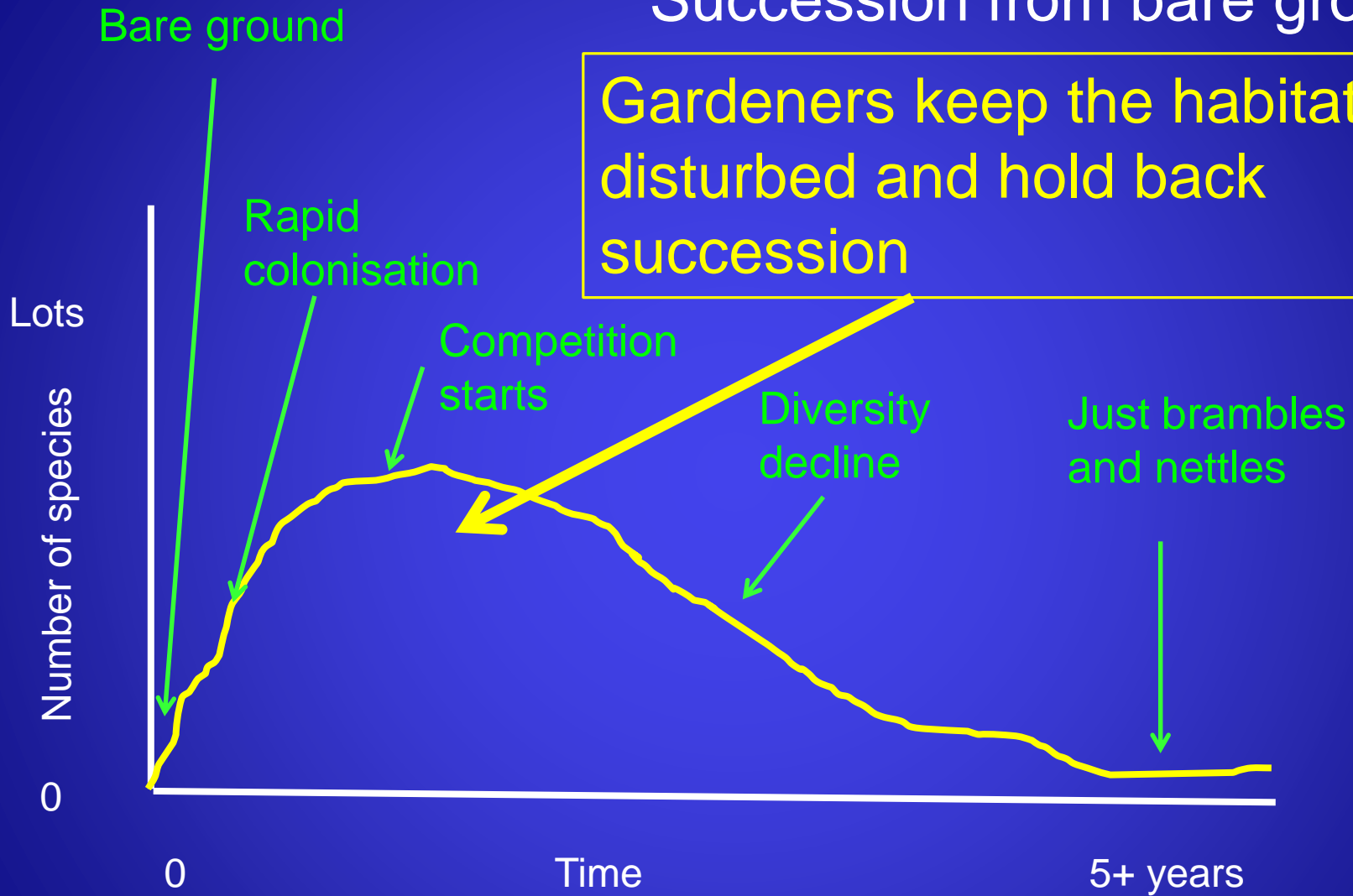
Permanent succession





# Succession from bare ground

Gardeners keep the habitat disturbed and hold back succession



# Gardens are biodiverse because:

Contrived plant diversity

Permanent succession

Variety of structure

Domestic lawns

Food supply and food webs





# Gardens reproduce many important British habitats

Mature trees

Shrubs and hedges

Lawns

Veggie patch and borders

Ponds

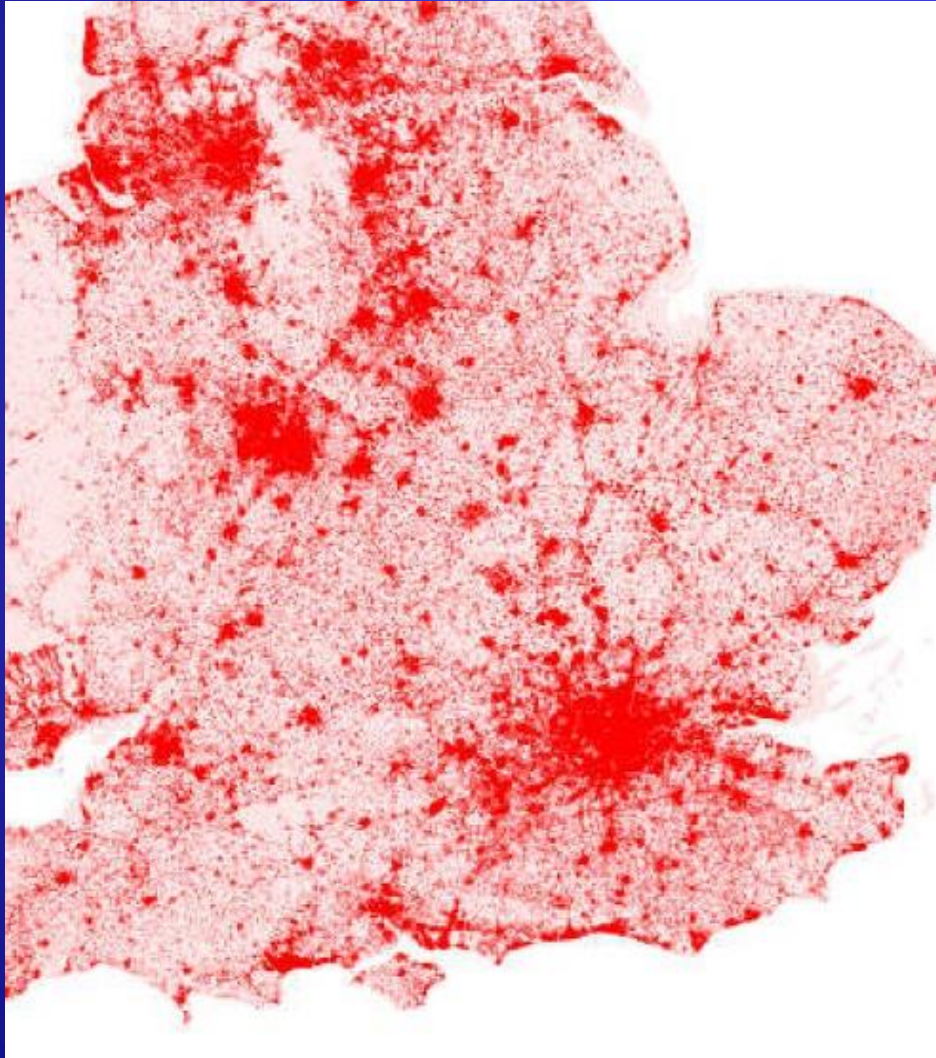
Compost heap

Rockery



Mountain, rubble, scree , sand-dune habitats

But surely gardens don't offer a significant *amount* of habitat ?



Area of domestic gardens in England is 564,514 hectares

(1/5<sup>th</sup> size of Wales)

Up to 50% of urban greenspace

Gardens provide *connectivity* through a fractured countryside



# Gardens are the main habitat for:



Welsh groundsel

*Senecio cambrensis*



Stag beetle

*Lucanus cervus*

# Gardens are the main habitat for:



House Martin



House sparrow



# Gardens are the main habitat for:



Frogs – up to 70% of British frogs are now confined to gardens



# Gardens are supermarkets





# Gardens are important for wildlife

Lots of species live in them

Lots more species use them

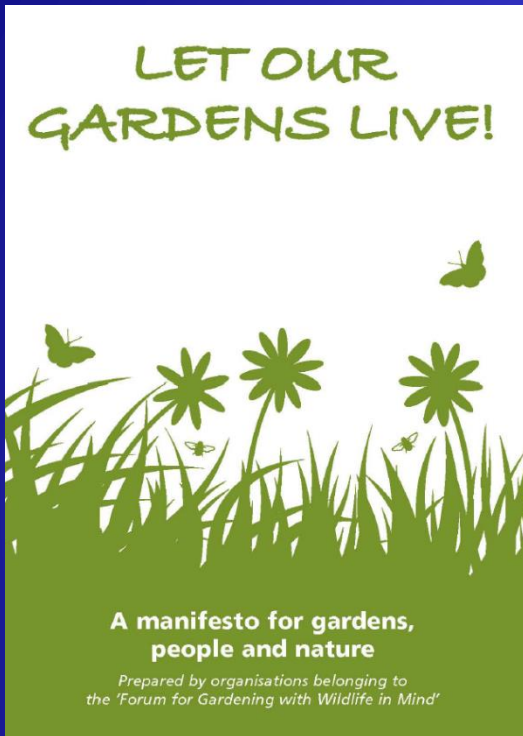
They are much more friendly places for wildlife than farmland or plantations

They are a very big resource

Think global, act local



# The Wildlife Gardening Forum



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

Founded in 2005 by English Nature,  
now an independent Charity

**Mission - To help 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

Inspiring and supporting the wildlife gardening  
community

Free to join – no employees

c1400 members from >200 organisations



# What are we worried about?

## Threats to garden wildlife

A close-up photograph of a Peacock butterfly (Aglais io) perched on a dense cluster of small, purple flowers, likely a Buddleja. The butterfly's wings are primarily brown with vibrant red and orange markings, and distinctive blue and white 'eyes' on the hindwings. The background is a soft-focus green, suggesting a garden setting.

Ignorance by ecologists

Myth-information

Concrete and paving

Loss to development

Shrinking garden sizes

Climate change

# General wildlife gardening myths

Only “wildlife gardens” are any good for wildlife

Wildlife gardening can be in one small area of your plot

Wildlife gardens must be informal and scruffy

All wildlife gardens should follow (MY!) blueprint





# Special wildlife gardening myths

“Only big suburban gardens are of value”

“You must only plant native species”

“Wildlife gardens need nettles for butterflies”

“You must buy special homes for garden animals”

“Lawns must be replaced with flower meadows”

Magpies and pussy cats kill all the garden birds”

“You must feed garden birds”

“You must garden organically”

# What is our interest in Education?

In our Manifesto we set out what we want to see:



All children having access to a garden rich in wildlife, at home and at school

Children using gardens to give them a richer environment for learning and play

People valuing and enjoying wildlife in their gardens, encouraging a deeper appreciation of biodiversity and the environment



# Because:

School gardens can add a significant amount to the garden habitat available to wildlife





# Because:

Being out of doors improves children's concentration, exercise and health



A third of 2-15 year-olds children in England are now overweight or obese, By 2050 > 50% of adults and a quarter of all children will be obese.



Children's ability to do physical tasks such as sit-ups has declined, and there has been a 10% drop in their cardiovascular fitness in a decade



# Because:

Being out of doors improves children's concentration, exercise and health



The best way to get children to exercise is to give them opportunities to play outside



They miss out on building resilience through coping with the risks and challenges of outdoor play,

*But especially* **Because:**

If the next generation of adults is to care about and protect the natural environment, they must build a connection with it as a child.

As David Attenborough said:

*"No one will protect what they don't care about; and no one will care about what they have never experienced"*





# Chris Packham Desert Island Disks 2013



What was your  
very first brush  
with nature?

*My parents say it was crawling around on the lawn of our very small house in Southampton and picking up ladybirds and putting them into matchboxes.*



Children watch television for 17 hours, and are online for 20 hours every week.

Our 11–15-year-olds spend half their waking lives in front of a screen.





This replacement of play in the real world with virtual play has been called '**the extinction of experience**',

The over-protected life of children indoors has been called '***well-meaning, protective house arrest***'.

# Extinction of experience

Percentage of children playing in different areas	Modern children	Parents' generation	Grandparents' generation
At own or friends home	83%	78%	73%
In local streets	40%	74%	80%
School playground	40%	64%	58%
House garden	75%	78%	73%
Woods	10%	44%	52%
Heath, field, farmland	9%	39%	49%
Riverside, canalside, pond	7%	22%	33%
Mountains, moorland, wild places	4%	11%	18%



# Extinction of experience


Percentage of children playing in different areas	Modern children	Parents' generation	Grandparents' generation
At own or friends home	83%	78%	73%
In local streets	40%	74%	80%
School playground	40%	64%	58%
House garden	75%	78%	73%
Woods	10%	44%	52%
Heath, field, farmland	9%	39%	49%
Riverside, canalside, pond	7%	22%	33%
Mountains, moorland, wild places	4%	11%	18%

# Extinction of experience

Percentage of children playing in different areas	Modern children	Parents' generation	Grandparents' generation
At own or friends home	83%	78%	73%
In local streets	40%	74%	80%
School playground	40%	64%	58%
House garden	75%	78%	73%
Woods	10%	44%	52%
Heath, field, farmland	9%	39%	49%
Riverside, canalside, pond	7%	22%	33%
Mountains, moorland, wild places	4%	11%	18%



# [www.wlqf.org](http://www.wlqf.org) Our Website



The screenshot shows the Wildlife Gardening Forum website. The header is green with the site logo, a search bar, and navigation links (Home, About, Contact, Sitemap). Below the header is a dark green navigation bar with links to Garden Science, Garden Wildlife, Practical Advice, and Public Benefits. The main content area has a breadcrumb trail: Home > Public Benefits > Gardening and people > Education > Introduction. The title is "Wildlife Gardening and Education". The text discusses the forum's focus on wildlife in gardens and education. A list of goals is provided, followed by a paragraph about children's experiences in gardens. A reference to Chris Packham's "Desert Island Discs" recording is included, with a small video thumbnail and a link to the recording.

Home > Public Benefits > Gardening and people > Education > Introduction

## Wildlife Gardening and Education


Although the bulk of the Wildlife Gardening Forum's work concerns ordinary private gardens and their significance for wildlife, from the beginning we have also been concerned with the health, social and especially education benefits of getting more "nature" into gardens, public space and school grounds. People cannot grow and develop healthily in modern nature-free environments, and we want to help policy makers understand these issues.

In our [Manifesto](#) we set out what we want to change:

- all children to have access to a garden rich in wildlife, at home and at school
- use gardens to give children a richer environment for learning and play
- help people value and enjoy wildlife in their gardens, encouraging a deeper appreciation of biodiversity and the environment

Gardens are where many children make their first contact with the natural world. There is nothing more exciting for a small person than lying prone on the lawn, and watching ants busy about their inexplicable daily lives in the edge of the flower bed. Using their young-person's gift of close-up vision, they discover for themselves a new and extraordinary world that contains so much more than just boring people.

One of the best accounts of discovering nature in and around the garden was given by Chris Packham on "Desert Island Discs" in October 2013.



Chris's Desert Island Discs recording is [available here](#). The most relevant section starts at 7.20 minutes in.

# [www.wlqf.org](http://www.wlqf.org) Our Website





# [www.wlgf.org](http://www.wlgf.org) Our Website



The screenshot displays the Wildlife Gardening Forum website. The header is green with the site name and logo, a search bar, and navigation links. A secondary green bar contains category links. Below this is a breadcrumb trail. The main content area features the article title and author details. At the bottom is a photograph of children in a garden.

Home

Google Custom ?

About

Contact

Sitemap

Wildlife Gardening Forum

Garden Science Garden Wildlife Practical Advice Public Benefits

Home > Public Benefits > Gardening & people > Education > Education evidence

## Evidence base for engaging children in wildlife gardening

Ruth Staples-Rolfe (Learning Through Landscapes) and Steve Head



## Wildlife gardening, nature and education – the evidence reviewed

### Steve Head

There is now a tremendous body of evidence that children's development and education at all levels benefit greatly when some of it can be delivered in an outdoor semi-natural environment, where children are exposed to natural physical and biological influences, and can let their imaginations run free.

Relatively little evidence is *specific* to school or home wildlife gardening, but maintaining semi-natural wildlife friendly areas for teaching and/or informal play are providing precisely the conditions which have been shown to benefit behaviour, health, concentration and learning. Please read this document as evidence for the importance of outdoor play, experience and learning. School grounds and wildlife gardens are easily available, cost effective and practical places to provide it.

We review evidence at several levels:

1. [Biophilia and poor human adaptation to cities](#)
2. [Loss of connection with nature](#)
  - 2.1. ["Nature deficit disorder"](#)
  - 2.2. [Changes in play](#)
  - 2.3. [Electronic media](#)
  - 2.4. [Disadvantaged children](#)
  - 2.5. [Loss of natural history skills](#)
3. [General benefits of outdoor play and experience to children](#)
  - 3.1. [Activity levels and physical health](#)

28 pages, 80 references cited



# [www.wlqf.org](http://www.wlqf.org) Our Website



[Home](#) > [Public Benefits](#) > [Gardening & people](#) > [Education](#) > [Case studies](#)

## Case Studies in school wildlife gardening



Here is where we give you access to case studies of school wildlife gardens, written by the teachers themselves.

They tell of the inspirations, the hard work, the problems overcome and the responses of the children and staff. Seeing how other schools have approached school gardening can be an inspiration for you.

If you have created a school garden, improved the school grounds, or started a food growing project, please let us know through [here](#), and we will publish your own experiences as a case study.



### **St Albans Church of England Primary School Havant.**

Teacher [Julie Newman](#) describes the extraordinary success of this pupil-driven project which has created new and attractive borders, beds and pollinator planting.

The school children set up "Pollinator Promise", which has now become a national scheme, and helped win them a major national award

# [www.wlqf.org](http://www.wlqf.org) Our Website



The screenshot shows the homepage of the Wildlife Gardening Forum. The header is green with a butterfly icon and the text 'Wildlife Gardening Forum'. Navigation links include Home, Google Custom!, About, Contact, and Sitemap. A search bar is also present. Below the header, there are social media icons for Facebook and Twitter, and a decorative illustration of a garden path. A menu bar contains links for Garden Science, Garden Wildlife, Practical Advice, and Public Benefits. The breadcrumb trail reads: Home > Public Benefits > Gardening & people > Education > Case studies > Pooles Park. The main heading is 'Case Study: Pooles Park School's Community Garden' by Sophia Ioannou. The article title is 'A Green Space for Wildlife and Us'. The text describes Pooles Park Primary School in Islington, London, and its vision for the natural environment in education. A photograph of a green, leaf-shaped sign with the text 'Welcome to Pooles Park's Community GARDEN' is shown. The sign is decorated with illustrations of flowers and butterflies. The article continues with a quote from the school's Headteacher Greg Crawford, who writes: 'Pooles Park School recognises the importance of contact with nature, for pupils, staff and visitors. At Pooles Park we raise awareness of biodiversity and sustainable practices to educate future generations.'

Home

Wildlife Gardening Forum

Google Custom! Search About Contact Sitemap

Garden Science Garden Wildlife Practical Advice Public Benefits

Home > Public Benefits > Gardening & people > Education > Case studies > Pooles Park

## Case Study: Pooles Park School's Community Garden

By Sophia Ioannou

### A Green Space for Wildlife and Us

Pooles Park Primary School is in Islington, London and has a strong vision for the importance of the natural environment in education.



The school's Headteacher Greg Crawford writes:

- Pooles Park School recognises the importance of contact with nature, for pupils, staff and visitors.
- At Pooles Park we raise awareness of biodiversity and sustainable practices to educate future generations.

Just 4 so far!



# [www.wlqf.org](http://www.wlqf.org) Our Website



# We need *Your* help

More Case Studies of practice in schools –  
what works!

Web page material on:

- School grounds
- Parents and children
- Forest schools
- Training in wildlife gardening

Fun blogs about school gardening!

Become a Trustee of the Wildlife Gardening Forum  
– Not such a big commitment!





# Thanks for listening



[Steve@wlgf.org](mailto:Steve@wlgf.org)