



I was woken at an ungodly hour this morning by my friendly local blackbird welcoming the new day, for a second I couldn't help but be slightly irritated by the rude awakening.

However I really should consider myself lucky, there are many of our common garden birds that have suffered in recent years and their numbers are declining.

Between 1995 and 2005 the numbers of blackbirds in Kensington palace gardens plummeted by 67%. Luckily these lovely birds are doing well elsewhere in the country. It is thought

that the decline of blackbirds in London is due to the overzealous clearing of fallen leaves to make the area look tidier and to make compost. Leaf litter provides a home and a food source to dozens of bugs and worms that work away unnoticed turning the dead leaves into humus, these bugs are a huge source of winter food for the blackbirds that dig around looking for tasty morsels.

The worry about the decline in blackbirds in London is that this is where the decline of another common bird was first spotted. The

population of the house sparrow in the same park in London has also undergone a massive decline. Since 1925 when the first census took place the numbers of this bird have dropped from a little over 2600 in 1925, to just 8 in 2000. There was an initial decline in the late 1920's that coincided with the replacement of the horse by the internal combustion engine, this caused a reduction in the amount of spilt grain on the streets resulting in less food for sparrows. The numbers were then stable for several years until the mid 1990's then the numbers went into free fall, to the extent that

they are virtually extinct in the capital. Worryingly, unlike the blackbird the house sparrow is declining in most areas across the UK, and the true reason is not known as even in areas where there

Species Profile

Name: *Passer Domesticus*

AKA: The House Sparrow

Status: **68% decline** UK wide over 25 years

Reason for decline: Unclear, loss of nesting and foraging likely to be contributing

Conservation status: UK BAP Priority Species, RSPB Red list



should be plenty of food and nesting areas the numbers are still decreasing. This decline has resulted in the house sparrow being placed on the UK Biodiversity Action Plan (UK BAP) priority list, and also the RSPB's Red List, both of which are for species that are severely declining and require conservation efforts. Hopefully the Blackbird will not follow the trend of the house sparrow and stay off these lists.

Apart from the house sparrow, the starling is probably considered to be the most common

bird in the UK. It came as a great surprise to me to find that Starlings are also declining at an alarming rate; numbers of this “common” bird have dropped from 20 million in the 1970’s to just 8.5 million in 2000. The reason for this decline in rural areas is likely to be due to intensification of farming and a reduction of wild pasture, again as with the house sparrow the reasons for urban decline are unclear.

It’s not just our birds that are suffering; hedgehogs are considered by most people to be abundant, after all there seems to be plenty of them finding themselves victims of traffic accidents. It may seem an odd way of determining animal numbers but counting dead hedgehogs beside the roads is actually the way population numbers are determined. And the numbers are depressing, despite a marked increase in traffic on the 250,000 miles of roads monitored in the UK, there has been a massive decline in sightings from an average of 1.8 hedgehogs per 100 kms in 2001 to 1.3 in 2009. The

Species Profile

Name: *Sturnus Vulgaris*

AKA: The Starling

Status: **87% decline** UK wide over 25 years

Reason for decline: Unclear, loss of nesting and foraging likely to be contributing

Conservation Status: UK BAP Priority Species, RSPB Red list



largest decline has been observed in Wales there has been a reduction in numbers of 78%. Adam Nicholson, writing in the Guardian states that there are only around 1 million hedgehogs left in the UK and if the decline continues they could be extinct in the UK by 2025.

Some of our charismatic insects are also suffering. Important pollinators like Bumblebees and Hoverflies are also suffering, particularly worrying given that these insects play an important role in pollinating some of our food crops. There has been a serious decline in bumblebees in recent years, with three species now extinct and a further six being placed on the UK Biodiversity Action Plan priority list, alongside the starling, house sparrow and hedgehog. The reason for the decline in these beautiful insects is thought to be mainly due to changes in farming practices; less natural pasture and more intensive crop farming has meant there are fewer wild flowers for bumblebees to forage. Thankfully for the bumblebee

Species profile

Name: *Erinaceus Europeus*

AKA: The Hedgehog

Status: **33% decline** across the UK in 8 years.

Reason for decline: Predation by foxes, road traffic accidents, lack of food in gardens

Conservation Status: UK BAP Priority Species



agri-environmental schemes that many farmers are now involved in, such as leaving field edges natural and planting hedges are likely to help bumblebee numbers in rural areas, however these insects still need all the help they can get if we are to prevent the loss of further species.

But does the loss of these species really matter? The term biodiversity refers to the richness of species including plants, insects, birds and mammals, which inhabit an ecosystem, each species within that ecosystem has a place and a role to play, including humans.

Biodiversity affects everyday life on Earth, approximately 30% of medicines have been developed from plants or animals, soil enrichment occurs through the decomposition of dead animals and plants and waste breakdown by organisms such as insects and worms. Approximately 80 plant species provide over 90% of the world's food sources. Ecosystems even provide us with clean water and pollinating species help ensure that we have enough food to eat. So basically biodiversity and ecosystems provide us humans with a range of important services and need to be protected in order to preserve

the quality of our life on Earth. Due to human actions many plants and animals have already become extinct; it is estimated that if trends do not change 34,000 plant species will become extinct. Shrinking biodiversity means ecosystems are unable to operate effectively; resulting in the loss of valuable resources.

Species profile

Name: *Bombus spp*

AKA: The Bumblebee

Status: 24 species in the UK,
6 common, **12 declining, 3 EXTINCT**

Reason for decline: Under debate however lack of nesting and foraging sites mainly due to intensification of farming likely to be contributing

Conservation Status: 6 bumblebee species are UK BAP Priority Species



Relationships between the species in an ecosystem are like a giant web. Cutting one thread of this web can bring it crashing down. This means that the loss of even a single species can have drastic consequences on an ecosystem as many

species may depend on it. For example if we look at a very simple example involving the house sparrow, a favourite food of the house sparrow is aphids, if house sparrows decline further the numbers of aphids could increase, this would be bad news for gardeners and farmers alike. Furthermore wasps prey on aphids, an increase in food source for these could result in more wasps in the ecosystem, and again whilst they are as important as any other occupant of the ecosystem, this would generally be considered by most people as a bad thing. It doesn't stop there, sparrows themselves are prey for predatory birds like sparrowhawks, less food for these charismatic

birds could cause these to decline also, in fact there is some evidence of a decline in Sparrowhawks in recent years. This is just a very simplified example involving a handful of species, the true effect of losing a bird like the house sparrow is likely to be much more far reaching.

I feel we also have a moral obligation to assist where we can in preserving the wildlife we share our lives with. Whilst ecosystems might provide important resources there isn't a price that can be placed on the joy that comes from seeing wild birds in the garden or watching a hedgehog snuffling around for worms and slugs. I certainly don't want to have to say to my grandchildren, *"We used to have hedgehogs at the bottom of the garden, but now they're extinct"* knowing that I did nothing to help their plight.

So what can be done to help the wildlife we share our ecosystem with ?

The biggest risk to biodiversity is changing land use, whilst the impact of deforestation on the animals that live in the forest is

generally understood by the general public, the impact of our expanding cities and residential areas are not often thought of as habitat destruction.

Thankfully all is not lost, domestic gardens represent a large but

highly fragmented area of green space. In Sheffield a project to study and enhance biodiversity found that 23% of the urban land area was taken up with domestic gardens. If just a small percent of homeowners made a

little effort to make their own garden more welcoming to wildlife, our urban landscape could become a much more viable habitat for some of our dwindling species.

Digging a wildlife pond and planting native trees and plants will undoubtedly encourage

more wildlife to your garden, however these can be pretty large and expensive projects and many people, myself included, just don't have the space for these options. There are



Perfectly manicured lawns and tidy gardens do not encourage wildlife. This garden is wildlife hell !



Mature trees, native plants and leaf litter provide shelter and food for a variety of wildlife.

many commercial housing boxes for wildlife from birds to hedgehogs to bugs, which can provide shelter in winter and nesting habitats in spring. However it is possible to help these declining species by spending less than £10..... how ?

The best and easiest thing is to do is to be less obsessed with having a tidy garden! A perfectly manicured lawn, clipped hedges and use of pesticides all limit the food and habitat available to wildlife. There are plenty of things that can easily be done to provide a habitat and food for wildlife, the following are just a few ideas :-

✓ **Don't sweep leaves**

Freshly fallen leaves protect a "fermentation" layer where worms, invertebrates and micro-organisms work to make humus; Blackbirds will dig around to feed from the insects in this layer of leaves.

✓ **Plant native plants**

A wildflower mix of seeds in the borders will provide a mini meadow that will encourage butterflies, bumblebees and other insects

whilst flowering and the seed heads will provide food for birds.

✓ **Provide a home for bugs**

A pile of logs or twigs in an inconspicuous area of the garden will become colonised by

invertebrates as the wood decomposes, these in turn will provide food for birds and hedgehogs, and might be used by hibernating hedgehogs. An ideal location for such a bug home is under a section of decking, just remember to leave a gap for the hedgehogs to get in and out !

✓ **Tolerate aphids**

Aphids are a prime food for house sparrow chicks,

chicks that are raised on a diet high in insect protein have a higher body weight and are more likely to fledge than those brought up on a primarily vegetarian diet. Do your roses really need to be aphid free? If aphids really are a problem try natural methods such as ladybirds (yes these can be purchased !)

I hope I've highlighted the importance and plight of some of our "common" wildlife species – conservation really can start in your back garden it doesn't have to be about donating £3 a month.....

The cost of helping wildlife :-

Digging a pond - £100 (minimum based on size)

Planting native trees - £30 for a single 1m tree

Providing nest boxes - £10-20

Providing hedgehog box - £30

Providing Bumblebee house - £15

Not sweeping leaves - FREE

Planting native seeds - £5

Providing a home for bugs - FREE

Tolerating Aphids - FREE

25 Ladybirds to control aphids - £15

Further Reading

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Details of BUGS project in Sheffield

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The British Trust for Ornithology Website
www.BTO.org.uk

<http://www.dailymail.co.uk/news/article-1328460/Hedgehog-decline-300-000-fewer-Britain-decade-ago.html#ixzz1Fuemq7f0>

