

Sustainable  
Westbury  
on  
Trym



[www.suswot.org.uk](http://www.suswot.org.uk)

# SusWOT QUARTERLY

*SusWot using less living more*

Winter Solstice

January 2012

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**Welcome to the  
January  
Quarterly edition**

**For this quarter bees are very much on the agenda. A declining bee population affects all of us.**

**Also a look at some environmental dilemmas and showing that problems are not easily solved.**

## Diary Dates

**Local Produce Market  
9.00am – 1.00pm  
Saturday 26<sup>th</sup> January  
Saturday 23<sup>rd</sup> February  
Saturday 23<sup>rd</sup> March**

SusWOT Open Evening  
Thursday 21st February  
Northcote House 7.30

## Local Population in Westbury is probably declining.....

While many of us try very hard to 'do their bit' for the environment we often feel that many tasks are taken out of our control or there is little we can do. Making our own energy savings are marginal in terms of the total costs involved and the amount of plastic film and general packaging is determined by manufactures and retailers. But there is something we can all do to improve the environment and help ourselves at the same time.

By providing the right sort of plants, we can give the bees a chance to survive and increase. Whether in the window box, garden or allotment growing the right plants in the right way can make a significant difference to the local bee population. SusWot are encouraging everyone to take part in helping to give the bees a chance. If you live in a flat and don't raise any plants of your own, a word to the management company to grow the right sort of plants used for landscaping can make a useful contribution.

This news letter has some general information about bees and the current problem and the March edition information on which plants to grow. SusWot will be selling suitable plants along side usual tomato seedlings.

## Some pollinator insect facts

- Britain has 25 species of bumblebees, of which about 11 commonly visit garden flowers.
- A honeybee hive can contain up to about 60,000 bees in mid summer and they can convert the nectar they collect into over 100 pounds of honey.
- There are about 260 species of solitary bee in Britain.
- There is a similar number of hoverflies, many of which have aphid predator larvae.
- Adult pollen beetles (*Meligethes* spp.) feed on pollen and are commonly seen in flowers in spring and summer.
- Butterflies and moths, with their long tongues (proboscis), can reach nectar in flowers that is inaccessible to short-tongued insects.
- Unlike humans, honeybees can see ultraviolet light and can detect patterns on petals invisible to us. The markings on the petals guide bees to the nectar-producing parts of the flower and bring the insect into close contact with the pollen-bearing structures.
- When foraging honeybees have located a good source of nectar or pollen, they can recruit other bees to visit the same flowers. A figure-of-eight-dance performed on the combs in the hive tells other bees how far and in which direction they need to fly to find the flowers.



*Compiled by Andrew Halstead, RHS Principal Entomologist*



## How to attract and support pollinating insects



- Aim to have plants that are attractive to pollinating insects in flower from early spring to late autumn. Seek plants at garden centres and nurseries having the RHS symbol
- Grow garden plants with flowers that attract pollinating insects. Most reputable seed merchants carry the bee friendly symbol for flowers that attract bees
- Avoid plants with double or multi-petaled flowers. Such flowers may lack nectar and pollen, or insects may have difficulty in gaining access. Summer half hardy bedding plants often have double flowers which make them less friendly to bees
- Never use pesticides on plants when they are in flower
- Where appropriate, British wild flowers can be an attractive addition to planting schemes and may help support a wider range of pollinating insects
- Observe the plants in your garden. If you know of plants with blooms that regularly attract insects, let the RHS know
- Encourage bees by keeping honeybees yourself allow a beekeeper to place hives in your garden. Nest boxes containing cardboard tubes or hollow plant stems, or holes drilled in blocks of wood will provide nest sites for some species of solitary bees. Such nests are available from garden centres or you can make your own (holes/tubes should be in a mixture of sizes with a diameter of 2-8mm)

## Why is the bee population declining?

**There is no one simple answer and the problems facing the honeybee are different to those affecting bumblebees and solitary bees.**

### Honeybees

Several factors have been identified as probable contributory causes of honeybee decline.

**Varroa mite:** This is a parasitic mite that sucks bee blood (haemolymph) from the bodies of honeybee larvae, pupae and adult bees. Varroa destructor was first detected in Britain in 1992 and now infests bee hives throughout Britain and Ireland. Unless beekeepers take steps to control Varroa, infested colonies collapse and die within two or three years. Varroa has gained resistance to the pesticide strips used to control the mite. The current alternative treatments are less effective and often provide a lower level of control

**Diseases:** Honeybees and their larvae are affected by many diseases caused by bacteria, fungi and viruses. Research has shown a link between certain bee viruses, Varroa and colony decline. The mite can transmit some viruses within the colony and increase the rate of infection compared to hives that are mite-free. A colony that appears strong in late summer can die out over winter or is reduced by the spring to a greatly weakened and non-viable colony

**Neglect by the beekeeper:** Honeybees today need more care and management because of the need to prevent damaging levels of Varroa mites building up. "Leave alone" beekeepers will lose their bees. In early autumn, it is important to ensure honeybees have enough honey in their hives to keep them going until nectar becomes available again in the spring. Hives that have insufficient honey must be fed with sugar solution to top up their stores

**Pesticides:** Pesticides, especially insecticides, are often blamed for bee losses. The instructions on the packaging often state "Dangerous to bees". This is because if the chemical is sprayed directly on to bees they may be harmed. When used according to the manufacturer's instructions, and by not spraying open flowers, the risk to bees can be reduced



Varroa mite  
- on a bee larvae



### Bumblebees and solitary bees

Bumblebees and solitary bees are not attacked by varroa mite. The main problems affecting them are loss of suitable habitat. This affects them in two ways:

**Forage:** some bumblebees and solitary bees collect nectar and pollen from a restricted range of plants. These are usually wild flowers, so garden plants are of no benefit to them. Traditionally managed flower-rich meadows, are now a rare feature of the British landscape and this appears to be a contributory factor in the decline of some bumblebee species. Where suitable habitat remains, it is often fragmented, making it more difficult for bee populations to expand and colonise new areas

**Nest sites:** some bumblebees and solitary bees have specific requirements for nest sites. The loss and fragmentation of suitable habitats reduces nesting opportunities

It would cost the UK £1.8 billion every year to hand-pollinate crops without bees – 20 per cent more than previously thought. Friends of the Earth.

The new figure - equivalent to the annual wages of 60,000 teachers - comes from research conducted by leading bee experts at the University of Reading on behalf of Friends of the Earth.

## Some environmental dilemmas

### Washing plastic waste containers



Surfers Against Sewage and the Environment Agency teamed up this Christmas to launch FOGS - Protect Your Beaches, Stop Pouring Fats, Oils and Greases.

Initially the campaign is targeting business communities in Seaton and East Looe in Cornwall, which are failing basic European water quality standards in part due to fat, oil and grease in the system.

SAS campaign director Andy Cummins said: "Seaton and East Looe are the first communities in the UK to benefit from this new campaign. "Surfers Against Sewage hope to promote Seaton and East Looe as outstanding national examples of community action delivering positive changes to protect our precious oceans and beaches.

#### However !

The cleaner your unwanted plastic containers, the more they're worth on the recyclables market. Municipal facilities first sort recycling by type (paper, several kinds of plastic, tin, etc.), and then by quality. Workers separate clean recyclables from soiled ones, into bales. "If the bale is lower quality, there is less revenue coming back into the system from the sale of recyclables, which helps pay for the program." By providing clean recyclables, you can actually save your city (and ultimately, taxpayers) money. The UK water industry estimates there are 150,000 sewer blockages caused by fat, oil and grease poured down the sink.

### Let the lights go out or produce more CO<sub>2</sub>?

The UK is no longer permitted to burn coal because of the high sulfur content. The largest power station, Drax, is being converted to burn biomass. This will be in the form of wood pellets from cutting down the trees in America and elsewhere and sent to be burnt UK. So there is no alternative since other sources of power—nuclear and other re-newables cannot make up the shortfall in time. By 2030 Britain will be burning five times the maximum timber harvest that could be produced in the UK.

To compound the problem even further the Renewable Heat Initiative (promoted through the Green Deal) encourages homeowners to heat their homes with wood rather than gas. Gas is lower in carbon than wood so effectively burning wood generates more CO<sub>2</sub>.

### 'Reduce food miles and save the planet'

We have all heard this and may have said it ourselves. Fewer air miles reduces the demand for fossil fuels and lessens the CO<sub>2</sub> produced. But as early as 2005 DERFRA came to the unavoidable conclusion that food miles were "were not a valid indicator of sustainability".

More recently Oxfam and the International Institute for the Environment are arguing that food miles are a positive good when seen in terms of the livelihoods of peoples in sub-Saharan Africa who export fruit and vegetables to Britain. While the British farmer uses highly mechanised machinery requiring oil derived fuels for production and storage, the African small scale grower uses their own labour and animals. Oxfam suggests that 'fair food miles' rather than 'food miles' is more appropriate.

This does not challenge some of the nonsense that that it is claimed to exist where potatoes are grown in France, washed in Spain, chipped in Greece, cooked and packaged in the UK and then exported to mainland Europe. Also it does not dispute the benefits of buying locally produced food at our Monthly Market.

### VAT dilemma for the Green Deal

The EU is putting pressure on the UK government to bring the VAT levied on energy saving initiatives such as insulation and solar energy systems from the current 5% up 20%. This is likely be a significant factor in the rolling out the Green Deal that use load for costs incurred. The loans are paid back via a levy on energy bills, but are dictated by the so-called Golden Rule that the expected financial savings of the proposed measures must be equal to or greater than the costs attached to the energy bill.

Currently the VAT increase has yet to take place – so it is worth considering taking up the Green Deal offers as soon as possible.

### We are what we wear?

Cotton is king for clothing, but there are several aspiring candidates to the natural fibre crown. Bamboo, the latest designer thread, has better green credentials. Each acre of bamboo, produces ten times as much material as an acre of cotton and absorbs five times the amount of CO<sub>2</sub>.

Rayon is made from processed wood pulp, undergoing several (non eco-friendly) stages before resulting the thread is woven into fabrics.

Cotton production accounts for 2.6% of our total water usage. By making do and mend, or donating and buying used clothes you can save natural resources and energy to ensure all cotton has a long life.

Nylon is derived from products produced in oil refining..

## Bristol Home Energy Upgrade Scheme

In October it was announced that Bristol City Council had been successful in obtaining central government funding for a Green Deal trial in Bristol. This programme is now officially launched and householders keen to participate are encouraged to register their interest as soon as possible as it's a 'first come first entered into the programme'.

The Centre for Sustainable Energy (CSE) are delivering the work for the Council.

This scheme is open to homeowners and landlords. Subsidies are available, and those on certain statutory benefits may receive a full grant for the work (See the process information document for full details). The programme is looking specifically at solid wall insulation & heating upgrades.

This scheme will be rewarding community groups for referrals that lead to installation. Bristol Green Doors have registered for the referral scheme and will receive the sum of £150 per completed installation referred through us (up to a maximum of 10 installs). If you would like to refer Bristol Green Doors for this small reward please include our details on the form, or return the signed form to us so that we can register your interest.

Bristol Green Doors CIC, Hamilton House, 80 Stokes Croft, Bristol BS1 3QY. Contact name: Kate Watson, telephone: 07725447361 and email: [kate@bristolgreendoors.org](mailto:kate@bristolgreendoors.org).

**Please note:** there is application form to register your interest, whereupon CSE will contact you to discuss the process further.

If you are interested in signing up for the scheme and do not want to be referred through Bristol Green Doors, you can call: 0800 082 2234 or Email: [at.home.energy@cse.org.uk](mailto:at.home.energy@cse.org.uk).

If you do not qualify for the scheme but know someone that does, be sure to let them know as soon as possible!

## Save-money-and-water-home

Out in the garden, solar-powered irrigation systems are also becoming more popular. They require no mains electricity or water supply, instead sucking water from a butt (or other non-pressurised water source) and then thoroughly watering plants every three hours with the aid of a solar-powered pump.

The device even gives the garden an extra helping of water when it's particularly sunny. The system uses 90% less water than a hose. Thames Water is offering a 15% discount on the kit (retailing at £79.50) to its customers.

When you visit a pharmacist, one in every four purchases will have come from a tropical forest.

## The Green Deal

### Bristol Green Doors win contract!

We are pleased to announce that Bristol Green Doors have been successful in obtaining a contract to help other organisations across the South West put on their own open homes events. The contract is part of the Energy Saving Trust & Regen SW Ready for Retrofit project.

The webpage is now up and running – you can view the information from the link below

Bristol Green Doors will be delivering a series of workshops for organisers who are keen to learn from our experience, enabling them to improve their own Eco open homes events or start a new event in their area. The scheme covers the following counties; Somerset, Devon, Dorset, Wiltshire and Gloucestershire. If you know of someone in this geographical region that might be interested in benefiting from this programme, please pass on this information and ask them to contact Kate Watson at the following address:

[kate@bristolgreendoors.org](mailto:kate@bristolgreendoors.org)  
[www.bristolgreendoors.org](http://www.bristolgreendoors.org)

Hamilton House  
80 Stokes Croft  
BRISTOL BS1 3QY  
United Kingdom

## Bugs instead of beef?

Termites and grasshoppers don't typically make your mouth water. However, insects have been a staple in many indigenous African diets for centuries. As food security concerns loom ever larger, should we be eating bugs instead of beef?

There are hundreds of edible insect species, high in protein, minerals, and vitamins. They use fewer resources than livestock, rate more highly in food conversion efficiency (squandering fewer calories) – and can be used as both human food and animal feed. They're also easily preserved for local sale or export all year round.

Traditional knowledge is essential to sustainable harvesting, however. If an insect is over-harvested at a particular life-cycle stage, or certain plants destroyed in the process, the species and valuable biodiversity could be lost. Yet, insects are quick adapters to environmental changes. With warmer temperatures, their populations are expected to increase, making them an accessible and abundant food source.

The edible insect trend is already catching on in Singapore, where some restaurants cater to crowds hungry to dine on larvae and scorpions.

Paris street cleaners pick up 315 tones of cigarette stubs a year. Each stub takes 12 years to decompose and pollutes 6 litres of water!