Gwent Wildlife Trust Wildlife Winners Update for 2012



Tell me more about Shrill Carder Bees

The Shrill Carder is one of the smallest members of the bumblebee family and also the most endangered. The wildflower-rich habitat it depends on is disappearing.

Although once common across Britain, the bee now has only a few places it calls home. The Gwent Levels is one of those places.

But there's good news. GWT has been teaming up with landowners, conservationists and the public to help raise awareness of this rare bee and recover and restore its vulnerable habitat.





Where to find the Shrill Carder Bee

The Shrill Carder Bee was once widespread throughout southern England and lowland Wales, favouring wildflower habitats such as sand dunes, well-established grasslands and heathlands. But today, the bee can only be found on half a dozen sites in the UK, including the military ranges of the Castlemartin peninsula in Pembrokeshire, brownfield sites along the Thames corridor, on the Glamorgan coast between Bridgend and Swansea, and on unimproved pasture across the Somerset and the Gwent Levels, including two of GWT's Reserves; Solutia Meadows and Magor Marsh. These reserves support large areas of wildflower-rich habitat providing just the nectar and pollen these and other bumblebees are after!



Why is something so small, so important?

Albert Einstein said 'If the bees were to become extinct then the extinction of the human race would follow within four years'. No more bees, no more pollination, no more plants, no more animals, no more man.



Bees have been on the planet for over 25 million years and are by far one of our most important pollinators. If bees were to disappear the cost to the UK economy could be up to £440 million per year. While bees visit plants to collect food for their colonies, they transfer pollen from flower to flower, enabling plants to reproduce.



Even a species as small as the Shrill Carder Bee makes an enormous difference to the landscape, pollinating delicate ecosystems like the Gwent Levels. The loss of a single species can create a dangerous domino-effect, endangering other species that rely on it.

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Where has your money been spent?

Wildlife Winners has helped to support GWT's work to raise awareness of the Shrill Carder Bee and work with landowners to restore wildflower-rich habitat to try and help increase the bee's range.

Activity has included the use of GWT's seed harvester. This special machine (shared with the Monmouthshire Meadows Group) has been used by GWT staff to collect seed from the wildflower-rich meadows of Solutia Reserve, ready for sowing on sites nearby which are less diverse and in need of a little help.



With the help of the Bumblebee Conservation Trust there have also been a series of bumble bee ID days to help get volunteers skilled in bee ID and help with valuable recording of bumblebees across the county.





Restoring wildflower-rich habitat for Shrill Carder Bees...

Firstly, seed was collected using the seed harvester in late summer, to try and collect as many ripe species as possible. The seed harvester is towed by a quad bike and special brushes gently brush the seed from the flower heads into a collecting bin. It then gets dried in the sun before being scattered by hand over seed receptor sites. Factors such as low soil fertility, an absence of weeds and not too many coarse grasses, all increase the chances of establishing wildflowers from seed. Before sowing, sites are heavily grazed/cut very short and harrowed or raked to remove dead grass material and create space for the seeds. One of the seed receptor sites included farmland adjacent to Solutia Reserve, to try and increase the size of this important block of species-rich grassland for foraging bees.

After sowing it is very important that sensitive long term management is in place. Simply sowing seed is not enough; there are no guarantees when sowing wildflowers and no instant meadows. In year one sites ideally need to be cut twice, and the cuttings removed, once in Spring and once in late Summer to prevent vigorous grasses out-competing the wildflowers. In following years a hay meadow regime should be employed with a hay cut in late July followed by some light aftermath grazing in September/October.

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