## **∲**REDROW

# SAXON BROOK

CASE STUDY



## SAXON BROOK – CREATING A BEE-FRIENDLY DEVELOPMENT



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**Gill Perkins** CEO of the Bumblebee Conservation Trust

## IN SUMMARY

#### UK'S FIRST EVER POLLINATOR FRIENDLY HOUSING DEVELOPMENT





## EDUCATIONAL BUMBLEBEE TRAIL

## **HUGE BOOST**

FOR NATION'S DECLINING BUMBLEBEE POPULATION







## SAXON BROOK

In the last 80 years, UK bumblebee populations have crashed and two species have become extinct. Factors largely responsible for this decline are intensification of agriculture, an increased use of pesticides and climate change. Bees are vital to our own survival because we rely on them to pollinate fruit and vegetables for food production.

Redrow became the first major housebuilder to partner with the Bumblebee Conservation Trust in 2014. Since then the home builder has worked to introduce nectar-rich plants to its developments across the country and educate customers and local communities on how they too can help boost the UK's bumblebee populations.

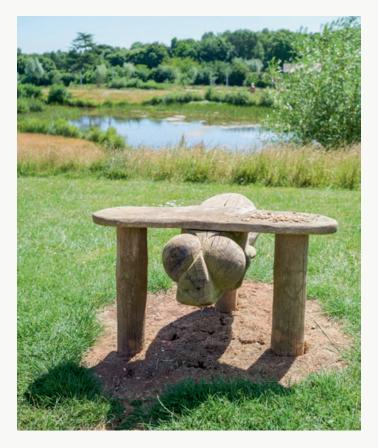
Located on the southern edge of Pinhoe, near Exeter, Saxon Brook was selected in 2015 for a pilot project to create the UK's first ever bee-friendly development.

Being built on former farmland on the edge of a city, Saxon Brook was chosen as an ideal location to provide improved, nectar rich habitats for bumblebees and other pollinators.

Redrow also wanted to extend its remit to educate and encourage new residents and the wider community to play a role in safeguarding declining bumblebee populations.

All new homeowners at Saxon Brook have received a special information brochure with information about bumblebees and how to protect and nurture them, plus membership of the Bumblebee Conservation Trust.

Since work began at the development a number of beefriendly features have been included in the first three phases, with two more phases subject to planning permission. Final completion is due in 2024. Mark Holland, technical director for Redrow South West, said: "A bumblebee trail has been created around the development, which includes sculptures designed by a local artist. Each sculpture features an information board to guide and educate people about bumblebees and how to encourage them in their own gardens.





"In addition, an orchard has been planted boasting 70 fruit trees. Designed to create a perfect bee habitat in spring, it includes apple, plum and pear species. Alongside these are several other landscaped areas including wildflower seeding and nectar rich planting around the attenuation ponds, rain (wetland) gardens, woodland areas and allotments plus new bird and bat boxes, insect 'hotels' and barn owl box improvements.

"A Suitable Alternative Natural Green Space (SANGS) is also being provided, which includes a linear park of around 12 hectares. The main objective of the SANGS is to provide a high quality area of landscaped open space with footpaths and cycle routes for residents to enjoy and that also connects the development to other green spaces in the wider area. There are a host of paths running through the parkland with access both to Saxon Brook and existing residential development adjacent to the site. Circular walks of 20, 40 and 60 minutes are being created. This area will feature both species rich grassland and wildflower areas to enhance biodiversity and these will be managed to maximise ecological benefits."

Along the northern boundary of the site, Redrow is also creating a new woodland of native tree species to adjoin existing woods and copses.

Mark added: "The protection and enhancement of the existing natural features at Saxon Brook has been our primary focus. This not only helps to prevent disturbance to wildlife but also helps this new development 'bed-in' to its local surroundings, while providing opportunities for the community to enjoy the health and wellbeing benefits of nature on their doorstep."

According to Gill Perkins, CEO of the Bumblebee Conservation Trust, urban spaces and gardens are becoming increasingly important for the UK's declining population of pollinators and have the potential to provide crucial food and nest sites for bumblebees and other insects. Gill said: **"Working together to create bee-friendly housing** developments and encouraging new home owners to do the same in their gardens, Redrow and the Trust have been able to achieve several key objectives that couldn't have been realised alone.

"Local bumblebee populations will have additional highquality forage, which will enable them to flourish in what could otherwise be a site of closely mown grass."





At Saxon Brook, the Bumblebee Conservation Trust has worked closely with the landscape architects, site manager, sales team and technical team.

"The landscaping has been designed to ensure the optimum habitat in which bumblebees can thrive, featuring large areas of colourful wildflower planting around the ponds, an orchard and bee-friendly planting throughout the development," said Gill.

"Training is vital to ensure the habitats are maintained for the future. We will continue to provide support for this to the contractor who takes over the site once it's completed, to ensure the public open spaces are managed to best effect. We have also helped to educate residents so they continue to manage their gardens for pollinators."

Gill believes the development has been a huge success on many levels:

- A pollinator friendly pioneer site has been created, which, through continual learning and development, is a unique success for pollinators, wildlife, residents and local community
- As a new housing development, Saxon Brook will make a positive contribution to nature and to the health and wellbeing of people who live there
- Work has been done to engage the general public about pollinators and a more informed public can wield enormous economic and political pressure to promote conservation policies
- Redrow's partnership with the Bumblebee Conservation Trust has led the way – showing the wider industry how new development can be designed with nature in mind
- A lasting legacy has been created, with managed community green space that will promote native plants and animals for the future

- Redrow has created a **replicable process and best practice** which can be used on other sites
- The project has enabled Redrow to demonstrate its commitment to environmental protection and enhancement

Gill added: "On a wider scale, projects like this work best if organisations – across all departments – understand why there are changes and the reason behind those changes. Getting everyone on board with the pilot project has really helped to drive its success, from the very top to those customer facing on site."





Redrow facilitated a working relationship between experts at the Bumblebee Conservation Trust and Redrow's landscape architect contractors Tony Benger Landscaping, who are also undertaking the ongoing maintenance of the site.

Managing director Tony Benger said: **"Our brief was to work alongside the Bumblebee Conservation Trust to create a thriving natural habitat for bumblebees including the orchard, the seeding and planting around the attenuation ponds and all tree and woodland planting.** 

"All wildflower seeds, as specified on the landscape drawings, are mixes to provide nectar for bumblebees, with some lovely large open spaces now covered in wildflowers, while the general planting palette has been selected to encourage bees. The Bumblebee Conservation Trust visits the site regularly to give ongoing advice around the maintenance and the feedback from the Trust has been very good so far."

Saxon Brook is being built over five phases, and will include 77 affordable homes. Redrow acquired the land and achieved outline planning permission in December 2015. Adding to its eco-friendly credentials, the development is also part of a district heating scheme with Eon. In essence, this is a large offsite communal boiler which feeds all homes on the development by heated pipes under the roads. This means each home does not require its own gas powered boiler and hot water tank, with heating and hot water provided through the district heating scheme.

As a result of connecting to the wider district heating network, and combined with Redrow's high insulation specification, the percentage CO2 reduction over and above current building regulations at Saxon Brook is 53.54%. Put into further context, this is well above the former Code for Sustainable Homes Level 4 standard of a 19% CO2 reduction.

Saxon Brook is also forecast to achieve a biodiversity net gain of 15% over pre-development levels. Before work began, the site had a low biodiversity value (being mainly agricultural grassland) and has been improved by the new species-rich habitat creation. The score was calculated using Defra's biodiversity net gain metric, which allows calculations of net losses and gains in order to provide an indicator of broad effects on biodiversity.

Nicola Johansen, group sustainability manager at Redrow, said: **"It has been fantastic to forge a long-term relationship** with the Bumblebee Conservation Trust and be playing our part as a business to boost bumblebee numbers.

- "The planting across Saxon Meadows has been specifically chosen to encourage and support the local wildlife and particularly bumblebees. Bumblebees are vital to our natural ecosystem – and our food chain – as they help plants pollinate and reproduce.
- "Our work at Saxon Brook in Pinhoe, Exeter, is the first project we've undertaken on this scale within a new development and the knowledge we've gained is being shared across our technical departments in all 14 of our housing divisions as a blueprint for similar schemes nationwide.
- "We have also gone on to develop a wider biodiversity strategy in partnership with the Wildlife Trusts, to enhance and protect the natural environment of our developments and surrounding eco-systems. This will enable us to work consistently to ensure we leave a positive and meaningful environmental legacy and places where our homeowners are proud to live."

#### For more information visit:

redrowplc.co.uk/about-redrow/our-values/thrivingcommunities/nature-for-people











