

SILVERLAKE

Crossways, Dorset

Habitat First Group (HFG)

BIG Biodiversity Challenge Award Category: *Project of the Year Award (> 5 ha)*

Project overview

Silverlake is a 227ha multi-phase development of sustainable holiday homes on a former quarry in Dorset. Phase 1 was completed September 2018 with biodiversity features listed below installed over the last 2yrs. The completed phase was the 1st in the UK to receive the Building with Nature (BwN) Full Award (Excellent). The Masterplan received the BwN Design Award.

What were the biodiversity conditions on site, prior to the enhancement?

11ha of heathland created in 2001 when the landfill closed but managed irregularly resulting in colonisation by birch. There was 4ha SSSI/SAC Warmwell Heath & an SNCI of remnant heathland with Smooth snake & Silver-studded blue butterfly. European Protected species include 7+spp bat; Dormice; Great crested newt; Otter; Smooth snake. Over 141 spp bird incl. SPA qualifying bird species, Nightjar; Woodlark & Dartford warbler. Planning conditions to protect the SSSI by infilling an open channel created by the quarry (it was diverting water from the mire & drying it out); & managing wastewater on site all undertaken. Biodiversity projects have exceeded all planning conditions.

What were the reasons behind this project ?

HFG have been building with nature for over 21 years, starting at Lower Mill Estate, Cotswolds. Through our approach to design & building we naturally deliver substantial net biodiversity gain protecting existing habitats & species & creating new habitats, as well as boosting biodiversity in the built environment. Sustainable construction, use of SuDs & other green infrastructure assets makes nature count & helps mitigate climate change. For HFG these are vital reasons for designing this project & we hope that the HFG approach can help influence others to build more sensitive to the needs of the natural world.



Beaumont Village



Brown long-eared bat roost built in 2016 & used in 2017 from redundant quarry sandhopper Reduce/reuse/recycle

What were the biodiversity measures taken?

Heathland restoration – restoring an 11ha, 20yr heathland with cattle grazing from 2018. to protect rare Dingy mocha moth & Nightjar. Restoring a SSSI heathland from August 2017 for the smooth snake & silver-studded blue it supports, achieved by birch removal & extensive grazing by native ponies. Ongoing due to nature of habitat. Restoring SSSI/SAC mire with ongoing management of birch & rhododendron. **Great crested newts**– An existing GCN pond was enhanced with careful tree management. Four new ponds created in May 2017. 4 large hibernacula created. Large area of suitable terrestrial habitat connected to woodland edged with native hedgerow & protected from development (October 2017). 25% units have ponds. **Sand martins** – The last sand face the birds used during quarrying was built into the development in 2017. In 2018, 205 pairs nested. Around 240 nests in 2019 thanks to artificial nest holes being created in 2018. **Bats** – Brown long-eared bat house constructed from old quarry sandhopper in 2016 - used in 2017. Bat boxes installed on outbuildings in Phase 1 in Sept 2017. 70% used in 2018. **Dormice** - permanent nest boxes installed when dormice are found by nest tube surveys. 1 new box installed in 2019 after first survey (12 in total). **Swifts** – Swift tower installed in March 2018 with solar powered calling system. **Swift/Bats/Bee** – Boxes for bats, swifts & bee bricks to be installed on all properties as standard from May 2019. **Species Recovery** – With BSBI/NE & county council we have secured the 7th population of rare Heath lobelia in the UK through the 1st ever translocation of this rare plant in 2018. 23 plants flowering June 19. Rare Penny Royal also seeded under licence. **Onsite waste water treatment** – SAF units & tertiary reedbeds reduce N levels below former agricultural discharge levels, protecting Poole Harbour SSSI. Completed & functional for Phase 1. **Planting**- native planting used with species chosen to protect the lowland heathland on site from spread of unwanted plants.



Heath lobelia: Flowering at Silverlake. The 1st ever translocation of this rare plant has been a success & a 7th UK population has been established.



Sand martins: the last face the birds used when the quarry was active has been retained and is being used annually. Artificial tubes were introduced to the left side to encourage the birds to use this section. This has been successful.

Further information

Silverlake has planning for 1000 units built in a phased manner. The developed areas will, however, only comprises 18% of the entire site with the remaining area devoted to nature conservation & controlled recreation. A series of wildlife audits are run annually with results submitted to county & district councils so any impact of the site (positive or negative) can be determined. A site wide Landscape & Ecological Management Plan produced by the HFG Chief Ecologist & approved by Natural England & local councils covers management of all areas of the site to ensure species & habitats are protected at all times. This is updated every 5 years & will continue for the life of Silverlake. Ongoing management works related to the plan are covered by a service charge payment from homeowners. A S106 Conservation & Community Fund has been set up allowing applications from the local communities for conservation & sustainability projects from a designated catchment around Silverlake. Each homeowner pays an annual fee (of £50) to the fund which is kept topped up to £10,000 by the developer. To date several primary schools have used funds for nature garden improvements & projects from Butterfly Conservation & Dorset Environmental Record Centre have been supported. We work closely with local council ecologists, Natural England, local volunteer groups & give talks to the local community regularly.

Project Team

- Dr Phoebe Carter; Habitat First Group; Conservation Builders Ltd; HML Group; Landmark Practice; Wilmore Iles; Peter Brett Associates

What was the motivation for carrying out the enhancement?

HFG aim to make nature count. Building sustainably with a focus on green infrastructure assets naturally attracts wildlife & helps with climate resilience. HFG goes further with projects that target species & habitats of conservation importance. All of this creates a wildlife-rich environment that benefits nature & the people visiting the site. Immersing developments in nature inspires an appreciation of nature in people which can motivate them to protect the environment and preserve natural areas. This is a hugely important consideration in the current climate. We believe in delivering significant net biodiversity gain & hope all developments begin to build alongside nature rather than against it.



Great crested newts: Pond complex & large terrestrial zone connected to semi-ancient woodland, created and protected from future development for conservation of great crested newts.



Bat boxes in Beaumont Village: Bat boxes are installed on outbuildings in the villages & are incorporated into/onto all properties going forward.