

Project Profile

Landscope Holiday Park, Devon: Delivering Biodiversity Benefit to Horseshoe Bats

Overview

In 2009 Park Holidays Ltd proposed to extend and modernise Landscope Holiday Park to revitalise it as a tourist destination. In 2019 BSG Ecology completed the final year of post development monitoring.

Ecology was the key consenting issue due to the potential for impacts on the South Hams Special Area of Conservation (SAC). BSG were commissioned to complete baseline survey and assessment, and to help the scheme negotiate the Habitat Regulations Assessment process. Monitoring of the wide-ranging mitigation solution has demonstrated its success, and the SAC bat population is benefitting from the measures implemented. The project has also helped establish a pathway through planning for similar redevelopment schemes in a local area where the economy is heavily reliant on tourism.

The project won the Best Practice: Large-scale Mitigation award at the Chartered Institute of Ecology and Environmental Management Awards 2020.

Challenge

Ecology was the critical issue in planning terms for the project. The site is adjacent to the South Hams SAC, which supports the largest known maternity roost of greater horseshoe bats in the country. Baseline survey established SAC bats commuted from a maternity roost at Berry Head (500m NW) along the northern and southern site boundaries. There was therefore potential to impact upon commuting routes, and reduce foraging opportunities within and close to the Holiday Park through land-use intensification, increased disturbance and light levels.

Solution

An Ecological Management Plan (EMP) was produced as part of the planning application. The main aim of the EMP was to ensure the development had no detrimental impact on, and increased the resilience of the SAC bat population. Specific objectives were to: maintain and enhance existing habitat used by SAC bats; create habitats of value to commuting and foraging SAC bats; avoid impacts from light pollution; and provide new night roosting opportunities.

Mitigation and enhancement took a holistic view of the ecological requirements of greater horseshoe bat, and included:

- Securing a long term management agreement to deliver enhanced year-round foraging resources for horseshoe bats on land adjacent to Berry Head. This involved re-establishment of organic grazing on derelict pastures, reinstatement of traditional haymaking and aftermath grazing, and the restoration of lowland meadow.
- The associated increase in diversity and abundance of dung invertebrate and moth communities, providing an important food source for greater horseshoe bats.
- Designing night roosting opportunities into stock shelters to maximise local utilisation of food resources within meadows and pastures.
- Provision of new traditional Devon bank hedgerows and new mixed native hedgerows for commuting and perch feeding
- Provision of new broadleaf woodland and native scrub to provide foraging opportunities in spring.
- Strengthening existing flight lines through buffer planting and parallel hedgerows.
- Modelling light spillage to inform measures to ensure a maximum

illumination of 0.5 lux along perimeter hedgerows, and installation of low-level directional lighting with limited spill throughout the Holiday Park.

Outcome

Monitoring of the effectiveness of mitigation and management prescription (2013-2019 inclusive) has shown:

- Foraging activity in the restored pastures has increased steadily. In 2018 foraging activity recorded was between 1.75 and 5 times greater than baseline (2013) levels. In August 2019 activity was approximately 20 times that in August 2013.
- Greater horseshoe bats are using the night shelter roosts most nights. These are also used by lesser horseshoe bats and breeding barn swallows.
- Commuting routes along the site boundaries remain in use, with 2019 activity levels being slightly higher than those recorded in 2013 at key monitoring points north and south of the holiday park. Measurements have demonstrated that maximum lighting levels of 0.5 lux have been achieved along these routes.
- Numbers of bats at the Berry Head roost have remained consistent throughout.
- The dung beetle fauna doubled in species diversity between 2015 and 2017.
- Key dung beetle species increased in abundance including: *Aphodius rufipes*, a key prey item for juvenile greater horseshoe bats (x12); and *Geotrupes spiniger* (x4) which are consumed by greater horseshoe bats when they emerge from hibernation. Cockchafers *Melolontha melolontha*, the preferred prey for greater horseshoe bats in May, were also noted as increasing over the period.

Thermal imaging survey improved our understanding of how bats used the landscape and helped to avoid erroneous conclusions through allowing bats to be observed at greater distances than practicable with acoustic detection and enabling bat passes to be accurately counted (including non-echolocating animals).

The operational holiday park is estimated to contribute almost £7 million per annum to the local economy.

Client Feedback

"We are delighted with the outcome of the mitigation and enhancement for biodiversity at Landscope. Whilst guiding us through the planning process BSG Ecology ensured that meaningful and proportionate mitigation and enhancement measures have been delivered through the project. The landscape and nature is a key reason people come to visit the holiday park and for the park to be able to contribute to that and become part of the network of resilience to the SAC is fantastic. We very much see Landscope as being an integral part of the landscape and the habitats and management provided have enabled us to reflect and support the positive management being undertaken by others such as the Torbay Coast and Countryside Trust in the local area. We are proud to have supported the internationally important population of bats centred at Berry Head and to have done our small part to secure their future."

Matthew Purdom, Planning Director, Park Holidays UK Ltd (Developer)