



Butterfly Conservation

Saving butterflies, moths and our environment

Prees Heath Common Reserve



A 2020 Vision of Heathland



March 2010

Background

When Butterfly Conservation bought the western half of Prees Heath Common as a reserve in 2006 it was committed to restoring the heathland to its former glory - a long term and challenging project. This meant not only clearing all the rubbish on the site and taking steps to prevent any further misuse, but crucially transforming it into the wonderful open heath it had been 100 years previously. The two world wars in the twentieth century saw the Common used as an army camp, an internment camp and as an airfield. Then after the airfield was closed much of the land became intensively farmed, causing even further losses of wildlife habitat.

The reserve is registered common land under the Commons Act 1965. Nine local properties have commoners rights attached to their deeds, and these include the right to put out grazing animals, dig sand, gravel and turf and to remove brushwood.



Prees Heath Commoners unable to exercise their grazing rights of common as what should be heathland had been ploughed up for growing potatoes. The old airfield control tower is in the background.

The reserve provides the last sanctuary in the English Midlands for the Silver-studded Blue butterfly. The butterfly was formerly more common both regionally and nationally, but its decline during the 20th century followed the decline of its grassland and lowland heath habitats. At Prees Heath much of the lowland heath was destroyed after World War Two, and the relatively small patches that remain are protected as a Site of Special Scientific Interest.

Lowland Heath in the UK and North Shropshire

In the United Kingdom it is estimated that only about 16% of lowland heath that existed in 1800 remains today, and its disappearance has been particularly fast during the 20th century. Lowland heath is found only in Western Europe, and a major proportion is still in the UK. This is why lowland heath is a Priority Habitat in both the UK and Shropshire Biodiversity Action Plans, and it is important not only to protect remaining heathlands but also to re-create them in areas where they have been lost.

Within a 10 mile radius of Prees Heath there are many settlements with the word 'heath' in their name, but in most cases there is now little evidence of any surviving heathland in these places. The 19th century tithe map for Prees Heath Common shows the many smallholdings and parcels of land which had been formed through enclosure of the once much larger common.



An old painting of Prees Heath Common showing the A49 and open heath dating from before World War One. Even then the heath was but a fragment of what had once covered the lands south of Whitchurch. The shortness of the vegetation and absence of scrub suggest heavy grazing levels, and the Common will have been used by most surrounding farmsteads.

Restoring the Heathland

Butterfly Conservation has embarked on an ambitious long term project to re-create heathland on the former four arable areas (Hangars Field, Control Tower Field, East of Runway Field and Corner Field), which total approximately 30 hectares (75 acres), or half the reserve. The processes have been devised with expert guidance in what is still a largely experimental field. The soil profile on these areas has been inverted to bury the highly enriched topsoil and expose nutrient-poor sandy subsoil. Elemental sulphur, an agricultural soil treatment, has been applied to restore the acidity of the sandy soil which had been modified by many years of arable cultivation, and especially by the application of very large quantities of chicken manure. The acid soil conditions are better suited for the heathland plants that are being established through spreading heather brash as a seed source. The Hangars Field and part of East of Runway Field have undergone these treatments and initial results appear encouraging. On the Control Tower Field it was decided to create initially a wildflower meadow pending the progress of the heathland restoration, to provide a diversity of wildlife habitats. Using seed sourced from local unimproved hay meadows with high quality wildflower grassland, the results have been very rewarding.



Heather seedlings on the Hangars Field in 2009, two years after the brash was applied. Although the brash was applied randomly, many of the seedlings have germinated in lines.

All the brash that has been applied is of one type of heather, Common Heather or Ling, *Calluna vulgaris*, harvested from suitable donor sites in the region. Prees Heath, however, also naturally supports abundant Bell Heather, *Erica cinerea*, and so 20,000 Bell Heather plug plants grown from seed harvested on Prees Heath have been planted by volunteers. In addition, a lot of Bell Heather seed hand-harvested on site by volunteers has been broadcast. Whilst Common Heather is the main caterpillar food plant for the Silver-studded Blue, Bell Heather is the main nectar source for the adult butterflies.

Seed of Wavy Hair-grass, *Deschampsia flexuosa*, which is a feature of the locality's natural vegetation, has also been harvested on site and broadcast on the restoration areas. On all the restoration areas there will be an ongoing need to control invading weeds and scrub whilst the heathland species become established, as well as a need to prevent the abundant rabbit population from eating all the seedlings.

Other works undertaken to date include planting over 2,000 trees and shrubs along the perimeter of the reserve, removing unwanted trees on the remnant heathland areas and excavating a pond, all of which will enhance the wildlife interest of the site.



A new wetland area for wildlife, in an area known to have been marshy previously

A 2020 Vision

Butterfly Conservation's vision for the reserve does not just consider nature conservation but also the position the reserve holds within the landscape, the local neighbourhood and the wider community. Our vision of the reserve in 10 years' time would of course be one full of heathland and Silver-studded Blues, but plenty more besides. To reach that stage will need various measures and mechanisms to be put in place, much of which has already begun. The following records these achievements and outlines the future steps on the way to that 2020 vision.

A Sanctuary for Wildlife

The restoration work being carried out on the reserve is bold and ambitious. It is science-led, and will in turn provide evidence and experience for similar projects in other parts of the UK. In a project such as this, some interventions will prove more successful than others, and it is important that lessons are learnt as the work progresses.

An application is being made to Natural England for a Higher Level Stewardship scheme agreement on the reserve, to provide income and guidance for the continuing heathland restoration and other enhancements.

The Silver-studded Blue remains the flagship species, providing one of the best wildlife sights in the county when hundreds are in flight during the second half of June and throughout July. The reserve is, however, not just for this one species but is being managed to benefit a range of wildlife. It is already a special place for wildlife, with over 570 species of insects, 270 species of plants and 100 species of birds being recorded there.

Many bird species present on the reserve are in national decline, such as Skylark, Snipe, Corn Bunting and Yellowhammer, and the heathland restoration work will help their numbers increase. We also hope to see in time heathland specialities such a Nightjar return to the reserve.

Other creatures will also benefit over time from a restored heathland:

- 🕒 Plants typical of lowland heathland/acid grassland such as Heath Dog-violet (Prees Heath is the only confirmed site for this species in the county), Sheep's-bit and Shepherd's Cress.
- 🕒 Reptiles, including Common Lizards and Grass Snakes
- 🕒 Amphibians, such as Frogs, Toads and Newts
- 🕒 Insects, including Dragonflies, Damselflies, Bees, Grasshoppers, Ants, Moths and Butterflies

The pond that has been created is to an extent experimental in nature, and it will be fascinating to see which creatures and plants colonise it. There is a plan for a larger wetland area to the south of the pond, and whether we go ahead with this partly depends on how the pond develops.

The Silver-studded Blues have been monitored on the site since 1991, and have shown a gradually increasing population trend, connected with the habitat improvement work carried out by Butterfly Conservation work parties before the reserve was even purchased. In 2009 a standard monitoring transect was established to record all butterfly species throughout the summer. Currently there are 20 species of butterflies and 110 species of moths recorded on the reserve, and these records provide significant information at both a regional and national level.

A 2020 Vision

- 🕒 As a result of the restoration and other works, the reserve has attracted a greater number of species of all forms of wildlife.
- 🕒 The Silver-studded Blue has thrived and colonised the restored areas providing the amazing sight of butterfly clouds.
- 🕒 Recording and monitoring has progressed to cover all the reserve's developing wildlife interest, involving many enthusiastic volunteers.
- 🕒 The reserve's wildlife and social heritage has made it a locally and regionally important educational resource.
- 🕒 Depending on the development of the excavated pond, further wetland habitats have been developed.



A mating pair of Silver-studded Blues on Bell Heather

Promoting Commoners' Rights

The Prees Heath Commoners played a vital role in saving the common from sand and gravel extraction in the 1990s. Their rights, which are attached to their properties in perpetuity, apply not just to the reserve but to the other half of Prees Heath Common on the eastern side of the A41 as well. With such rights now better protected and supported by legislation, they are not just a matter of historic principle, but will be of continuing importance to the future management of the common.

In particular, we are keen to see grazing livestock on the common again. Grazing is the traditional way heathlands have been managed in the past, and is in fact how they were created, with the browsing animals preventing the vegetation from ‘scrubbing up’ and becoming woodland. Grazing animals will not only give added interest to the reserve but will prove an effective management tool. An important aspect of the reserve is that it is unenclosed, but also that it borders two very busy roads, the A49 and the A41. Therefore ensuring that any livestock can be accommodated safely will be a very important issue, and all the various options will need to be carefully considered. Any major works that affect access onto the common have to be approved by the Planning Inspectorate under the Commons Act 2006.

A 2020 Vision

- 🕒 Grazing livestock is returned to the common.
- 🕒 The Commoners continue to play an active role in the management of the site, and their rights are promoted whenever possible, and this will include exploring the option of forming a Commons Council.



A Prees Heath Commoner (and friend) exercising his rights of common by gathering wood

A Historical Legacy

The rich military history of the site - a World War One trench warfare training camp and a World War Two internment camp and bomber training airfield - is well known. The military history also extends back further to the English Civil War and the reign of King John in the thirteenth century.

The most obvious historical artefact remaining on the reserve is the former airfield control tower, and we want to secure funding to see it preserved and used as an opportunity to promote this important aspect of the site. We will be seeking a grant to do necessary work to ensure the building is repaired, that parts of it are made suitable for bats and birds, that it is accessible for visitors on guided walks and by prior arrangement, and that information is provided for visitors about the various aspects of the common, including the military history.

A 2020 Vision

- 🕒 The former airfield control tower is repaired, and made safely accessible in connection with its uses in providing both a wildlife habitat (bat roosting and bird nesting) and a source of information about all aspects of the reserve.
- 🕒 The educational resource potential of the reserve has been fully realised for this aspect of its heritage.



The old airfield control tower in winter

A Place for People

The reserve is Open Access land under the Countryside and Rights of Way Act 2000, and people can walk wherever they wish. As such, it is an important local resource for people to enjoy fresh air, quiet recreation and exercise. The reserve is becoming an increasingly popular place to visit and it is essential that issues such as litter and dog waste are dealt with responsibly. To help people appreciate the special qualities of the reserve Butterfly Conservation has installed:

- ⌚ waymarker posts carved by a volunteer to provide an enjoyable walk for visitors on the remnant heathland parts of the reserve
- ⌚ information panels at two entrance points, and a box at the main entrance point containing copies of the reserve leaflet
- ⌚ an interpretation panel on a plinth made out of concrete from the old airfield
- ⌚ a high quality bench made from green oak
- ⌚ a dog waste bin, emptied regularly by Shropshire Council
- ⌚ two vehicle barrier gates and kissing gates on either side of the access track
- ⌚ a horse stepover to deter motorcyclists
- ⌚ small information signs explaining what work is ongoing how people can assist with this.

A 2020 Vision

- 🕒 The reserve will continue to grow in popularity as a site for families and other groups to enjoy walks and picnics. Managing their needs and associated activities will be a major task, but the strong public regard for the site, and the support of enthusiastic volunteers helps Butterfly Conservation deal with these pressures.
- 🕒 Volunteers of all abilities and interests have become involved, helping to record butterflies and moths, providing information about the site and taking part in practical work parties. It is a key focus for volunteering in the area, with strong support from local authorities and organisations. The well established infrastructure and site management mechanisms mean that the volunteer workforce has become the main means of delivering wardening and other activities.
- 🕒 The number of guided walks around the reserve with different themes, such as butterflies and moths, the dawn chorus, history and heritage and fungi forays, are annual features. They help justify the Silver-studded Blue's status as Tourism Emblem for Shropshire.
- 🕒 Visitor access on the reserve has been carefully integrated with the needs of wildlife. Access related structures and facilities are low-key, keeping the reserve 'un-cluttered' and with a strong sense of naturalness.
- 🕒 Measures to prevent illegal vehicle access and other misuses have been maintained and continue to be successful.



A guided walk around the reserve

The Wider Landscape

Prees Heath Common is one of a very few surviving lowland heaths in the region, and as such it should be seen as a beacon for heathland to be restored in other areas. The most notable potential area for restoration is the eastern half of Prees Heath Common, on the other side of the A41 from the reserve. Most of this remains in arable cultivation, but it still had significant areas of heathland in the 1970s and Silver-studded Blues continue to be found there. Butterfly Conservation will continue to play a role along with other nature conservation agencies, the commoners and local residents in seeking the enhancement of this area for both wildlife and visitors.

The possibility of linking the common with nearby Brown Moss to create a larger landscape also needs to be part of any vision for the future. Research is demonstrating how many wildlife populations can only be sustained where there is enough suitable habitat available in the local landscape.

The Silver-studded Blue is a sedentary insect, seldom travelling great distances, so colonising new habitat can be slow. At Prees Heath it also breeds on areas of heather outside the reserve, such as the old hangars compound by the A49 where its habitat has SSSI status. It will need to be carefully monitored in what is now an industrial site. There is very little other suitable habitat within its range, but heathland restoration work at Brown Moss may see the butterfly gain that area. Other heathland restoration projects in the nearby region are ongoing, and in the course of time the merits of translocating the Silver-studded Blue to these sites could be considered.

A 2020 Vision

- 🕒 The reserve will act as a beacon for heathland restoration, and Butterfly Conservation will support and encourage similar projects in the region.
- 🕒 Opportunities for the successful translocation of the Silver-studded Blue to other sites in the region are carefully considered by Butterfly Conservation.

Conclusion

Through the work that has taken place there since 2006, and thanks to the measures taken before then, the vision Butterfly Conservation has for Prees Heath Common Reserve is already on its way to being realised. The continued support of everyone concerned will be needed to see the heathland fully restored and the potential of Prees Heath being fully realised.

For more information about the reserve and Butterfly Conservation please contact Stephen Lewis, Warden, on 07900 886809 or by email at slewis@butterfly-conservation.org

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