# Herefordshire Orchards Community Evaluation project



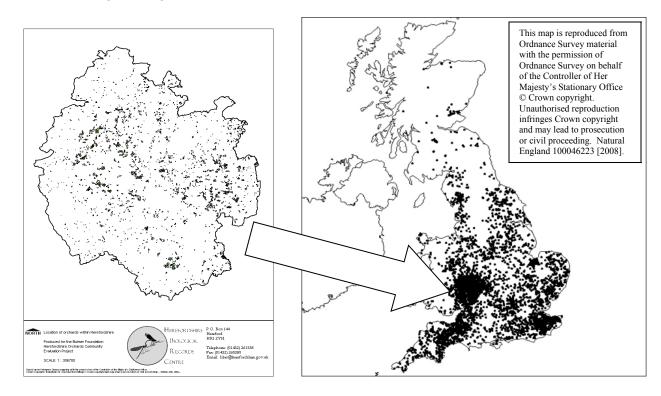
# **Summary report**

#### **Background to the project**

Apples and cider making have been a prominent part of the Herefordshire economy for the last four hundred years and orchards form an important part of the distinctive rich landscape, inextricably linked with local traditions, culture and biodiversity.

There are more than 3,000 orchards in Herefordshire, covering 5,500 hectares, but this is a far cry from 1664 when John Evelyn said "Herefordshire has become in a manner an entire orchard". We estimate that over the last seventy years the County has seen a 40% loss of orchards, but this is a much smaller decline than has been experienced elsewhere. Herefordshire now has more orchards than any other county in the UK and in this small county (covering less than 2% of England's land area) stands 16% of the entire orchard area in the country.

The map below records the location of orchards in Herefordshire as a result of the Phase 1 Survey carried out by Herefordshire Nature Trust between 1999 and 2004. This project was able to fund the digitisation of this important record for the County. With the mapping technology, it is possible to home in on each orchard on the map to see the type of orchard (traditional or bush), notes added by the surveyor, and the nature of its neighbouring orchards.



Our definition of an orchard is "where at least five fruit-bearing trees are growing together within a defined land parcel".

### What the project was about

This project was developed by the Bulmer Foundation on behalf of Herefordshire's Orchard Topic Group, which represents a wide range of interests in orchards. It set out to really understand the importance of orchards to Herefordshire by looking in detail at six orchards selected to represent the different types and characteristics of orchard that can be found here. We used a *triple bottom line impact accounting* methodology as a means of focusing the evaluation and recording the environmental, social and economic impacts of each.

The six orchards that we looked at were:

- Henhope, a four hectare organically managed traditional cider apple orchard in an isolated location
- Salt Box on the Garnons estate, a five hectare cider apple orchard with bush trees, sited alongside the main road from Hereford to Brecon
- Village Plum, a six hectare eating plum orchard close to the village of Glewstone and employing migrant labour
- Lady Close at Bodenham Lake Nature Reserve, a remnant orchard with recent replanting and managed by Herefordshire Council as a public amenity, with culinary and dessert apples and pears
- Tidnor Wood, over ten hectares of traditional and half standard cider apple trees. Tidnor Wood Orchard Trust is exploring different ways of supporting the orchard and of connecting people with orchards, including tree sponsorship and a cider apple tree museum.
- Half Hyde, a three hectare traditional cider apple orchard alongside the main road to Worcester

For each of these orchards, we have prepared triple bottom line impact accounts on a consistent basis, by the monetarisation of three environmental (biodiversity, climate change, soil and water), three economic (orchard profit, local economy and tourism) and three social impacts decided by the local community at each orchard. Alongside this financial picture, the *accounts* for each orchard also include the wealth of data collected, the photographs, people's opinions and reminiscences, and the 'feeling' of each place.

#### **Environmental**

Through the help of the wonderful natural species recorders that we have around the County, we now have a good idea of the types of flora and fauna in the orchards. There have been all manner of finds – indeed some nine hundred different species have been recorded across the orchards, including a County-first find of a fungus and several Red list endangered species. The icing on the cake came last November when lichenologists Joy Ricketts and Cliff Smith discovered the Golden Eye lichen, *Teloschistes chrysophthalmus*.



This exquisite specimen had previously been thought to be extinct in Britain due to the effect of pollution, fertilisers and loss of habitat. The find has therefore caused excitement in lichen circles, been featured in local and national press including an editorial in *The Times* and on the BBC, and was even reported in the Iran Daily News. The subsequent difficulty of finding appropriate funding for the farmer to ensure the protection of this unique lichen has however been disconcerting.

We have also been helped by students from Cardiff University who have looked at the differences in populations of worms and mesofauna (small creatures living in the soil) and the



Central Science Laboratory looked at small mammal populations: In both cases, it was great that the orchards being evaluated for the project were also able to contribute to these institutions' research programmes.

The combined finds are a clear demonstration of the importance of all types of orchards as habitats and of the amazing contribution of the recorders to the understanding of our environment. It is notoriously difficult to value biodiversity *per se*. We used the government Environmental Stewardship payment rates as an available proxy measure of biodiversity value.

We have also looked at the carbon emitted and sequestered by the orchards, and hence their effects on climate change. The University of Wales, Bangor has conducted research for the project into the very significant amounts of carbon stored in the orchards – both in the trees and, as importantly, the carbon in the untilled soil beneath the trees. Due to their long life, orchards are particularly susceptible to any change in climate and we have sponsored a factsheet that explains to farmers the threats and opportunities for orchards posed by climate change. This has been published as part of the *Farming Futures* series and can be seen on their website <a href="https://www.farmingfutures.co.uk">www.farmingfutures.co.uk</a>.

The environmental value takes into account the nature of the management of the orchard, including the implications of the use of fertilisers and herbicides.

#### Social

We invited people living near to each of the orchards to explain and rate the impact of the orchard upon their lives, and a total of 138 people came along to our community evenings. During these evenings, neighbours of each of the six orchards took part in structured discussions to consider and rank the impacts of the orchard on local people. People seemed pleased to have been asked for their views on their local environment.

Each orchard had its own distinct role for its neighbours, but the conclusion is that they have overwhelmingly positive impacts on Herefordshire life. Local people valued orchards as an amenity, as a view, as a place to experience and conserve nature, and where they can witness a vibrant local economy.



As a result of the interesting tales that emerged during these evenings, we commissioned Rebecca Roseff to conduct in-depth taped interviews with some of the neighbours to record their stories. The results of her work are twelve excellent recordings which are now stored for posterity on the oral history database at Hereford Cider Museum.

#### **Economic**

Each orchard owner opened their books for us to assess the profitability of the orchard on a consistent basis and to consider its impact upon the local economy. Of particular note was the positive effect on the local economy of the relatively large migrant labour force employed at the eating plum orchard at Man of Ross where the fruit must be picked and thinned by hand. Tourists, visitors to Bodenham Lake orchard, Tidnor Wood Orchard Trust tree sponsors and local hoteliers have all participated to develop an understanding of the impact of each orchard on the broader economy through tourism.



Most people don't seem to come to the County for its orchards specifically, but for the general landscape of which orchards are a part – and few visitors had noticed the particular orchards chosen for our study, even those by the roadsides.

#### Summarising the *triple bottom line impact* assessment

Overall, we have amassed a wealth of information about different types of orchard that will prove an invaluable basis for further consideration. Orchards, both traditional and bush, are clearly special places which we need to treasure.

In financial terms alone, estimates of the triple bottom line impact of orchards suggests that the annual value of the orchards far exceeds the profit earned by the owner: In aggregate, it appears that the overall value ascribed to the six orchards in this study is some eight times higher than the base profit from farming – a value differential which is only marginally compensated by the current grant system.

The findings for bush orchards are significant as commercially managed bush orchards are quite often dismissed as unimportant. However, we found them to have strong positive value across each of the three bottom lines and they proved to have some good natural biodiversity.

#### **Communicating findings**

We have held a number of talks throughout the project and these have been really well attended. Local people seemed genuinely interested in the approach that the project has taken and in the importance of orchards.

A website, <u>www.herefordorchards.co.uk</u>, has been set up to explain the project's findings in more detail.

To encourage local people and tourists to be more aware of Herefordshire's orchards, an Orchard Art exhibition is being held at Hereford Cider Museum from 9<sup>th</sup> September to 22<sup>nd</sup> November. An exhibition entitled *Orchard* by acclaimed Somerset artist Edwina Bridgeman, comprising an installation art work of an orchard of three large trees together with smaller sculptures, will form the central focus of this three month event at the Museum, which will include orchard art work by local artists, poetry, orchard related activities, as well as an opportunity to explain the findings of this Herefordshire project: This autumn event is aimed at finding different ways of encouraging people to appreciate the beauty and value of our orchards.

This project has taken a genuine partnership approach and I would like to record my sincere thanks to everyone who has helped to make it a success; the natural species recorders, the facilitators at each community evening, national experts and particularly Heather Robertson at Natural England for her advice and support throughout, orchard neighbours, and of course the orchard owners for being brave enough to participate in a project that required them to open their books to us and to allow their orchards to be inspected in such detail. Experts at the national sustainable development charity Forum for the Future greatly assisted with the development of the project's methodology. We are also grateful to the organisations shown below for their support.

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