

11.4 Traditional Orchards

Traditional orchards are defined by their habitat structure - open grown trees within grassland. This is both structurally and ecologically not dissimilar to wood-pasture and parkland, and in many respects traditional orchards resemble small wood-pasture, parkland or woodland edge habitat. But there are defining differences between these two broad habitat types, with traditional orchards having:

- A predominance of fruit trees
- Generally a denser cover of trees
- A more frequent occurrence within the countryside and usually as smaller units compared to wood-pasture and parkland sites
- Management of trees for fruit production rather than for timber

The management of the herbaceous field layer beneath the trees is similar between these two habitat types with grazing and cutting of the grassland integral to both orchard and wood-pasture and parkland management.

Other similarities include the presence of scrub, formed mainly by boundary hedgerows or as shrubs amongst the trees (particularly in abandoned orchards). Ponds, often a feature in wood-pasture and parkland, are also often present. But it is the usually old trees and their importance for wildlife where these two habitat types share the greatest similarity in terms of their biodiversity importance.

Unlike most trees in wood-pasture and parkland, fruit trees are relatively short-lived and as such they tend to exhibit features indicative of veteran trees at a relatively young age. Features include hollowed trunks and limbs, split trunks, rot holes and various tears. The resulting deadwood is then often present in well-lit, sunny conditions making the overall habitat excellent for many specialist deadwood invertebrate species. Survey work has recorded a very diverse deadwood invertebrate fauna which includes nationally rare and scarce species along with UK BAP Priority Species like the Noble Chafer *Gnorimus nobilis*, a wood-decay specialist beetle which is restricted almost entirely to traditional orchards.

Within individual orchards, the trees can sometimes support a high diversity of lichens, epiphytic bryophytes and deadwood fungi, adding greatly to the overall biodiversity. Orchards provide important nesting and feeding habitat for many species of bird, (Wedge & Robertson, 2007).

Other habitats within traditional orchards can be of some conservation significance. One example is the grassland. Long periods of sustained low intensity management of grasslands has, in some orchards, resulted in species rich grassland of sufficient diversity to be considered a UK BAP Priority Habitat (Lowland Meadow).

Traditional Orchards in Derbyshire

Prior to the recent inclusion of traditional orchards in the UK BAP Priority Habitats list there had been little attention paid to this particular habitat type within Derbyshire. An initial attempt to quantify the extent of traditional orchards in lowland Derbyshire has been undertaken by Derbyshire Wildlife Trust using desktop analysis of Ordnance Survey data and satellite imagery combined with a sampling 'ground truthing' field survey. The desktop results suggested that 474 traditional orchards occupying 100 ha remained, but the 'ground truthing' survey then found that only 65% of the sample of orchards surveyed on the ground actually remained intact. Ongoing work by the People's Trust for Endangered Species (PTES) to nationally map traditional orchards will eventually add to our current knowledge of the resource in Derbyshire.

In contrast to traditional orchards in other parts of the country where fruit production has historically formed an important component of land use, (i.e. Kent, Herefordshire, Cambridgeshire etc.) the orchards of lowland Derbyshire are generally very small, the largest being 1.2 ha. Historically they appear to be generally associated with larger country houses on estates and farmhouses rather than for commercial fruit production. Given their comparative small size it is possible that the biodiversity interest associated with traditional orchards elsewhere in the UK may not be present within Derbyshire's remaining orchards, or their biodiversity interest might be very different but equally important. However, as yet no detailed assessment of the specific biodiversity interest of the Derbyshire orchards has been undertaken.

Traditional Orchard Selection Guidelines

Sites that meet the following guideline will be eligible for designation as a Local Wildlife Site.

TO1 Any site which supports a traditional orchard, defined by the features listed below:

- 50% of the trees should be domestic fruit or nut species
 - there must be at least 5 fruit trees which show features indicative of old age within the orchard area
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UKBAP Priority Habitat – Traditional Orchards

Application

Whilst the actual biodiversity interest of the lowland Derbyshire orchards is as yet un-quantified the physical structure of the habitat can be defined. Following guidance within the UK BAP Priority habitat descriptions (UK BAP, 2007) and Natural England's 'Orchard Project' traditional orchards within Derbyshire can be defined by the qualifiers listed above.

Natural England suggest that in addition to a minimum of 5 trees being present their crown edges should be within 20m of each other. However, given that all of the orchards likely to be considered by these guidelines are going to be very small, it is considered that this qualifier is of less relevance than if it were being applied to much larger orchards.

New orchards, or old orchard sites with less than 5 trees which have been replanted, if managed without the use of chemicals or inorganic fertilisers, would essentially still be considered a traditional orchard. However, until the trees reach a reasonable age and begin to exhibit features associated with veteran trees, it is unlikely that they would have sufficient biodiversity interest to warrant selection. It is possible that a young traditional orchard might contain species rich un-improved grassland or other features such as ponds. In these circumstances sites should be considered for selection under other habitat selection guidelines, (e.g. grassland and wetland).

Many traditional orchards now form part, or all of the garden of residential properties. Where this is the case the overarching policy to not designate domestic gardens should be applied. For some sites, whether an orchard forms part of a garden or not might prove difficult to determine. In these cases there may be a need to consult with local planning officers.

Justification

Recently there have been large declines in the total area of traditional orchards across the country. Concerns about the resulting loss in biodiversity have resulted in traditional orchards being made a UK BAP Priority Habitat.