TECHNICAL INFORMATION
Orchard Restoration

INTRODUCTION

Traditional orchards are an important feature of the Somerset landscape. As areas that have been left undisturbed for many years, orchards often contain a wide diversity of habitat and niches that can be exploited by many species.

Blossom in spring time is a ready source of nectar for insects; fallen fruit in autumn feeds birds such as fieldfares and redwings; a limited amount of dead wood provides habitat for insect life; the irregular and fissured bark of old trees can support lichens, mosses, mistletoe and a host of insect life which in turn attracts birds; hollow trunks and holes may attract nesting little owls, tree-creepers or blue tits while mistle thrushes and chaffinches may nest in tangled branches.

Orchards should also be retained for cultural reasons. Old varieties may not be widely available today so enhancing the longevity of old trees and replanting the same varieties will keep the tradition of orcharding alive. If left unmanaged, both the productive value and wildlife value of an old orchard will diminish.

Reasons for pruning old, neglected trees:

- *To reduce wind damage in an overcrowded crown. This is especially important if some wind damage has already occurred or if the trees are leaning or on an exposed site.*

- *To increase sunlight and air in the crown to promote healthy, new growth evenly throughout the head of the tree and to remove diseased wood.*

- *To reduce flower buds to concentrate growth in fewer but larger and cleaner fruit.*

ASSESSMENT

The following pruning advice is suitable for most farm orchards where the goal is not optimal, commercial production but retention of the trees and a modest yield.

1. Examine the trees for any signs of growth – this may be just a few millimetres per year if not pruned for 30/40 years. If some live wood remains, then pruning will be beneficial.

2. Check the general health of the trees. Ignore lichens, moss and mistletoe but look for cankers that have killed young shoots and branches. Also look for scab damage on fruit or young shoots. Most old trees will have some canker and small branches with knots where the tree is trying to heal over a wound. This is a good sign as it shows resistance in the tree. Some dead wood may be caused by shading out and not disease. As long as roughly half of the new growth is reasonably healthy it is worth pruning.

3. Do not condemn a tree that is leaning or even horizontal or hollow. Again, dead wood may be due to shading rather than disease and judicial pruning may in fact save the tree. Bramleys in particular often successfully spend much of their life recumbent. Leaning trees can be propped.

HOW TO PRUNE

The aim should be to create an uncluttered, open crown that will:

- *maximise sunlight reaching the developing flower buds*
- *increase air-flow through the branches to minimise the effect of air-borne diseases*

Pruning should be carried out between November and March. Branches should be removed by first making an undercut to prevent tearing the bark. Heavy branches should be removed in sections, finally removing the stub. First take out any ***dead*** wood, then tackle any ***dying*** or ***diseased*** wood, and finally remove any ***crossing*** branches that are rubbing against each other. A small amount of dead but not diseased wood can be retained. Dead wood, especially rotting heartwood, provides food and habitat for invertebrates. Care should be taken not to remove more than ¼ of the crown in one year. Ideally, you should stagger the restoration of an old tree over several years.

If the tree grows strongly in the first year after pruning, then root system is probably in good shape. If growth is very strong (over 200mm) then the tree may have been over pruned and even more flower buds may result the following year. With more appropriate management, the tree should recover in a couple of years. If growth is still weak after 4 or 5 years, then either pruning was too light or the tree is failing. If space allows and there are no obvious signs of disease, keep the tree or stump.

When re-planting into gaps, try to follow the original planting pattern. Please refer to the 'Planting Orchard Trees' information sheet.

Grassland in orchards

The grassland under a traditional orchard is likely to be unimproved (unploughed and possibly unfertilised), commonly used for grazing youngstock if close to farm buildings. The grass sward may be botanically-rich supporting insects and small mammals such as voles, shrews and hares. Anthills, an indicator of old pasture, may also be found.

Ideally, there should be a mixed grazing system with lambs or sheep with calves. Depending on the season, stock can grazed in early spring to take any late autumn/early spring growth. Aim to reduce stocking in May, June and early July when plants are flowering and butterflies breeding. Stocking should be increased again in late July, August and September to 'tidy up' the sward before removal of stock prior to harvest. As with all old grassland, care should be taken to avoid poaching the ground. If the orchard has many wildflowers you should also resist supplementary feeding and fertilisers, artificial or bagged.

Hedgerows

Orchards are often surrounded by hedgerows and ditches that provide important cover. Other features such as old willow pollards may also be important to the overall value. Consider laying gappy hedges to restore weak sections, or leave some hedges untopped

in some years for song posts and nest sites. A tall, thick hedge will also deflect farm operations from surrounding fields. Some work may be eligible for grant aid – contact FWAG for details.

Further Information can be obtained from your local FWAGSW Advisor. Details are on the FWAGSW website at **www.fwagsw.org.uk**