

## A National Orchard Inventory for Scotland

# Area Report for: Fife

### **Collaborating Organisations:**

CLEAR Buckhaven,  
Sustainable Cupar  
Transition University of St Andrews  
PLANT Tayport



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### **Project national partners:**

Scottish Natural Heritage  
Orchard Research & Enterprise CIC

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Thanks for all your contributions

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# Summary

## Keywords

orchard; fruit tree; top fruit; apple; pear; plum; undercrop; EUNIS G1.D4; Fife

## Background

There has been growing interest in traditional orchards in Scotland for a little over a decade. This interest has a great breadth; from cultural heritage and horticultural practice, to historic varieties and the gradual disappearance of this unusual Scottish habitat.

The National Orchard Inventory for Scotland Project aims to create a comprehensive orchard inventory for the nation. This has probably not been attempted for over a century, perhaps since the 1885 Congress. The rationale that underpins this aim is that an Orchard Inventory will form the basis for addressing a number of issues linked to the decline of orchards over the last four decades and create a strong foundation for their revival. Simply put, we need to know what's where in order to change the downward trajectory.

The project began in 2013 with a pilot study which since then has received funding support from Scottish Natural Heritage. The programme has grown since that time to add further phases so that at the time of writing more than half of Scotland's orchards have been surveyed and recorded. The national project is reported separately, and is available at the project website [www.scotlandthefruit.org.uk](http://www.scotlandthefruit.org.uk)

## Main findings

A total of 196 orchard sites were surveyed, of these 174 were found to be intact orchards.

The total acreage of orchards remaining in this area was found to be 27.7 ha and the average area of each orchard was 0.17 ha.

The survey showed that while a small area of orchards have been lost, this has been more than offset by newer orchards.

Most of the orchards contain less than 30 trees and are in a domestic setting. Five larger orchards of commercial size are recorded.

Though apple dominates, most orchards contain a diverse mixture of fruit species, reflecting their domestic use.

The new and young tree stock dominates but there are significant numbers of mid and aged trees.

Veteran tree features indicate the orchards contain high levels of biodiversity.

The majority of orchards have some or active management, and this is at a higher rate than typically found elsewhere in Scotland.

Many orchards have new plantings and younger trees, and this shows orchards renewal is occurring.

Soft fruit and also vegetables are grown in a significant minority of orchards.

Most fruit is used for family and friends, some is sold commercially and some is left to waste.

Livestock is grazed in minority of orchards, these mainly being fowl.

The qualitative data demonstrates the depth of history; cultural, economic and otherwise, that this area is custodian to.

To conclude, Fife contains a large number of small orchards, most of which are quite actively managed and from which the fruit is used within the domestic setting. There are a handful of commercial sized orchards.

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## 1 INTRODUCTION

There has been growing interest in traditional orchards in Scotland for a little over a decade. This interest has a great breadth; from cultural heritage and horticultural practice, to historic varieties and the gradual disappearance of this unusual Scottish habitat.

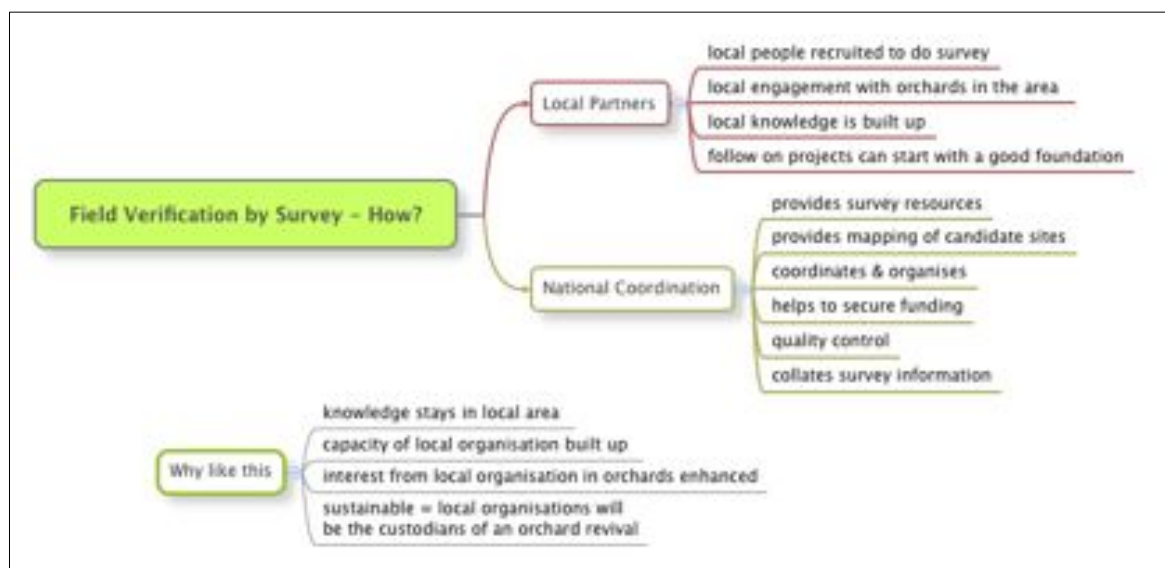
The National Orchard Inventory for Scotland Project aims to create a comprehensive orchard inventory for the nation. This has probably not been attempted for over a century, perhaps since the 1885 Congress. The rationale that underpins this aim is that an Orchard Inventory will form the basis for addressing a number of issues linked to the decline of orchards over the last four decades and create a strong foundation for their revival. Simply put, we need to know what's where in order to change the downward trajectory.

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This document is one of a series of reports that provide results for particular areas, which are usually coherent with the local authority domain. The purpose of producing these 'Area Reports' is to make results relevant to local organisations and local people. It is intended to raise awareness about their orchards and their cultural heritage, and to identify issues that may be contributing to their decline and, in some cases, revival.

## 2 COLLABORATION

The national project is structured to partner collaboratively with local groups. Resources, systems and coordination are provided nationally, fieldwork is organised and carried out by the local collaborating organisations.



The graphic shows what each partner brings to the field survey work. The reason why we have structured the project like this is also shown. We want knowledge to be retained locally so that capacity is built and a sense of ownership and interest in local orchards is strongly established. We think this will be the most sustainable way to create a foundation for an orchard revival.

As a project partner, the local collaborating group has a copy of the data collected in their area.

### **3 BACKGROUND TO THE AREA**

Fife contains diverse areas in terms of climate and landscape, from the fairly dry and relatively frost-free arable lands of the East Neuk to the wetter wooded areas in the west towards Kincardine. The major estuaries of the Tay and the Forth also play an important role in moderating the climate to make Fife a significant area for domestic orchards in Scotland. A further aspect is the historical context, and in particular the religious houses in the area. These include Lindores Abbey in Newburgh which other research (Hayes, 2004) shows was likely to be instrumental in bringing orchard practice to this part of Scotland after it was founded in around 1200.

Not all of Fife has been covered by the work reported here because we were unable to identify a collaborating group west of Dunfermline. A further omission has been Newburgh itself, perhaps Scotland's finest fruit town containing around 1000 fruit trees. However this was thoroughly surveyed in 2003 (citation above), as was Fife's Tay coast (Hayes, 2010).

### **4 METHODOLOGY**

The methodology for the project (of which this area is a subset) is described in Annex 2.

To summarise, a two stage approach is adopted.

1. A deskstudy is carried out, looking for orchard sites from mapping, historical data, existing surveys and other sources. This is collated on a Geographical Information System. Each site is given a unique number and a location map created. Nationally the deskstudy considered 1859 sites of which 1728 were considered candidates for field verification.

2. Field verification. Each candidate site was visited and surveyed by a volunteer surveyor. Photos were taken where possible. The survey results were submitted to the national project.

Finally the results are collated and reported.

The Local Facilitation for this area was provided by Leslie Anderson, Sarah Davidson, Ali Macleod, and Kaska Hempel of CLEAR Buckhaven, Sustainable Cupar, Transition University of St Andrews and PLANT Tayport respectively.

Time input for field verification work is reported in Annex 2.

### **5 STRUCTURE OF RESULTS**

The results are structured in this report in three distinct sections:

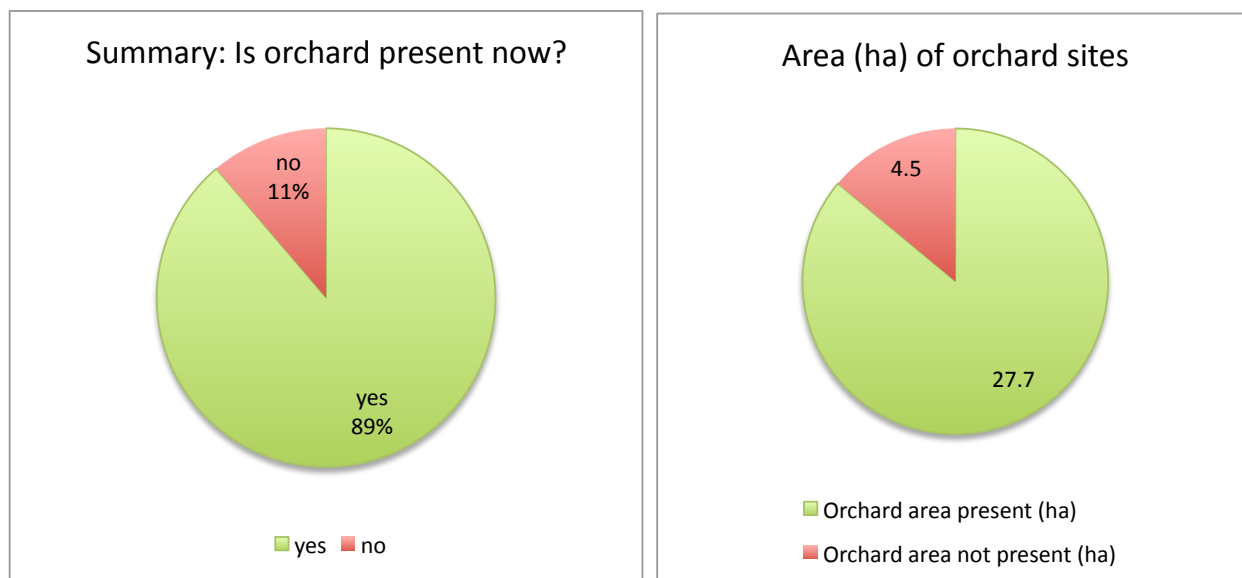
- Numeric and classification information (quantitative), together with overall conclusions.
- Anecdotal and comment information, qualitative aspects.
- Representative photo gallery. A collection of photos with descriptive captions that illustrate the orchards of the area.

Photos have been submitted for a total of 185 sites.

## 6 NUMERIC AND CLASSIFICATION INFORMATION

### Quantitative Data Results

We have analysed the data collected and have turned it into a more presentable form by creating a graphical output. In the section below, those graphs are presented with a commentary.



The graphs above show the headline results of whether orchards were found to be present on candidate sites (left pie chart), and the total associated area (right pie chart).

Field surveywork was completed for this area for 196 candidate sites. Of that number, 174 sites were found to have an orchard present and of those 91 were new orchard sites, the balance resulting from our deskstudy. Our definition of an orchard is a collection of 5 or more fruit trees in proximity. By 'new sites' we mean sites not identified in our deskstudy - so new to us. Many, though not all, are recently planted orchards.

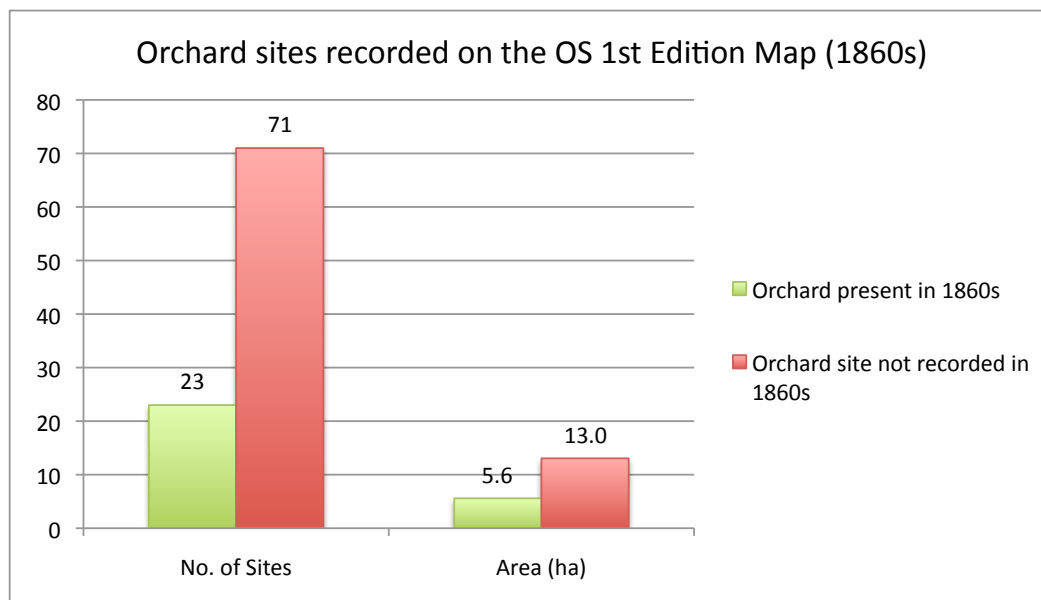
The fieldwork also found that a total of 22 sites were not orchards at the time of survey. Most of these latter sites were identified in the deskstudy as likely to be orchards from mapping, historical, or previous survey data. As such it is likely to represent some of the loss of orchards.

A further 1 site(s) were visited where it was not possible to gain access or make a determination as the existence of an orchard.

In terms of the acreage of sites, the fieldwork found that 27.7 ha of the orchard sites were present in Fife. This represents 86% of the total area of deskstudy + new orchard sites. The average area of an orchard is 0.17 ha.

The graphs show that there has been some small loss of orchards, both in terms of numbers and total area. Around a tenth of orchard sites have been lost, however this has been offset by the creation of many new orchards, including some commercial orchards.

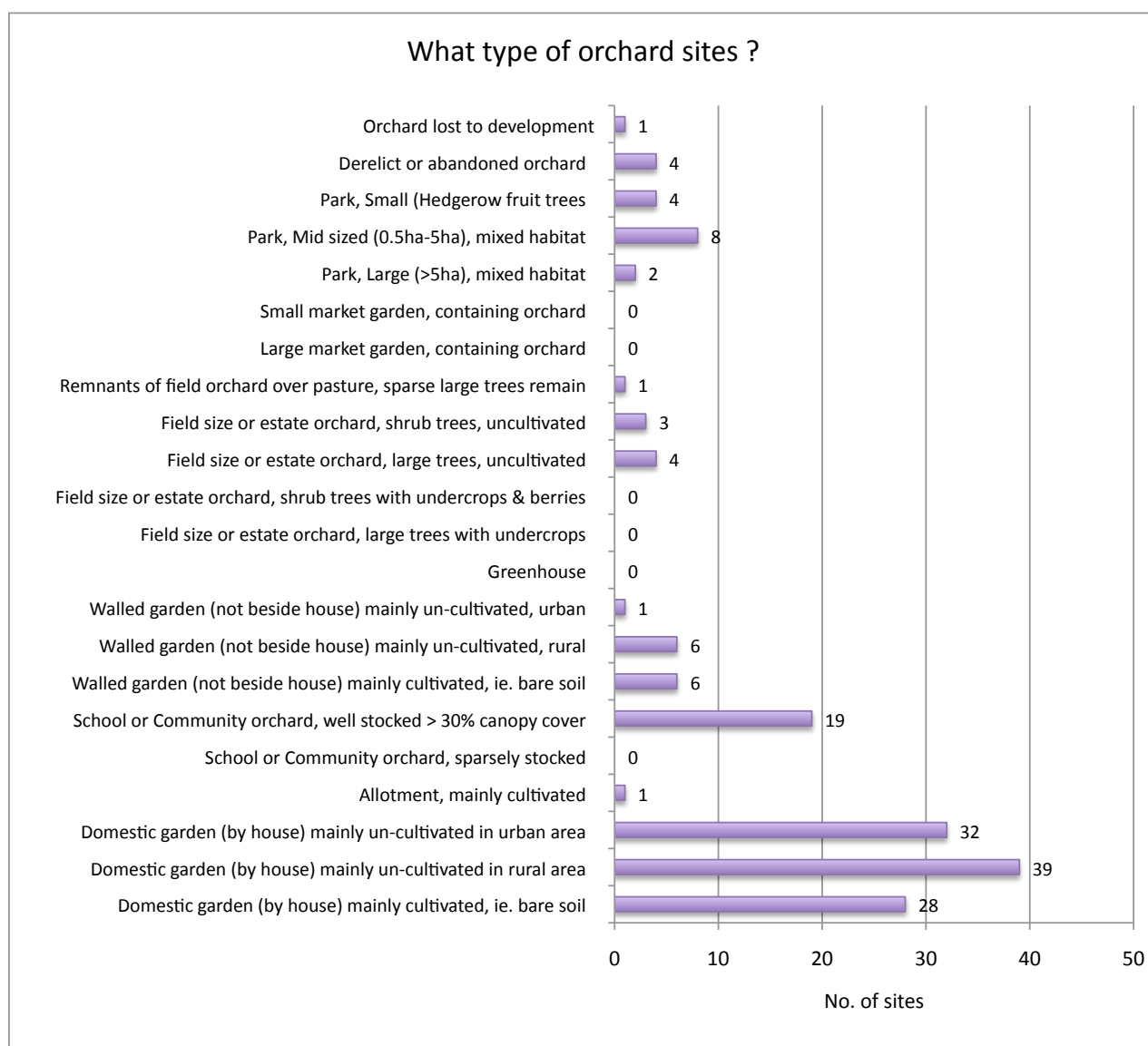
For a historical perspective on the significance of this trend we have also analysed the OS 1st edition data which was assessed for each site during the deskstudy. The OS 1st edition was surveyed in the late 1850s and early 1860s, and covered most of Scotland and was very detailed. It represents a good resource for historical analysis.



In Fife a determination for the presence of an orchard on the OS 1st Edition was made for a total of 94 candidate sites. The graph shows that of these, a total of 23 candidate sites were an orchard. The total area for these orchard sites was 5.6 ha in 1860s.

These data represents an interesting story for the Fife area. Though these data only includes candidate sites that our deskstudy assessed there was a reasonable prospect of an orchard being present, the indication is that the acreage of orchards today may be much greater than they were in 1860s. Though the data from 150 years ago didn't include domestic orchards which we have done, it still represents a relatively positive trend.



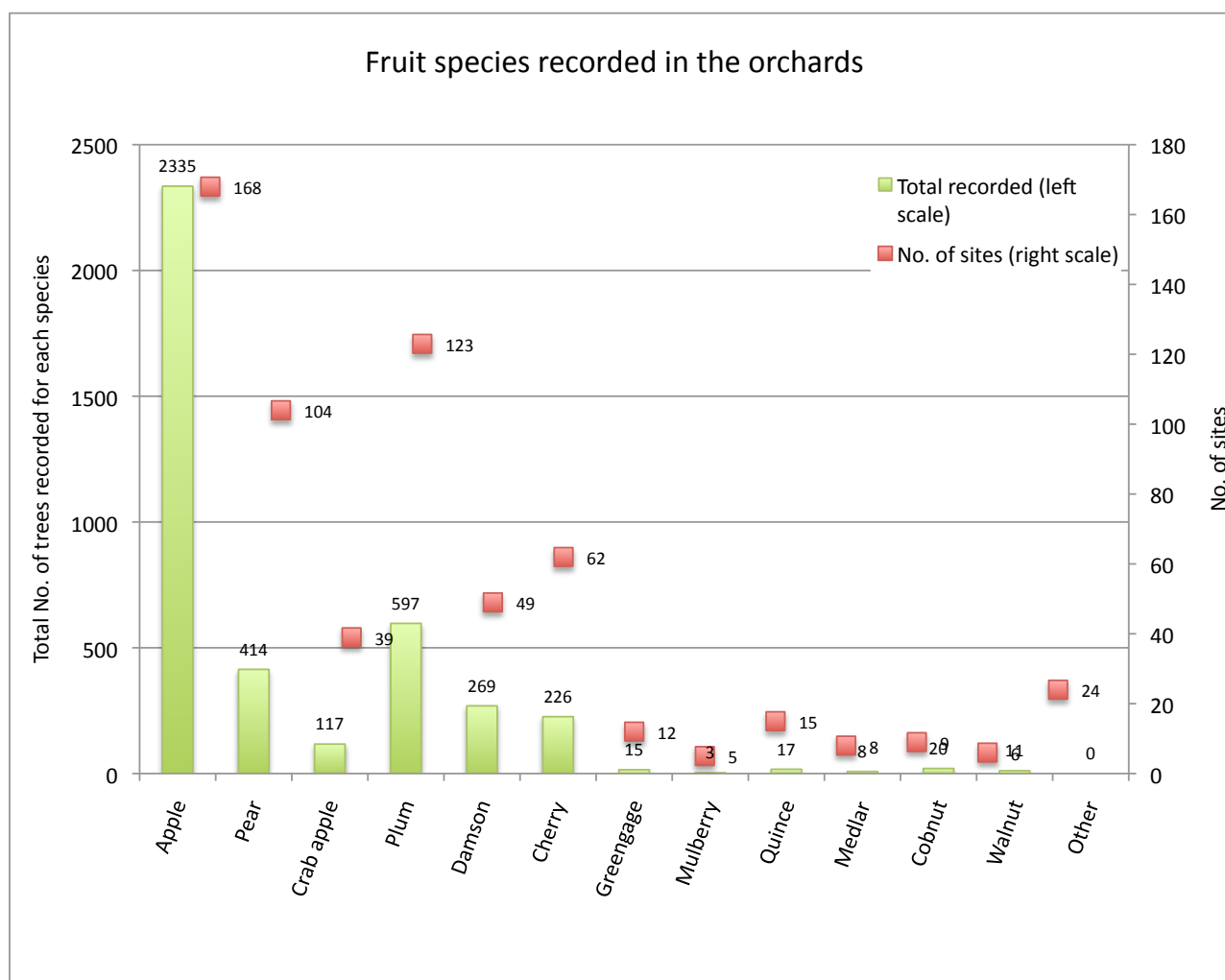


The type of site was recorded as a simple metric that can give a powerful insight into the type of orchard being considered, as well as assisting in the habitat classification using the European Nature Information System (EUNIS). Hence the apparent complexity of site types.

The graph shows the three largest classifications of 32, 39 and 28 sites are domestic orchard by houses. The fourth largest classification of sites with a school or community orchard. A few walled gardens are also recorded, as are field scale orchards, the latter would be considered for overtly commercial purposes. Five derelict or abandoned or lost to development orchards were recorded. A number of other site types are present.

### Stewardship and Agricultural Payments

In the area being considered, it has been reported that no orchard(s) are part of a Stewardship scheme. In terms of orchard sites where an agricultural subsidy is being claimed, the survey found no orchard(s) were registered within the Integrated Administration and Control System (IACS) which relates to EU agricultural payments. This figure is probably an under-representation as there is some incentive to classify the land as other than an orchard.

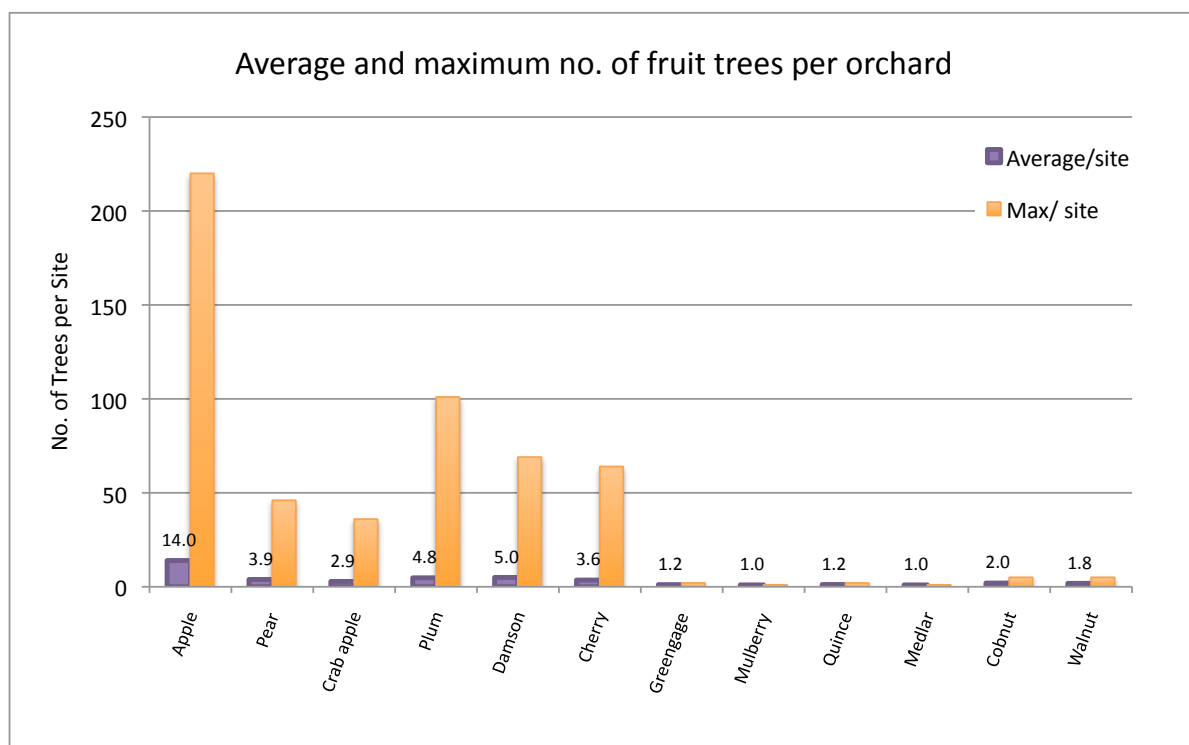


A broad range of top fruit species were recorded to gain a full picture of fruit produced. The green columns (left scale) represents the total number of trees recorded for each species in the area being considered. The red markers (right scale) represent the number of orchards in which that data was collected. In some cases it was not possible to determine numbers for individual species in an orchard, so the total number of sites surveyed is likely to be greater than the maximum number of sites recorded here.

The total number of individual trees recorded in the survey was 4032. We also recorded a size range for each orchard. An estimate of the total number of trees from this size range data is 4047. This demonstrates reasonable agreement, given that number of individual trees is not always recorded in every orchard.

The graph tells the story of this area. The apple dominates in the orchards recorded as part of this survey, being present in 168 orchards. There are a mixture of other species commonly found but only at a subsidiary level.

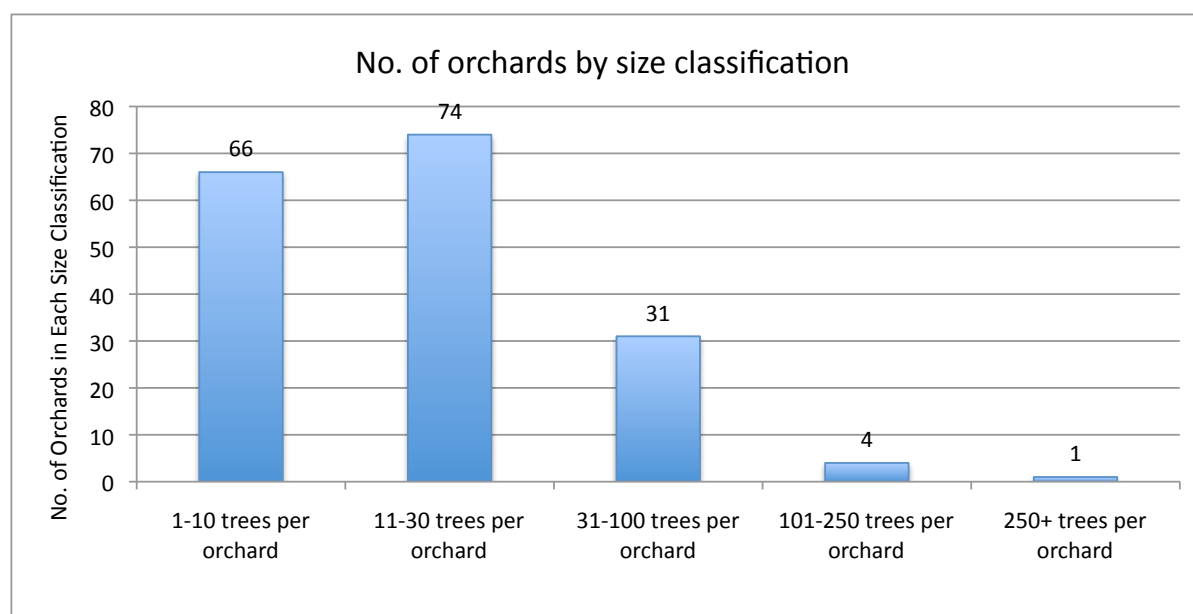
Of the more unusual species, it is interesting to see that quince were found in 15 orchards, medlar in 8 orchards and mulberry in 8 orchards.



The graph above represents the average and maximum number of each species in the orchards of the area. It does not represent the typical stocking of an average orchard.

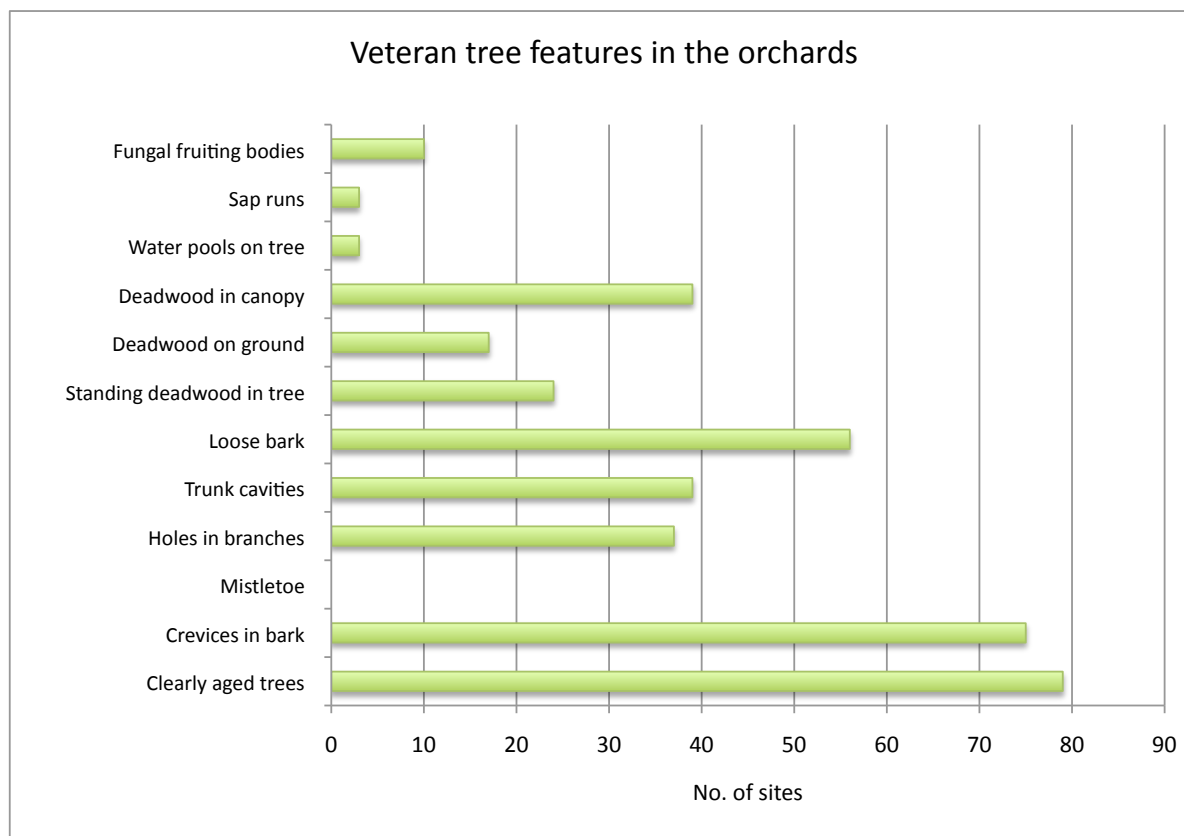
The short purple column on the graph show the average number of each species in the orchards. The taller orange columns show the maximum number of a species found in any orchard in the area.

The high numbers for the orange columns reflect the few commercial orchards. The purple (average) provided a more realistic picture of the typical contents of a Fife orchard. This shows that orchards are typically mixed, with apple as the main species, and then a number of other species in support.



As well as asking how many individuals of each species of tree were present, we also wanted a general sense of the size of an orchard, and therefore size range classification was recorded, as shown in the graph above.

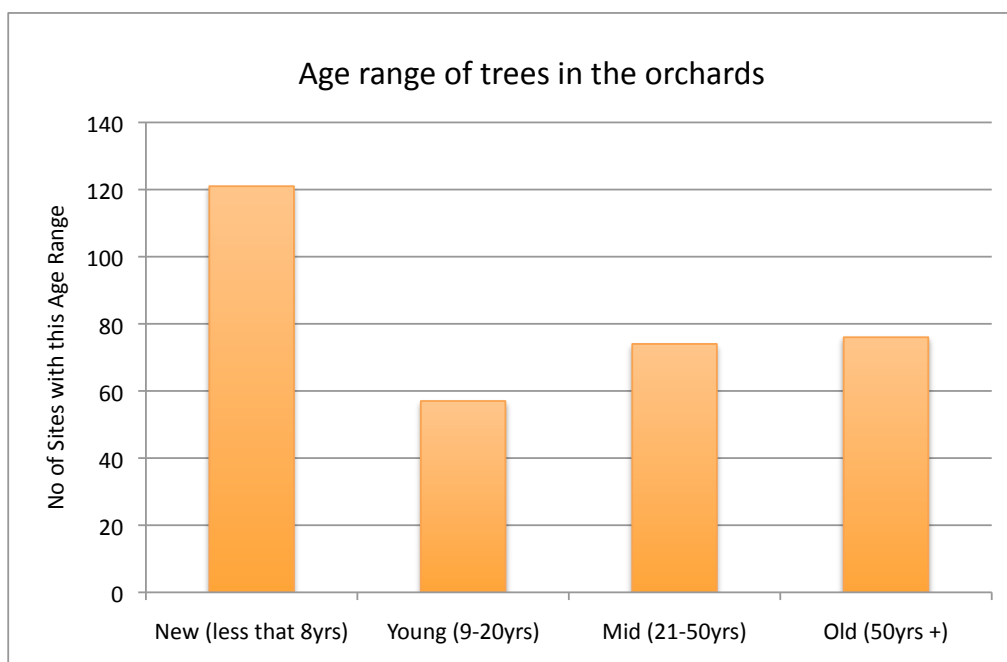
The graph shows that most orchards had 30 fruit trees or less. A few have up to 100 trees. Only five orchards have more than 100 trees and only one more than 250 trees, which we consider to be a commercial size.



Veteran tree features are used as biodiversity indicators. Therefore the more veteran tree features present, the higher the likely biodiversity in the orchards. There was a total of 382 veteran tree features recorded in the orchards in this area. This demonstrates significant biodiversity.

Its useful to assess how mature the trees in an orchard are. We consider trees over around 50 years old to be mature. Mature trees of older varieties generally are more established in terms of their steady yield. However, there is also potential for more disease. A further dimension is that orchards with mature trees have greater biodiversity potential.

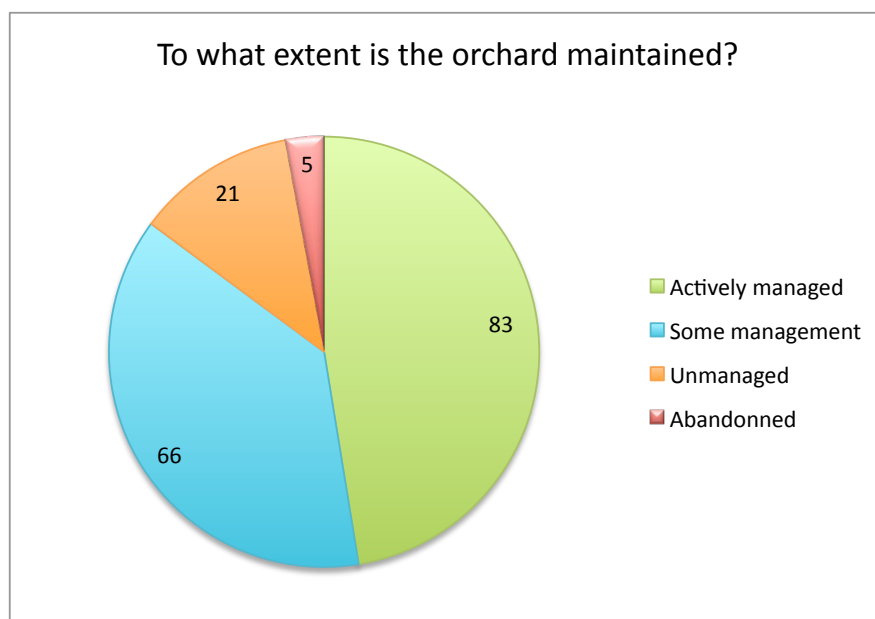
The average proportion of older trees for the orchards was 28%. This figure was calculated from the 164 sites where data was recorded. There will however be a great variability with some orchard being entirely mature, and some being entirely young.



The age of trees contained in each orchard was recorded. Ages were grouped into 4 categories to simplify the assessment in the field.

Each orchard may contain a number or all the age ranges reflecting the plantings over the years. Predominantly old trees indicates a mature collection of orchards. If no new or young plantings are recorded in an area, this indicates that the presence of orchards in the area is potentially threatened.

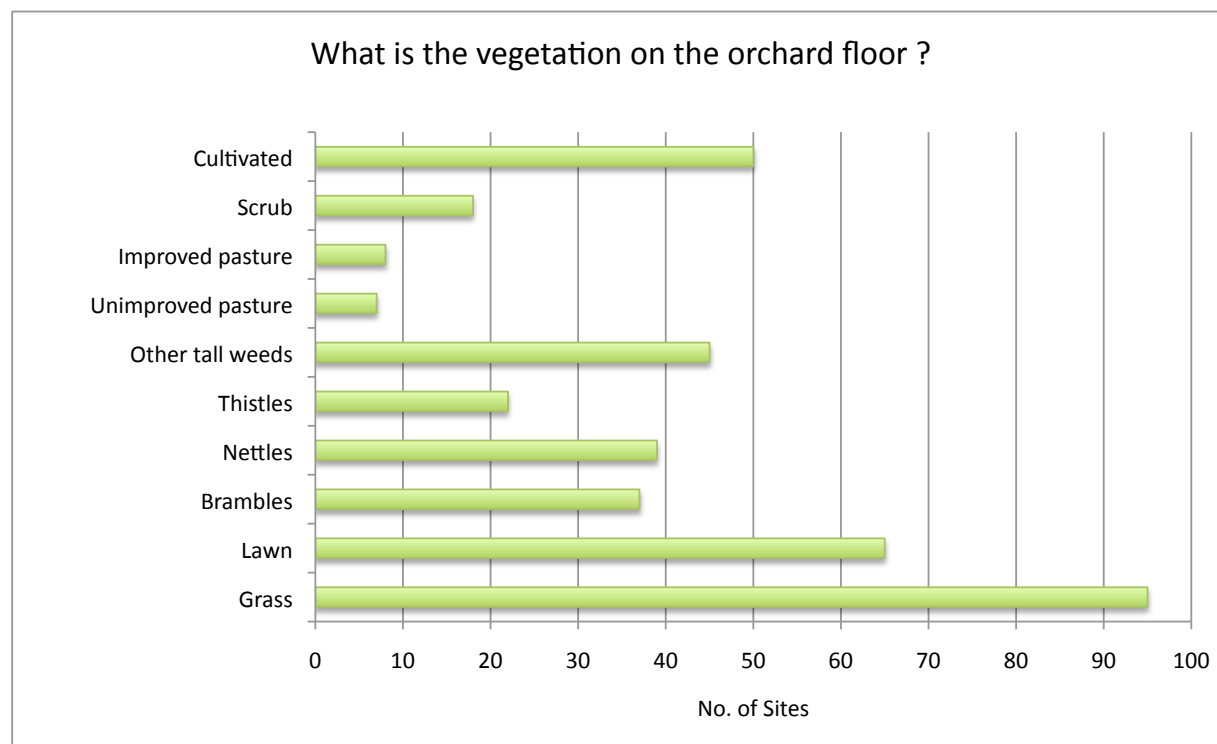
The graph shows all age ranges being represented but the younger ranges dominate. It is some comfort that there are significant numbers of orchards with new and young trees, reflecting a resurgence in interest in locally produced fruit.



The extent of orchard management is given above. A total of 175 sites have data recorded for them. The figures in the chart are the number of orchards determined to be in each particular category.

The graph shows that most orchards have some or active management. This demonstrates higher levels of orchard management than are found in many parts of lowland Scotland.

High proportions of abandoned and unmanaged orchards are an indication that there needs to be a local focus on raising awareness on maintenance issues. Maintenance skills project are also a popular way of building capacity locally.

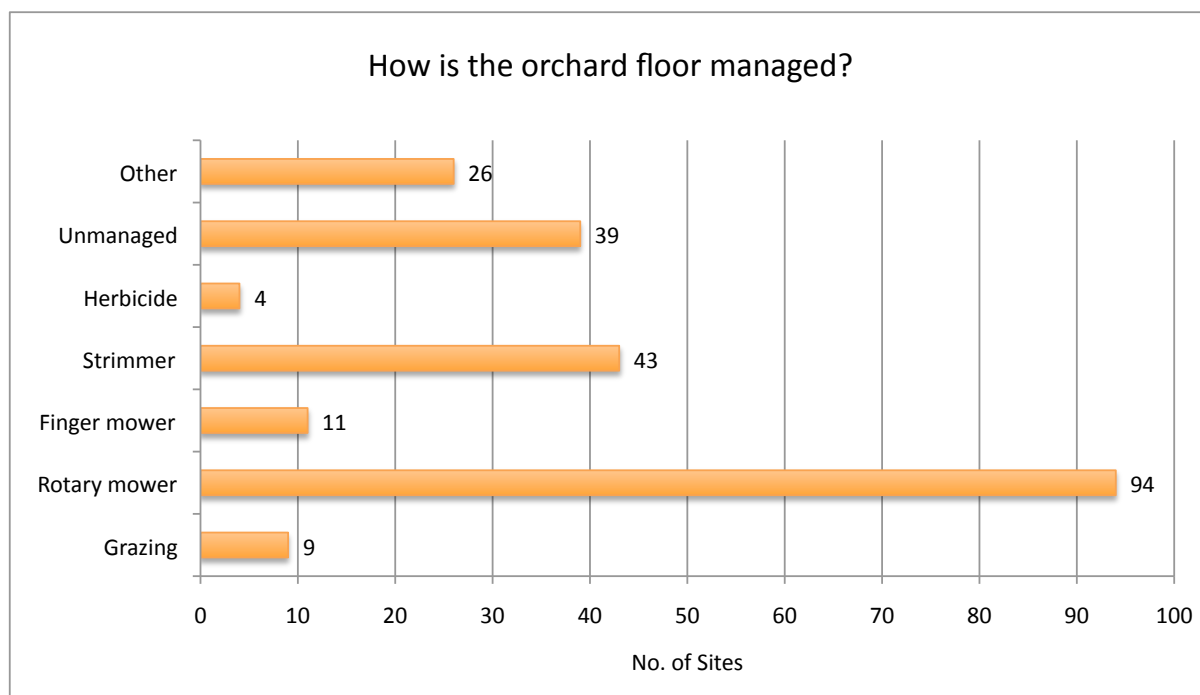


The orchard floor is an important part of the orchard habitat, both for biodiversity but also as a further element of the growing space. The generic term used across various habitats, is the 'field layer'.

Each site may have several field layer types, for example parts of it may be mown into a lawn while other parts are unimproved pasture with thistles. We are also interested in orchards that are cultivated as this was a practice that was once much more common.

The graphs shows that though many orchards have some sort of managed grass as a field layer, there are a significant number that have various tall weeds and scrub.

There are also a significant minority of 50 orchards that are also cultivated showing a more complex use of the land.

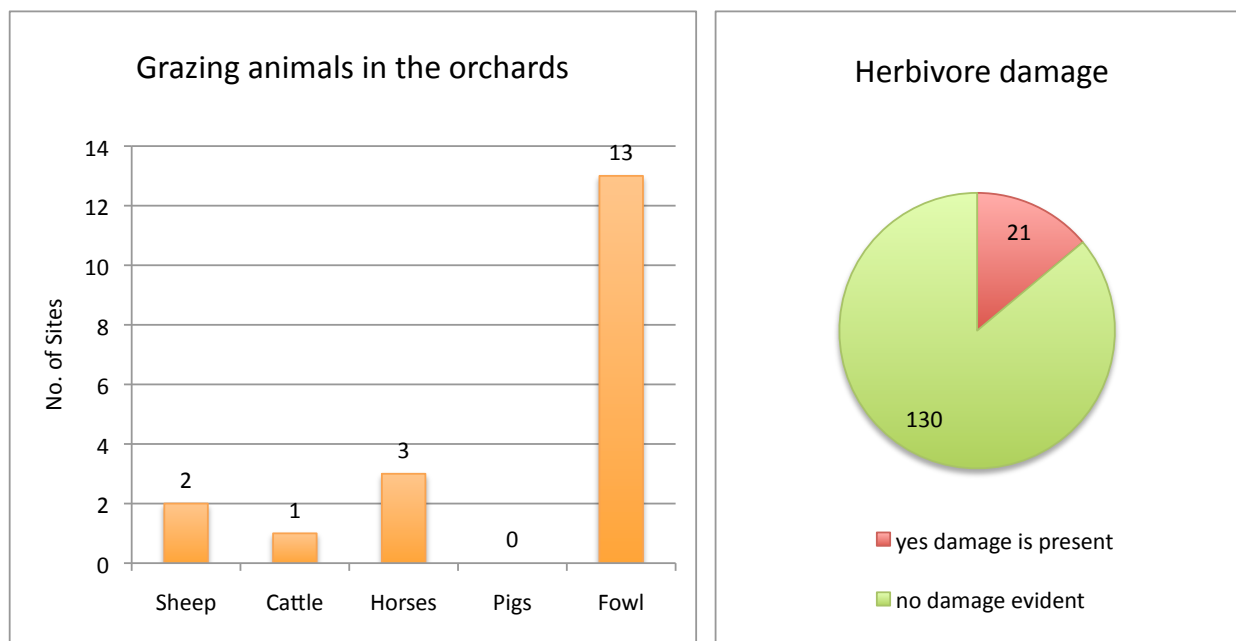


Each orchard can record more than one method for managing the orchard floor. The reference to the finger mower may be unfamiliar. This is a type mower that has a flat cutter bar like a hedge trimmer. The reason for recording this separately is that there is some evidence that this sort of mower does far less damage to invertebrate life in the sward than a rotary mower, which tends to suck up and eviscerate the sward contents.

In our experience herbicide use is under-reported by orchard keepers.

Unsurprisingly, the graph shows that the common method of management is by rotary mower. However, the number of strimmer managed sites comes second, with unmanaged field layer coming third.

The 'Other' classification is mainly made up of sites where mulch matting, or other mulch such as bark chips are used around the trees.

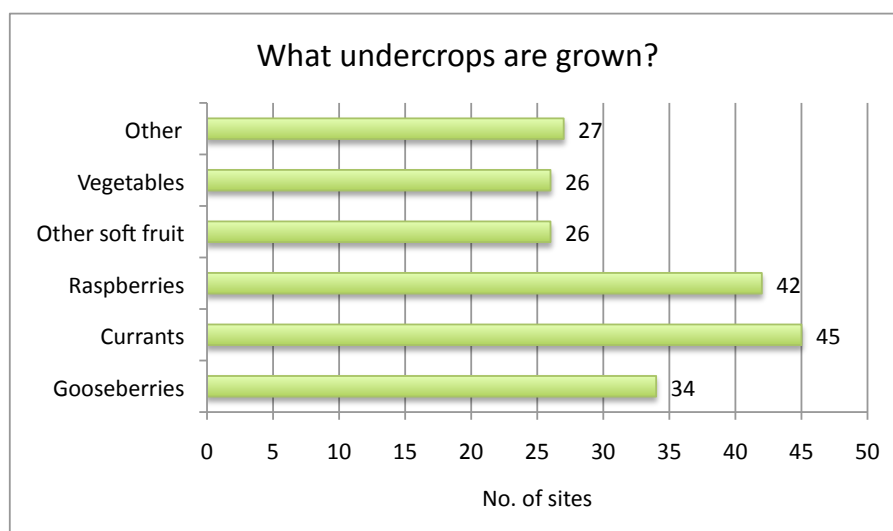


Each orchard can record more than one type of animal grazing the orchard floor.

The graph (above left) shows that fowl, horses, sheep and cattle graze a small minority of the orchards. Fowl are clearly the most popular and make a good use of the orchard floor.

The pie chart shows that where recorded, herbivore damage is evident on a small minority of sites.

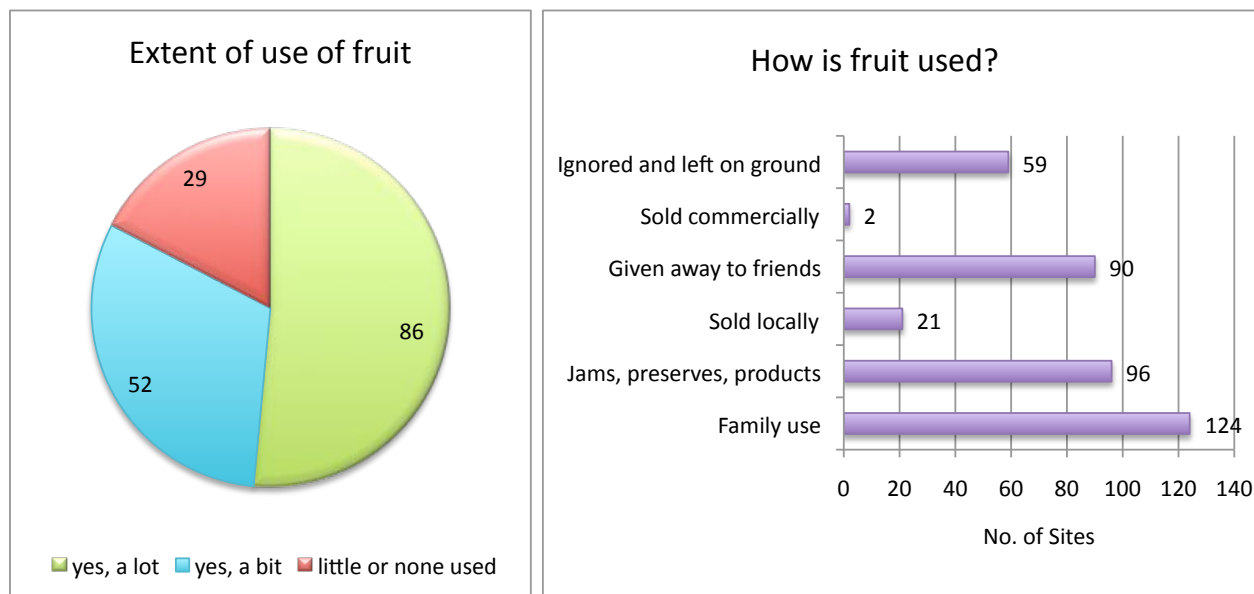
Not all recorded damage can be attributed to grazing livestock, as deer and rabbits also play a role.



The growing of other crops within an orchard – known as undercrops - was formerly a much more common practice than it is today. Each orchard can have more than one type of undercrop recorded.



The graph above shows that undercrops are still common in this area, in particular soft fruit. As such this demonstrates the multi-purpose use that orchards in Fife are put to.



The use of fruit was determined for 167 sites. Though the categories in the pie chart are fairly broad, they do give a clear indication of the proportion of orchards that are well harvested. It also gives an indication of the scale of the unused local resource.

The chart shows that over half of orchards report that they use the fruit a lot. A minority few use little or none of their fruit. This is a higher level of use than is found in much of the rest of Scotland.

The bar graph (above right) provides detail on how fruit is used. An individual orchard can record multiple uses. So while the family may use some, they may also leave unused fruit on the ground.

The graph shows that family use, followed by jam, preserves, products and then by giving the fruit away was most common. A reasonable number of orchards sell their fruit locally, and 2 orchards sell commercially.

However a significant minority (59 orchards) ignore at least some of their fruit and leave it on the ground.

## 7 ANECDOTAL AND COMMENT INFORMATION

### A qualitative data summary

#### 7.1 Introduction

Anecdotes and comments add a lot of colour to the survey of orchard sites. They are more valuable than they may first appear because they help interpret individual sites and whole areas in relation to their orchards. They also form an important record of local oral history that may not be recorded elsewhere; this may be about the family and its own orchard, or it may be about the characteristics, history and purpose of orchards in the area, and how this formed a part of its economic and cultural heritage.

#### 7.2 Structure and Presentation

Guidance and training for the field surveywork encouraged the collection of anecdotal history, comments, pertinent information relating to the orchard being considered. This was written up on the survey form and submitted to us in that way.

The data presented below are a selected summary, representing what we consider to be the most interesting aspects of the qualitative data collected. We have identified emergent themes from these data and have categorised them accordingly.

The comments have been subject to some editing. Our intention is to maintain them as verbatim as reasonable. The editing has been restricted to typos, spelling and minor changes to assist understanding. We have carried out further editing to comply with data protection. We have therefore also redacted content that would enable an individual person to be identified.

#### 7.3 Anecdotal and Comment Data Categorised by Theme

##### **South-Central Fife (surveyed by CLEAR Buckhaven)**

The most striking characteristic of the area was a number of community orchards recorded by the surveyors.

Most of surveyed orchards (20/60) were those developed by CLEAR Buckhaven around Buckhaven area. Almost half of those contained between 30 and >100 fruit trees, with one exceeding 250 fruit trees.

Among them there was the first small 'guerrilla' orchard planted by the group, in the council lawn along a road:

*This was CLEAR's first planting site, they did not gain official permission so it was a 'guerrilla' project, however the council now help maintain the area by mowing it. This site is near the CLEAR office and is particularly well maintained and used. FIFE0221*

Since, CLEAR have planted many similar orchards in public lawns around Buckhaven, where maintenance is shared with the Council e.g.:

*30 apple trees planted on a patch of grass in the town by houses. The volunteers I talked to reported that the orchard was not managed but that there are plans to manage it again with CLEAR volunteers. they did not know whether the council or clear are responsible for mowing or strimming the grass and weeds. When I visited the site it was clear some volunteers had visited recently and the trees had been pruned. FIFE0234*

*A small group of trees on a grassy area by a sheltered housing car park, these are managed by CLEAR rather than the housing association. They are possibly doing well more consistently than the adjacent site (FIFE0236) as this site is more sheltered. FIFE0235*

*A row of trees planted in a deep hollow along the side of a path, and 2 on the other side of the path on a bark mulched bed. The hollow is rather damp, and the volunteer expressed the opinion that the trees should have been planted up the slope a little. Some are struggling a little and have splits in their bark, however others are doing well. The site is maintained partly by CLEAR and partly by the council. FIFE0212*

They have also worked to regenerate a number of sites, sometimes in partnerships with other organisations or schools:

*Previously a derelict site this was developed by CLEAR in conjunction with the nearby primary school and the rotary club into a forest garden, outdoor education and wildlife friendly area. The site also has a bug hotel, a bed where strawberries and herbs are grown and there is a plan to sow more wildflowers and manage the orchard floor as a wildflower meadow. There are mature Ash, sycamore and Hawthorn on the site.*

*The older fruit trees are thought to have grown accidentally from discarded apple cores, they produce well and the fruit is edible but not particularly tasty. [...] FIFE0189*

*Planted on a previously derelict site where a house was knocked down (after being unsaleable due to being the site of a double murder). The site is mown by the council, the trees and small circular beds are tended by CLEAR. FIFE0213*

*This is the site of the [demolished council] flats. [...] CLEAR have actively planted this winter 2015-2016 with subsequent additional planting (of sea buckthorn, raspberries, larger replanted fruit - plum and cherry trees). Two ponds have been created for wildlife FIFE0202*

They often combine fruit trees with native trees in hedge and forest-type garden plantings. They have also established a number of 'wild', minimally managed orchards (mostly in the Ness Brae area), some of them with a large number of fruit trees:

*A row of trees planted on a grass verge among a hawthorn hedge. some of the trees are struggling, especially those that have been vandalised FIFE0225*

*Linear foodbearing hedegrow, filling gaps left by dying or removed hawthorn [damsons, some apples]*

*Planting [...] by CLEAR 2011,2012 with some replacement subsequently. FIFE0210*

*A mix of woodland species and fruit trees were planted here by Clear, some trees are well established and producing well, some are struggling. some of the trees are rather closely planted. The ground can be boggy in places and some of the trees have had to be moved from the wettest areas. FIFE0226*

*One of the CLEAR-planted wild orchards planted 2010-14. The site was formerly sloping parkland only 50 metres from the sea (a stretch affected by coastal erosion), owned by Wemyss Estates and managed by Fife Council. However, mowing stopped and the slope has been planted by native tree community woodland (higher up the slope) and orchard lower down the slope, partially sheltered from the sea by older woodland.*

*The trees suffer from deer damage and some vandalism but many are surviving and now yielding fruit. the wild orchard concept means they receive only limited maintenance - some weeding, checking of protection and occasional pruning. FIFE0159*

*This is a CLEAR planted and managed 'wild orchard'. It is planted along wide uncut grass verges adjoining the Fife Coastal Path (and between two sections of path) amidst plenty of brambles and nettles which provide some protection. This was planted between 2010-2015. Initial trees were Scottish varieties supplied by Butterworths with a predominance of apple. There is one older apple tree. Some trees have stakes remaining and also mesh guard (close to the park), but the brambles, nettle and long grass provide the best protection against vandalism. The land is owned by Wemyss Estates but managed by Fife Council and the Fife Countryside & Coastal Trust (path). The mainly linear orchard (2-3 trees deep) is in three strips divided by grass paths. FIFE0158*

*This is a CLEAR community 'wild orchard' site first planted around 2009-10. There has been some additional planting and gapfilling since to replace dead trees or ones damaged by deer. [...] The trees on the site are increasingly threatened by rapidly bindweed, which CLEAR tackles every summer FIFE0157*

*One of CLEAR's 'wild' orchards, planted among wild plants, along a fairly well hidden path. Often competing with high undergrowth and given fairly minimal management. The more vigorous trees are doing well but some trees are struggling due to deer damage and competition with wild plants. [...] FIFE0233*

*This is the main Ness Braes site, occupying a large triangular area on slightly sloping ground between two paths. CLEAR has been planting this area with fruit trees since 2010, with some replanting of damaged or dead trees. Recently a sea buckthorn border has been planted around this. [...] FIFE0156*

As can be seen from the above surveyors' comments, orchards in public locations do tend to suffer from vandalism, trees not doing well due to inappropriate sighting, and from deer damage. However, many of the trees are doing well, most of the sites are being maintained and damaged trees are often replaced. For example:

CLEAR Buckhaven's Community Growing space contains one of their most well maintained and used orchards, alongside other food growing areas:

*CLEAR's Community Growing Space; a very well designed, well tended and productive community garden.. Most of the trees are planted in straight rows in beds also growing herbs and fruit, a few apples are trained as stepovers. The community garden also has vegetable bed and a polytunnel. Volunteers work there 4 days a week, school children are involved (though I do not know how often) and there are regular community open days and courses. [...] FIFE0190*

Fruit from this and many of the orchards is well used, e.g.:

*Fruit is used by the many volunteers who work in the community garden, it is also sold and given away, both fresh and processed by CLEAR via their shop and at community garden open days. at times they have more fruit than they can use. FIFE0190*

*This is a community 'wild orchard', planted and maintained by CLEAR and in a well used park/path so fruit tends to be harvested. FIFE0158*

*The fruit used is mainly from the young trees, the fruit on the older trees is not very palatable. the fruit is used by Clear, both by their volunteers and sold and given away in their hub, fresh and processed products. FIFE0189*

Surveyor(s) noted three other orchards in private gardens which were also planted by CLEAR Buckhaven, e.g.

*Trees planted by CLEAR in a local residents garden, in a row on the lawn by the garden fence [...]. FIFE0231*

A garden around the council house flat of one of the CLEAR Buckhaven volunteers contained an impressive and beautifully maintained 29 fruit trees (see photos), a living testimony to the orchard skills and passion around orchard development in this organisation.

There were nine other impressive new community orchards in the South Central Fife area:

*A short strip of trees underplanted with currents and lavender within a large grassy area. The bed is mulched with bark and any maintenance of the floor is done by hand. Fab [Floral Action Burntisland] planted it with the help of school children and hope the children will pick the fruit as they pass on their way to school. They intend it to be an attractive easily repeatable model and hope to do more, either on the same site or on others around the town. FIFE0203*

*Ten trees on what looks like a piece of public land by the main street in charlestown. I saw this orchard in passing and have not been able to find out any information about who planted or maintains it. The trees came from 'apple tree man' the orchard looks less than 5 years old and well maintained. FIFE0238*

The Large walled garden at Ravenscraig park used to be a council plant nursery it became a community garden project around 4 years ago. As well as the community garden area and the orchard [run by Greener Kirkcaldy] there is a large area of allotments. There are 2 volunteer sessions a week, these are well attended and the orchard looks very well maintained. There is an open day and apple day at the garden at least once a year. As well as the fruit trees and soft fruit a mixed hedgerow was also planted [...]  
*Much of the fruit is taken away by the volunteers, some is used for juicing during the apple day, some is sold in the greener Kirkcaldy shop. FIFE0222*

*These trees have been planted as part of a wetland and edible landscape, created by Fife Council, Greener Kirkcaldy and School pupils in [Dunnikier Park]. [...] it looks as though this landscape is still under development. Of the over 80 trees originally planted only around 40 are surviving due to severe deer damage. The deer damage, the youth of the trees and the time of year made it difficult to identify some of the trees and record the number of each species, the vast majority are apple with a significant number of plums, one damson, cherry and quince. The trees are mostly in 3 circular patches, one of these is a mulched forest garden bed with a herb and soft fruit layer. Greener Kirkcaldy volunteers maintain this site one afternoon a week. FIFE0223*

*A community orchard planted by EATS [Rosyth] funded by the tesco plastic bag fund. EATS have funding for several paid gardeners and the orchard looks well tended. The community were involved in the orchard planting and in its maintenance e.g. the bulb plating was also a community day.  
very new orchard so there is no fruit yet but the intention is that all fruit will be used by the community. FIFE0216*

*A short row of apple trees planted in the grounds of a church near by EATS' Centenary community orchard, planted by EATS at the same time. FIFE0217*

*A community orchard planted at Lochore meadows park in 2009. The site is accessible to the public. It is deer fenced and all the trees have protection. There are 65 trees in total,*

*though a few of these seem to be dead, some struggling but the site looks generally well maintained. Tree id was difficult as some of the trees were small and struggling and largely obscured by their tree guards. The original blog post on the orchard talks of 30 pear, apple and plums, however there are many more trees now and some of these are definitely mulberry, it may be that there were other species I failed to identify. I have received no reply from the orchard keeper yet, if more information becomes available, e.g. a species or variety list, it will be added to the folder. FIFE0161*

*Community orchard planted in Townhill country park by Soroptomist International of Dunfermline and Fife Countryside Rangers in 2010. The site is accessible to the public. [...] some information was available in a biodiversity Plan produced for Fife Council Parks & Countryside*

*[http://publications.1fife.org.uk/uploadfiles/publications/c64\\_OrchardTownhill.pdf](http://publications.1fife.org.uk/uploadfiles/publications/c64_OrchardTownhill.pdf). There are clearly a number of gaps in the orchard where trees have been lost, most likely to deer damage, I also suspect the ground may get boggy but am not certain as I visited during a dry period. Some trees appear to be doing very well, some are struggling. FIFE0162*

*The [Ecology Centre] orchard was established on a piece of land, purchased by Kinghorn through the Community Right to Buy and funded by the Scottish Land Fund. It was planted on 20th March 16 by volunteers who signed up beforehand so all the trees could be allocated, the funding for the trees came from a grant from Tesco's. There are also native trees such as willow, holly and hazel planted around the boundary. FIFE0205*

*Originally a Fife Diet Project [now Broomhill Gardens Community Group] which opened in spring 2011, Broomhill gardens is a combination of community garden and allotment site. The community Garden areas, where the trees are planted, are mostly used by the weekly kids Garden club and occasionally by other groups such as the rainbows. The garden club often use the produce in cooking activities such as making stewed apple or jam and families take some of the fruit home. Originally 17 trees were planted but only 10 survive. The apple trees are usually pruned in winter by a volunteer, the plums and cherries have not been pruned recently and the one surviving cordon looks very unruly. FIFE0204*

Surveyors noted only a couple of orchards in decline:

*Largely abandoned and away from the main gardens of the house (The [house] has another orchard which has been surveyed), perhaps originally belonging to a derelict cottage on the estate. The trees are so covered in ivy it was difficult to establish exactly how many there were or how many were still alive. The owners do sometimes remove ivy from them but have not managed this year. There was evidence of some fruit, but without some renovation I would not expect the trees to survive more than another year or 2. The [house] has a large and impressive garden which they do open by request. FIFE0220*

*Believed to once be a small orchard there are now only 2 old trees remaining, a plum tree died and was removed a few years ago. The current owner does not use the fruit or manage the trees in any way. [A] cottage and [a] house are on the same land and are currently up for sale. FIFE0038*

*The walled garden is listed (the walls and gates) and was built around 1900, in the grounds of [a large estate] house, [...] some of the trees may date from then. It was a private house until 1947 when it became a convalescent home for miners wives, then a school, it is now flats. Much of the original estate has now been built on and the garden is used by the residents of the flats and house for recreation. I do not know whether the maintenance of the orchard is covered by all residents of the estate, or just the residents in the orchard house flats.[...].*

*The trees have had some maintenance, enough to keep the garden, which is otherwise grass, neat, but do not seem to be managed for fruit production or health of the trees. Some of the trees are clearly very productive but a few are dying.*

*This would be a great opportunity for an orchard group to restore an old orchard.*

*FIFE0237*

There was one estate garden which contained a mix of well-kept and impressive veteran fruit trees alongside younger plantings:

*7 veteran trees remain or what was a large orchard, in part of huge garden grounds. The current residents found an old map of the orchard on a piece of asbestos, it is displayed in their greenhouse and can be seen in one of the photos. They have gradually been losing more and more of the old trees to a mixture of age, drainage problems and some neglect (some of the pear espalier have been crowded out by other shrubs). They are gradually replacing the older trees with younger ones. The owners do have open garden days, most often by request.*

*4 apple trees are well over 50 yrs, probably ~70, The Espalier pears are thought to be 100 yrs old. damsons are around 30 years old. the remaining trees are 4 or 5 yrs old espaliered pear, the only one of the 3 remaining pears in reasonable health. Thought to be at least 100 yrs old. Girth is 82cm. see photo. FIFE0045*

Surveyor noted that some of the neglected or unused garden orchards are being restored to productivity, including that of the historic Culross Palace:

*The very neglected house and garden were bought by the current residents 2 years ago and they have been renovating the house so the garden remains largely neglected and very overgrown. Many of the old fruit trees were cut down at some point by previous residents, 5 or 6 trees are resprouting from old stumps, there may be more but the garden is very overgrown. some of these have regenerated strongly and are producing well, some are struggling or also sprouting from rootstock. The four older fruit trees which have not been cut down (2 apples and 2 pears) are very productive. the residents hope to do more work on the trees and garden this year. FIFE0208*

*The walled garden was mostly bare when a group of individuals took it on, signing a landshare agreement with the owner. The topsoil had all been removed and piled in a corner. It is now a community garden growing fruit and vegetables, the 3 or 4 yr old fruit trees are all trained as cordons along one wall. The group have considered growing standard trees outside the walls and may do so if they can get more funding, though these would need protection from a donkey and a llama. FIFE0188*

*A terraced garden with a terrace of older fruit trees, mainly apples, one pear. Four are trained against the wall of the terrace, two apples are standard trees. Younger trees are planted on the lower terrace over the past 8 years. The current Occupants have been in the house for 17 years, prior to this it was owned by the MOD and the trees were neglected, the Espaliers very overgrown. The current occupants have brought them back under control and prune them regularly.*

*They have cleared an area of sycamore near by and are hoping to plant a mix of native woodland and fruit trees. FIFE0043*

*A walled Garden on a south facing slope behind Culross palace, recreated as a late medieval food and flower garden. There is one area named 'the orchard' where the dumpy hens also roam, but fruit trees are spread all over the garden. As well as fruit trees in the walled orchard area, some of which are trained against the wall. there are trees in the main raised beds (these are the younger trees) trees trained against walls, both outer walls, internal walls and terraces, and three rows of fruit trees on a steep slope on the east side of*

*the garden. The garden is rambling and has many different sections and terraces and I am not sure I identified and counted every single fruit tree, the head gardener herself was unsure where they all were. The apples are harvested, stored and sold to visitors, the head gardener is exploring more ways of using the apples.*

*The head gardener thinks the oldest trees were planted in the early 90s however there is some uncertainty. FIFE0187*

Surveyors noted a number of private small orchards, ranging from mid-age to newly planted, indicating general interest in orchard keeping/food growing in the area:

*A small garden with low walls, just high enough for small espaliers. The owner intends to plant several more fruit trees, mostly trained as espaliers against the walls. The owner plans to develop the garden into a permaculture/forest garden, so is growing fruit herbs and perennial vegetables under the trees. When I surveyed the garden there were hens there but these were only visiting for a couple of weeks, the orchard keeper may get ducks this year. FIFE0224*

*Mainly dwarfing trees in a small garden with lawn, pond and vegetable and fruit beds. FIFE0218*

*A small, crowded orchard planted by the house on craigencalt farm by kinghorn loch. the current residents planted it almost 30 years ago. The trees are producing a lot of fruit. A great deal of birdlife was seen in the orchard. FIFE0206*

*This orchard was planted by the current residents 28 years ago. Until a couple of years ago it was in the care of the ecology centre for 15 years, the keeper says this resulted in inconsistent care, over pruning and under pruning due to a variety of volunteers practicing on it. It is now back in the care of the farm, though they are not confident in their orchard care abilities. Some of the trees are in good condition and producing well, others are looking very poor, several I think are shooting from the root stock. FIFE0207*

*8 trees in a large walled garden, most are in a bed mulched with wood chip fenced off from the chickens, the others are in cultivated beds near by. the perry pears seem to be the favourite of the owner. The owner is very interested in orchards and has been involved in community orchards and orchard groups in the past. Perry pear varieties are: Brandy, Thorn and Hendre huffca [used to make perry!] FIFE0229*

### **North East Fife along the Tay (surveyed by PLANT)**

Surveyors notes point to the Earlsall Castle orchards being one of the most impressive historic sites in the area with an extensive collection of apple varieties. The grounds contain four separate orchard sites:

*The garden is part of the grounds of 16th century castle. It was the first commissioned by Robert Lorimer (after his first work on a family home of Kelly Castle) in 1890s. The vegetable garden and orchard plantings contain many of original apples and pears. The garden was a bit neglected recently until about 18 years ago when new owner [...] set about restoring it. To keep with original design, many fruit trees were replanted with pre-1900s varieties, large proportion of them grafted from existing trees. There are over 100 fruit varieties in the garden (predominantly apples). The gardener [...] has put a lot of effort in getting the varieties of old trees identified. She's also gradually reduced the size of the larger trees in order to make them more manageable (mostly in the original Orchard area in the South). Vegetable garden has an original old multi storey apple store in the North wall. The garden has been open to the public as a part of the Scottish Open Gardens scheme. As of Feb 2016 the castle is for sale.*



*A print with a layout of the garden has been included on p. 19 in the New Book of Apples by Joan Morgan and Alison Richards [...]. It still represents the layout fairly accurately. [the grounds contain 3 different orchard sites] FIFE0069*

*This part of the orchard has 3 sections: vegetable garden with espallier trees around each of 3 beds, veg garden back wall (both contain 1890s and 2000s plantings) and a new Kitchen Orchard [...] Original varieties were those available in 1890s and any new plantings are either grafts of the originals or pre-1900s varieties in order to preserve the original character of the garden. FIFE0511*

*This is a new planting in previously large grassy area (pasture?) to the East of the Earlsall castle and part of the Earlsall estate together with FIFE0003 and FIFE0069. FIFE0003*

*This is the original orchard in the south of the walled garden with new plantings on the outside of the south wall. Orchard is part of Earlsall Castle grounds alongside FIFE0069 and FIFE0511. [...]*

Surveyors also noted a number of well-maintained orchards in farmhouse and domestic gardens, many of them containing a substantial number of older specimen trees:

*Keeper is planning to replace older trees one by one as they are quite old now. The orchard used to be underplanted with fruit bushes - intermingled with the trees - when the keepers moved. Those were removed as family could not eat through so much produce. FIFE0508*

*The orchard contained a very large old pear tree when the keeper first arrived at property >50 years ago. It was cut down as the pears were not very nice.  
Plums were marked this year with some disease - keeper not sure what this was. Normally plums cropping well.  
The large old walnut might be slightly more than 20m away from the rest of the trees and outside the walled area, next to the house.  
Plums sold at a farm shop by keeper's daughter.  
3 apple eaters planted from seed from New Zealand Pink Lady 15 years ago  
8 cookers planted over 50 years ago  
3 plums planted 40 years ago  
Walnut 100 years old  
3 old plums already there when keeper moved in >50 years ago FIFE0133*

*A wonderful range of ages, varieties and types of fruit both North and South of the house. Very nice espalier arch newly planted with 10 Laxton superbs. FIFE0139*

*Keeper has purchased a press and hopes to make cider next year. The trees produce a huge amount of fruit, probably the highest yielding in the village. FIFE0519*

*A lovely mature domestic orchard with well cared for trees. One plum lost a few years back and the remaining one broke under weight of fruit in 2015.  
All trees there and mature when keeper moved in 45 years ago. FIFE0523*

*The garden used to be a market garden in 1950s. Many trees remain from that time. It continued to be a productive family garden after the parents of the current keeper took it over. There used to be a large veggie patch and glasshouse at each end of the house with white and black eating grapes. At the moment only the trees remain.  
Owner would like to learn more about the older apple varieties and cider making.  
FIFE0549*

However, there were some indication that some mature orchards, although still productive, may decline in the near future due to a number of factors:

*Hives were introduced to the orchard 2 years ago. Some problems with honey production as positioned in a rural area and it highly depends on what crops are put in nearby. Neither the keeper nor the gardener able to prune trees properly. More trees are likely to be removed as they cause issues - e.g. crab apple which overhangs a shed roof.*

*All trees apart from the peach were in the garden at keepers arrival 23 years ago. Peach planted 9 years ago to replace the keepers previous planting which died of some disease.*  
FIFE0107

*The house used to belong to a sea captain and was built in 1800s. Keeper assumes that most of the trees planted then. One of the apples is a red eater - unknown variety but called a snow white apple by the children as is a lovely red colour with shoots of red through the flesh. Used to have a big veggie patch and using fruit a lot when the whole family lived there over 35years.* FIFE0516

*The place is subdivided for development of 1/2 of the plot - the part with the orchards is going to be developed so likely that trees will be cut down.* FIFE0532

*The garden is in 2 halves - one neglected and the other well maintained. The neglected garden likely to be cleared soon as flat getting sold.* FIFE0541

*Garden of two interconnected sections. Main garden around the house well maintained with a number of v old trees. There used to be a proper orchard in there when family first arrived at the house. Many needed to be cut down. Nextdoor there is a garden that was cleared for a vegetable garden, now slightly overgrown with weeds and brambles. A permaculture garden is being set up there with a number of new trees planted. A native hedge of sloes, wild roses and rowans was planted. There used to be a number of old pear trees next to the wall dividing the gardens which were cut down recently, trunks still remaining. The pear planting pattern is similar to other gardens in vicinity.* FIFE0546

*This orchard was planted by [the keeper] some years ago but has since been neglected. [the keeper] planted the cherry trees which have grown quite large and [the keeper] considers that the cherries have crowded some of the other fruit trees. The apple trees had produced a good crop of fruit but it was not clear there had been much other fruit. The two cob nut trees were lovely and a good size (4m) but no evidence of nuts.* FIFE0001

*The keeper has only been resident at property for around a year. The house a rental and it is a Registered Children's Home and the keeper is a social worker working there. He would be interested in making more of the trees and the fruit but needs help. The keeper is not certain of when to pick the fruit and how to use it. Some fruit was used in cooking but it is obvious that most of it is being left on the ground. A gardener maintains the garden, looks like the lawn is well maintained and that the trees are pruned to some extent. Small fruit implies that the trees may need some fertilisation. The resident does not know how to maintain the trees but would like to learn so that they can take advantage of the orchard.* FIFE0125

Abandonment and neglect of orchards does not mean that they go unused as illustrated by one of the sites in the area:

*The orchard is abandoned but fruit is used by the locals as reported by a local resident and evident from paths trodden between the trees in the understorey weeds. There is an easy access to the back of the orchard from a car park next to an industrial shed.*

*Although abandoned and generally unkempt, somebody put chickenwire guards around trunks of most of the plum trees to protect from grazing damage. FIFE0105*

Surveyors noted a couple of walled gardens where orchards have disappeared:

*The walled garden used to be attached to the [...] Estate House which burned down in early 1900s? Old photos show mostly an ornamental garden so it looks like it never really contained a substantial planting of fruit trees. Remnant trees restricted to those trained and planted at walls and spaced out >20m apart. The rest of the garden is grassy and I have seen cattle and chicken grazed there before. [...] FIFE0510*

*House is empty. Has been used as a rental property for many years with little maintenance. Trees in main walled garden all gone. Trees now only on a small strip to the South of the walled garden. FIFE0524*

Surveyors also noted efforts to restore and establish new domestic as well as estate garden orchards:

*This is a newly planted orchard inside a newly planted beech hedge in a different location to the one marked on the map. The whole house and grounds being redone. Trees still had labels on them but as keeper not present I surveyed from behind the gate so could not see variety names. FIFE0076*

*The house has been renovated and gardens relandscaped but this island of the ancient pears has been preserved in the middle of the driveway. The property has recently been renovated including a lot of landscaping and really well maintained gardens. FIFE0075*

*The garden used to be the fruit and vegetable garden to an Edwardian villa. 30 years ago there were about 10 very old fruit trees. All but one have had to be removed. [now replaced with new fruit trees] FIFE0513*

*[New] Garden in an old quarry. FIFE0514*

*The keeper planted all the trees and selected some old varieties and those suitable for Northern climate. The soil is v wet over winter so growing may be a challenge. FIFE0500*

*Keeper selected and planted the trees. He chose varieties which were unusual and not available at the shops apart from Elstar. He ordered from a list from a nursery from South of England FIFE0528*

*The keeper was in the process of pruning and clearing ground. Not experienced at fruit tree maintenance and it looks like it's the first time something was being done since they moved in a couple of years ago. FIFE0064*

*Property has been empty for around 10 years, however previous owner`s (deceased) son has been keeping the garden ticking over. New owner has just moved in and taken over the management. FIFE0526*

A number of keepers noted how they make wildlife welcome in their orchards:

*[...] One of the apples retains fruit on branches and birds tend to feed on it. FIFE0529*

*The keeper leaves some fruit on the ground and on the trees for the birds, e.g. fieldfares and blackbirds. FIFE0527*

*2 dead plum trees- kept for supporting climbers and for wildlife FIFE0539*

There were a number of new community and school orchards in the area, some very well maintained:

*17 small trees planted and staked but identity not possible as overgrown and stunted. many small trees just alive - protection has been removed or blown away and ties gone in some cases - much long grass in tubes where the protective tubes remain intact. FIFE0174*

*The orchard is a part of Fruit Tree Walk planted by PLANT on council lawns along Scotsraig drive. This part was planted as part of phase 1 in a community event alongside a native hedge (details included in the attachments). It is being maintained by PLANT members.*

*This is a public orchard, meant for harvest by local residents. So far there has not been many fruit as trees are young. We try to pick and distribute at events and at the Tayport Community Garden when available. FIFE0503*

*The orchard is planted as fruiting hedge along the Tayport Community Garden fence. Partially underplanted with fruit bushes. Neighbouring woodland contains a number of edible cherry trees. Most trees and bushes supplied by Appletree man and plants with purpose. The selection focused on Scottish varieties. The planting was done in spring 2016 for Mother's Day. FIFE0506*

*The garden was established by the Tayport Playgroup which is a voluntary organisation with children 2-4 y/o. [...] the children grow vegetables, flowers and fruit in this garden and use [...] grounds for outdoor play. FIFE0501*

*trees in walled school garden, sheltered from wind FIFE0178*

*It looks like a well used and equipped wildlife area - the school website indicates that it is used regularly by them. The fruit trees are a bit neglected. [...]. FIFE0184*

### **North-East Central Fife (surveyed by Sustainable Cupar and Transition St Andrews)**

The surveyors notes were very brief in this area but photos provide an excellent summary of types of orchards encountered in the area.

Surveyors noted a number of aging orchards in decline:

*Remnant of older orchard (0.17ha). Five old trees, supplemented by four new in a garden for a newly refurbished property; formerly grassy land taken up by walled gardens as part of grounds of [the] Estate; now estate owners residence adjacent to woodland and farmland FIFE0032*

*No one around but the gardener gave me access and said most trees against the wall will be coming out soon. the trees are used more as an architectural feature of the garden than for their fruit! FIFE0119*

*This is a nice, good sized [field] orchard with a mixture of quite old trees, a number of different varieties, (from looking at different windfall), some of them around the perimeter walls & the majority open orchard trees. [...] It suffers from a lack of maintenance to the trees in terms of pruning, removal of rootstock growth etc. FIFE0008*

*[...] property recent new owner [...].Head gardener not available at time of survey. Walled garden neglected [...]. FIFE0009*

There were also some sites where orchards have disappeared:

*No fruit trees now present. We were told by [the person] who prunes the trees at [the] House that they had been cut down some years ago FIFE0085*

*SEVERAL OLD TREES WERE TAKEN OUT BY OWNER AFTER THEY BOUGHT THE HOUSE FIVE YEARS AGO. THE ONLY OLD TREE IS POSSIBLY A PLUM BUT IS NOW DEAD.  
THIS SITE IS NOT AN ORCHARD NOW. FIFE0087*

*[...] Only 3 or 4 fruit trees present (mostly apple). According to a neighbour most of the fruit trees were cut down some time ago. FIFE0122*

On the other hand, there were also some older orchards in excellent conditions, and some being newly planted or regenerated:

*A neat and tidy old orchard with canopies of trees touching each other, a lot of windfalls and a lot of fruit in the trees FIFE0018*

*Current owner has been there six months and has plans to plant a new orchard in a different part of his garden. FIFE0094*

*There is a polytunnel and raised bed in the orchard, both used for growing vegetables. After some years of neglect, the orchard has been actively managed for the last 2-3 years. It is planned to plant more apple and pear trees and also blueberries. [The keeper] is very enthusiastic about the orchard survey and keen to keep in touch with developments. FIFE0121*

Among the productive older estate orchards, Cambo Estate walled garden orchard seems like one of the most impressive. Here are the notes from their Head Gardener:

#### *Context*

*The Cambo Orchard is located and integrated into the 2.5 acre walled garden. We grow Apples (Cooking and Eating) A couple of pears and some plums. We have a couple of pears on the a south and a west facing wall all the rest of the fruit is free standing. The walled garden traditionally has produced fruit and vegetables for Cambo House. It is not really a productive intensive orchard but rather part of a wider ornamental garden. Many of the trees are very old and some must be around 100 years old. Some of the trees have climbing roses through them and are not used for production. Most but not all of the trees are labelled.*

#### *Maintenance*

*The trees are spur pruned between Late December and Early March. Every 3-5 years potash in the form of ashes from the fire are topdressed in late winter. The base of the trees are usually mulched with fine grade composted bark They are often combined with woodland edge planting and spring bulbs. Many of the trees have canker. The trees are not removed as they are an important part of the aesthetic of the garden. Cutting tools are dipped in Jeyes fluid as we go from tree to tree. 15 years ago the trees received a lot of formative pruning as they were overgrown. This was carried out gradually over 4-5 years to avoid over vigorousness associated with pruning too hard.*

#### *Storage*

*We also have an apple storage shed where there are shelves with wooden slats for ventilation. We often wrap the apples in newspaper when storing.*

*Use*

*We use a large proportion of our apples for juicing at events and making chutney as part of a small social enterprise run by adults with learning disabilities. Some are also eaten by family, volunteers and guests staying in Cambo House.*

*Many of trees over 100 years old FIFE0401*

There were also several community and school orchards in the area (also see photos), some of them very productive:

*A couple of large old apple trees, and one big old 'crab pear' tree are the most notable individual trees, all still producing fruit. Very abundant orchard overall. Pruned regularly. Some very new trees planted in last couple of years. Bee hives located within same walled garden, and orchard managed with bee foraging in mind. FIFE0098*

One of the keepers shared a lovely orchard memory with the surveyor:

*The keeper pointed out 'Story Corner' under the damson trees where they used to read and tell stories to her children and friends. FIFE0108*

## 8 CONCLUSIONS

The results presented above, and also in the following photographic record, lead to the following conclusions:

A total of 196 orchard sites were surveyed, of these 174 were found to be intact orchards.

The total acreage of orchards remaining in this area was found to be 27.7 ha and the average area of each orchard was 0.17 ha.

The survey showed that while a small area of orchards have been lost, this has been more than offset by newer orchards.

Most of the orchards contain less than 30 trees and are in a domestic setting.

Five larger orchards of commercial size are recorded.

Though apple dominates, most orchards contain a diverse mixture of fruit species, reflecting their domestic use.

The new and young tree stock dominates but there are significant numbers of mid and aged trees.

Veteran tree features indicate the orchards contain high levels of biodiversity.

The majority of orchards have some or active management, and this is at a higher rate than typically found elsewhere in Scotland.

Many orchards have new plantings and younger trees, and this shows orchards renewal is occurring.

Soft fruit and also vegetables are grown in a significant minority of orchards.

Most fruit is used for family and friends, some is sold commercially and some is left to waste.

Livestock is grazed in minority of orchards, these mainly being fowl.

The qualitative data demonstrates the depth of history; cultural, economic and otherwise, that this area is custodian to.

To conclude, Fife contains a large number of small orchards, most of which are quite actively managed and from which the fruit is used within the domestic setting. There are a handful of commercial sized orchards.

## REFERENCE LIST

Hayes, C.W. 2004. *Taking Stock: Newburgh's Orchard Heritage. Report on a Mapping and Stock Survey of Orchard Trees in Newburgh in 2003.* Report to Newburgh Orchard Group. Available [www.crispinwhayes.com/projects](http://www.crispinwhayes.com/projects).

Hayes, C.W. 2010. *Orchards of Fife's Tay Coast: 2009 Survey to Determine Location and State.* Report to Fife Coast and Countryside Trust. Available [www.crispinwhayes.com/projects](http://www.crispinwhayes.com/projects).



FIFE0209 LPrintersafter (3)49.jpg



Plate 001. One of CLEAR Buckhaven community orchards planted at Levenmouth Printers site.

FIFE0211 GardenOrchard.JPG



Plate 002. An impressive garden at a council flat in Buckhaven, host to a young mixed orchard of 29 fruit trees.



FIFE0412a.JPG



Plate 003. A community orchard planted by Anstruther Primary School and community.

FIFE0413.JPG



Plate 004. A small community orchard planted as part of Anstruther Edible Routeway.

FIFE0159 LwrNessBraes (1).jpg



Plate 005. Another CLEAR Buckhaven orchard site at Ness Brae, formerly a regularly mown slope prone to erosion. It survives and fruits well despite occasional vandalism. These wild orchard concept means they receive only limited maintenance - some weeding, checking of protection and occasional pruning.

FIFE0088 TWO.JPG

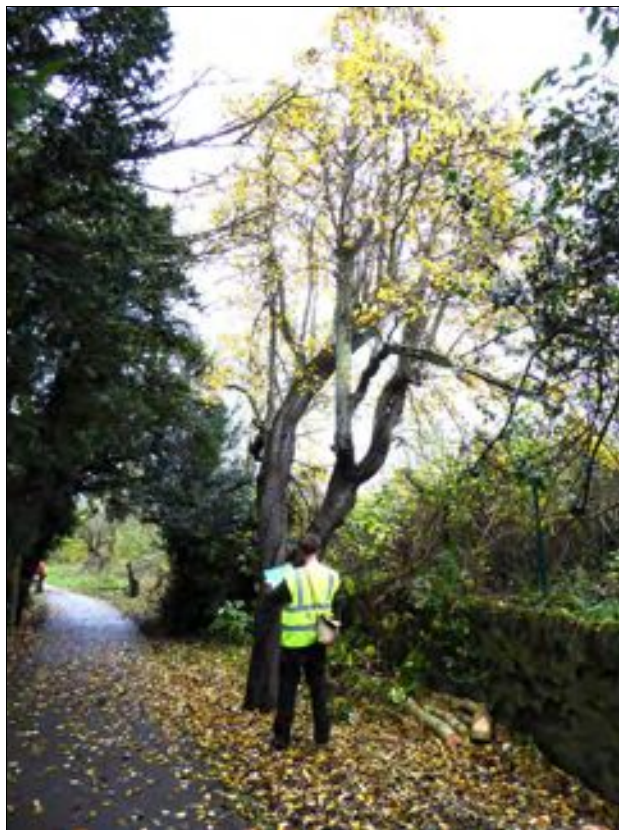


Plate 006. Old pear trees within a newer planting of a mixed community Orchard Walk in Cupar. They used to be in pasture for herd milking cows kept at the Millgate.



FIFE0086 NO2 VETERAN (1).JPG



Plate 007. One of the unmanaged veteran trees in a border of a well-kept domestic garden.

FIFE0157\_ViewforthStairsnov153 (6).jpg



Plate 008. A large community 'wild orchard' first planted around 2009-10 by CLEAR Buckhaven at the foot of Forthview Stairs in the Ness Braes area.

FIFE0301 (2).JPG



Plate 009. A large community orchard planted and managed by Fruit and Blossom group in Cupar. The orchard contains a graft from a veteran pear in the Cupar Orchard Walk. There is also a graft of Lady Henniker from Earls Hall Castle orchards.

FIFE0082 Crab Apple.JPG



Plate 010. A crab apple tree in a large walled garden orchard. Soft fruit planting visible on the orchard floor.



FIFE0082 Espalier trees.JPG



Plate 011. Young espalier fruit trees in a large walled garden orchard. The orchard consist mostly of young trees with several well maintained veteran specimens.

FIFE0079347.JPG



Plate 012. Very healthy Nectarine, Peaches and Fig in a glasshouse of an old estate walled garden. This relatively young orchard also hosts 50 apple trees.

FIFE00960352.JPG



Plate 013. Old plum trees in a small farmhouse orchard. Trees extremely gnarly being mostly maintained by sheep.

FIFE0081.JPG



Plate 014. A small orchard in an old walled garden. All trees are under 45 years old, the last two veteran trees having been removed recently. There is an old map of the garden, showing its design and plantings in 1838.



FIFE0177 (3).JPG



Plate 015. A small school orchard - pupils use the fruit in cooking classes.

FIFE0009 (2).JPG



Plate 016. A neglected walled estate garden with a remnant orchard.



FIFE0009 (4).JPG



Plate 017. A damaged glasshouse in a neglected estate walled garden.

FIFE0083 (4).JPG



Plate 018. An unmanaged farmhouse orchard in an overgrown garden.

FIFE0202 RisingSun (1).jpg



Plate 019. A CLEAR Buckhaven community orchard planted at a site of demolished council flats in 2015-16.

FIFE0215 CowleySt (2).jpg



Plate 020. One of CLEAR Buckhaven's community orchards. Native trees are planted to the rear of the line of fruit trees (adjoining the pipe factory) and wildflowers planted in front of fruit trees. Many trees have been vandalised due to proximity of a high school.



FIFE0121-1.JPG



Plate 021. A small young orchard in an estate home garden. Neglected until recently but now managed actively with plans for expansion.

FIFE0181-1.JPG



Plate 022. A small public orchard in a reserve area. Part of the orchard floor cleared, but mostly overgrown with brambles and weeds.



FIFE0182-1.JPG



Plate 023. A small orchard in grounds of Stratheden Hospital. The fruit is used in cooking sessions with patients.

FIFE0008 Farm (82).JPG



Plate 024. A sizeable mature field orchard.



FIFE0078n.JPG



Plate 025. An orchard in an old estate walled garden. Apart from 3 cherries and the crab apple all trees are being grown against walls mostly as espaliers or fans, some as cordons. Keeper doesn't like most of the apples so is beginning to replant.

FIFE0401\_2.JPG



Plate 026. A well used orchard in a walled garden of Cambo Estate House. Many of the trees may be over 100 years old.



FIFE0410\_IMG\_0282.JPG



Plate 027. Crail In Bloom community orchard planted in 2015.

FIFE0203\_b.JPG



Plate 028. A small community orchard planted in 2015 by Floral Action Burmtisland in order to encourage children walking to school to pick and eat the fruit.

FIFE0204\_c.JPG



Plate 029. Broomhill Community Gardens combine a small orchard with allotments. Originally opened in 20... as a part of Fife Diet project.

FIFE0214\_d.JPG



Plate 030. One of CLEAR Buckhaven community orchards at Starkies Wood.



FIFE0043\_b.JPG



Plate 031. Part of a small garden orchard brought back to life by current keepers. The mature fruit trees were pruned and new trees planted on the property.

FIFE0503 01-10-2016 17-39-13.jpg



Plate 032. One of the three orchard sites along the Tayport Fruit Tree Walk, a community orchard planted band maintained by a local gardening group PLANT. The young apple trees are in a good condition, well pruned and are starting to fruit. There are also some plums and damsons.



FIFE0506 01-10-2016 15-48-27.jpg



Plate 033. A newly planted fruiting hedge of fruit trees and bushes around the perimeter of Tayport Community Garden, run by PLANT gardening group.

FIFE0507\_2016Planting\_IMG\_7145.jpg



Plate 034. Young fruit trees planted in a wildflower area of a home garden with a large orchard of mixed varieties and ages.



FIFE0125\_GeneralView\_03-10-2016 16-30-04.jpg



Plate 035. A mature and diverse orchard in a walled garden of a farmhouse. Although grounds are well-maintained, the fruit looks very small, and many trees have fallen over, indicating a lack of specific care for the fruit trees.

FIFE0516 03-10-2016 14-39-40.jpg



Plate 036. A mature orchard in a well cared for home garden, some trees likely planted in late 1800s when the house was built. The trees are still very productive and keeper donates most of the apples to the local community juicing event. The trees are not being replaced and likely to decline in the near future.



FIFE0018 (4).JPG



Plate 037. A neat and tidy old orchard in a home garden with canopies of trees touching each other, a lot of windfalls and a lot of fruit in the trees.

fiFe0091.JPG



Plate 038. A slightly neglected and underused orchard at the House of Tarvit, a National Trust property.



FIFE0098butterfly.JPG



Plate 039. A butterfly on an apple in a community group orchard within a very productive walled garden. The orchard and garden is managed with bee foraging in mind.

FIFE0107\_Beehive\_20161010\_164849 (6).jpg



Plate 040. Well maintained farmhouse orchard with beehives.



FIFE0205\_a.JPG



Plate 041. Community Orchard at Kinghorn Ecology Centre, planted in 2016. The orchard was established on a piece of land, purchased by Kinghorn through the Community Right to Buy and funded by the Scottish Land Fund.

FIFE0206\_a.JPG



Plate 042. A small, productive and well maintained 30-year old orchard in a farmhouse garden.

FIFE0207\_a.JPG



Plate 043. A 30 year-old field orchard on a farm.

FIFE0126\_VeggiePatchPumpkinsTall...



Plate 044. A neglected small orchard at a back wall of an old walled garden. The plums and damsons never produce fruit.



FIFE0501\_AppleCordonsAndPear\_IMG\_7233.jpg



Plate 045. A small vegetable garden and orchard established to support outdoor play for a local playgroup.

FIFE0527\_GardenViewApples\_20161019\_101714 (4).jpg



Plate 046. A productive mature orchard in a border of a home walled garden. The garden is managed to be wildlife friendly and some fruit always left of trees or the ground to feed the blackbirds and the fieldfares.



FIFE0519-006.jpg



Plate 047. Very productive apple trees in a home garden orchard. The keeper recently bought an apple press to produce cider from the excess apples.

FIFE0127\_GeneralView2\_23-10-2016 15-09-02.jpg



Plate 048. A mature orchard and a neighbouring vegetable plot in a home garden. Both well-maintained and productive but in danger of being neglected due to the age of the keeper.



FIFE0528 23-10-2016 14-53-25.jpg



Plate 049. A young apple orchard in a home garden. The keeper carefully selected the varieties from an English fruit tree supplier for a range of flavours and properties.

FIFE0065 (2).jpg



Plate 050. A productive and well-maintained farmhouse orchard with many veteran tree specimens.

FIFE0539.jpg



Plate 051. A trunk of a dead plum tree next to a newly planted one in a home garden. Trunks of dead trees were noted in several gardens in the area. They were left in place as host to wildlife, support for climbers or for aesthetic reasons.

FIFE0105-OldRussetGeneralView\_25-...



Plate 052. A recorded veteran specimen apple tree (Russet) in an abandoned but still productive home orchard. Local residents glean much of the apples, pears and plums.



FIFE0178\_PearAndBughouse 25-10-2...



Plate 053. A pear tree in a well-cared for school orchard. The rest of the trees grow in a garden lawn and against the back wall and children use the fruit.

FIFE0523 25-10-2016 16-27-05.jpg



Plate 054. A lovingly cared for home garden orchard of apples, plums and pears with a number of splendid veteran trees. Trees were already mature when the owners moved in 45 years ago and likely date from the time the house was built in late 1800s.

FIFE0508 26-10-2016 16-37-36.jpg



Plate 055. A well maintained and used mature orchard in a walled farmhouse garden. The keeper is replaci... the trees as they become unproductive.

FIFE0208-i.JPG



Plate 056. A neglected home garden with a small orchard currently under restoration by the new owners.



FIFE0529 30-10-2016 13-39-57.jpg



Plate 057. Pebble mulch under an apple tree in a small home garden orchard.

FIFE0534 30-10-2016 14-01-39.jpg



Plate 058. An old pear tree in a home garden with several specimen veteran fruit trees.

FIFE0502\_PlumTrunkMoss\_31-10-2016 15-39-09.jpg



Plate 059. A veteran Victoria plum tree in one of Tayport's home gardens. Circumference of the tree is 120cm and despite its age it still fruits well. A number of trees of similar age were found in other gardens in Tayport.

FIFE\_0174\_1.JPG



Plate 060. A newly planted community orchard. Many trees are stunted and damaged due to lack of protection.



FIFE0003\_OrchardGenViewMiddle\_01-11-2016 10-56-57.jpg



Plate 061. The original orchard site at Earls Hall Castle with a mix of the 1890s and recent apple tree planting... The older trees have recently been undergoing regenerative pruning. Many varieties have also been grafted and grown as sampling in order to preserve them.

FIFE0069\_VegGardenOldEspallierPear\_01-11-2016 10-42-33.jpg



Plate 062. Earls Hall Castle vegetable garden - an example of a veteran espalier tree dating from 1890s.



FIFE0133\_GeneralView1\_01-11-2016 12-16-56.jpg



Plate 063. A large walled farmhouse garden with an unusual planting of apple trees in a form of an tight 'arbour' formation (top left). The orchard also has a number of productive plum trees, including some veteran specimens. Plums are sold by the owner in a farmhouse shop.

FIFE0186\_GeneralViewApril2011Planting\_01-11-2016 12-55-59.jpg



Plate 064. A young school orchard planted in the front lawn of the school. Many trees are damaged or leaning due to lack of protection but most doing well.



FIFE0511\_ 01-11-2016 11-03-18.jpg



Plate 065. A newly planted orchard at Earls Hall Castle - a mix of edible chestnuts and cherry trees in a large lawn.

FIFE0188\_c.JPG



Plate 066. A walled farmhouse garden, managed for food production by a group of individuals through a landshare agreement with the owner. The walled garden was mostly bare when it was taken on but now contains a small orchard alongside vegetable growing areas (see apple cordons in the background).



FIFE0010 (2).jpg



Plate 067. A small established apple orchard at a farm cottage.

FIFE0526 (5).jpg



Plate 068. A healthy young pear tree in a neglected home orchard.



FIFE0540 (2).jpg



Plate 069. A newly planted orchard in a rural home garden.

fife0176.JPG



Plate 070. A sizeable young school orchard - children have access to the area and eat fruit directly from the trees.



FIFE0521\_OverallView\_07-11-2016 14-27-12.jpg



Plate 071. A very much loved wildlife garden containing a productive small orchard.

FIFE0001\_2.JPG



Plate 072. A neglected small farm orchard of cherries and cobnuts at a farmhouse.

FIFE0522\_OverallViewwithOldPearTreePair\_12-11-2016 14-36-13.jpg



Plate 073. A pair of mature pear trees growing alongside some newly planted fruit trees and a vegetable garden in a small well-cared for and productive home garden.

FIFE0535\_GeneralViewUpperGardenPear\_12-11-20...



Plate 074. A part of a large home garden with numerous and diverse fruit trees, many of them with veteran features. The garden is slightly neglected but still productive.



FIFE0544\_CloseupApples\_14-11-2016 15-26-46.jpg



Plate 075. A small mature orchard of apples and plums in a garden of a B&amp;B.

FIFE0133\_OldWalnutGeneralView\_15-11-2016 14-5...



Plate 076. An impressive veteran walnut tree next to a large estate farm house.



Fife0185Dairsie School1.JPG



Plate 077. A small orchard in a school playground.

FIFE0541\_MessyHalfGenView\_15-11-2016 11-04-20.jpg



Plate 078. An overgrown home orchard at an unoccupied house. Despite neglect the orchard is productive and fruit used for juicing by a local community group.

FIFE0546\_TreeInWildflowerMeadow\_ApplePearScul...



Plate 079. Fruit sculptures in a mature garden orchard, set within a wildflower patch under a fruit tree.

FIFE0547\_AppleInBorder\_18-11-2016 14-04-47.jpg



Plate 080. A slightly neglected home garden orchard with a great range of fruit trees, ranging from veterans to newly planted.



FIFE0548\_OlderTreesGenView\_19-11-2016 12-48-15.jpg



Plate 081. A home garden orchard apple trees in a frosted lawn.

FIFE0549\_OlderTreesCloseUp\_19-11-2016 13-54-0...



Plate 082. A veteran apple orchard in a home garden - it used to be a market garden until mid-1900s.

FIFE0216\_b.JPG



Plate 083. A large community orchard planted by EATS Rosyth in 2016.

FIFE0219 morello.JPG



Plate 084. A trained morello tree against a wall in a small, mixed-age orchard in a domestic garden.



FIFE0551\_YoungTreesInBorder20-11-2016 12-16-53.jpg



Plate 085. A range of young apple tree varieties planted in a home garden orchards, alongside other fruit trees, some of them veterans.

FIFE0045\_a.JPG

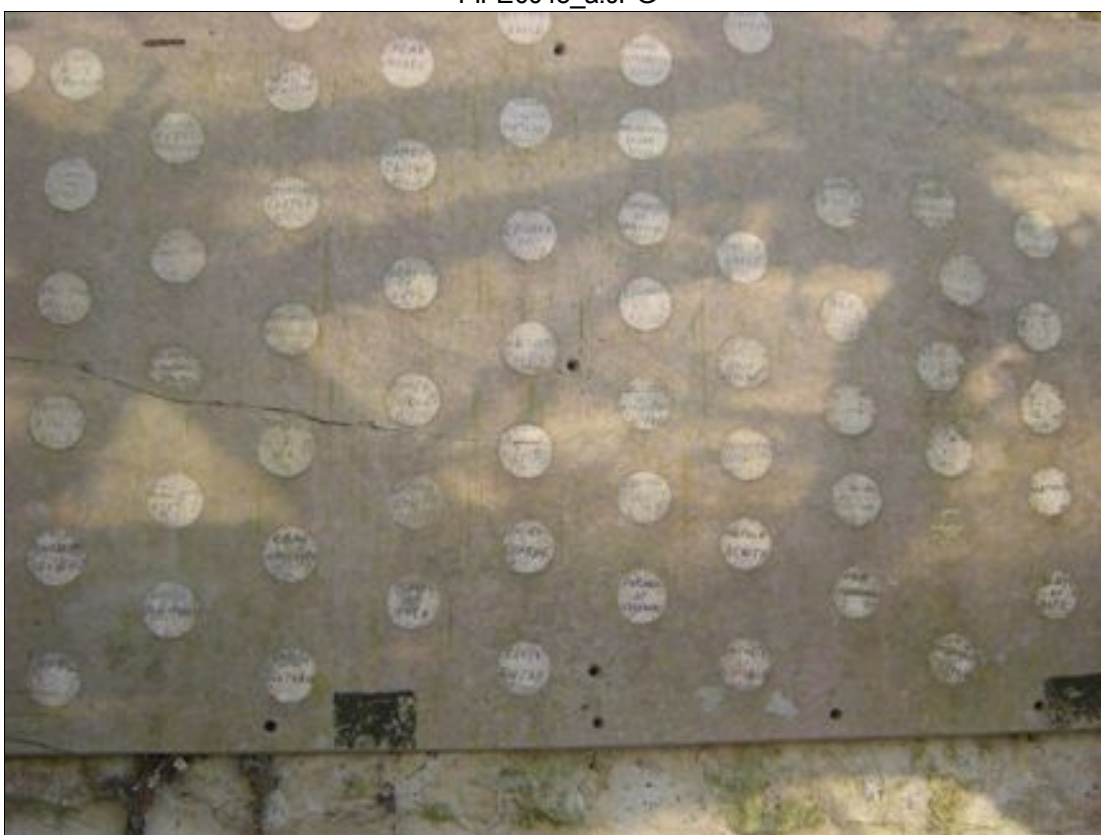


Plate 086. An unusual historical orchard planting plan made on a base of an asbestos board.



FIFE0045\_b.JPG



Plate 087. A well-cared for and well used orchard - in contains a number of veteran trees alongside newly planted ones.

FIFE0045\_m.JPG



Plate 088. A veteran espalliered pear in a well-cared for orchard in a domestic garden, thought to be at least 100 years old.



FIFE0139\_4.JPG



Plate 089. A farmhouse orchard with a wonderful range of ages, varieties and types of fruit. Photo shows a newly planted espalier arch of 10 Laxton superbs.

FIFE0220\_b.JPG



Plate 090. A small abandoned orchard, remaining mature trees overgrown with ivy.

FIFE0221\_a.JPG



Plate 091. The original community orchard planted by CLEAR Buckhaven.

FIFE0552 23-11-2016 14-37-36.jpg



Plate 092. A very small home food garden - still managing to squeeze in an orchard.



FIFE\_0116\_7.JPG



Plate 093. A small orchard of apple trees at a farmhouse. Well protected from livestock but clearly underused as evidenced by the amount of apples left on the ground..

Fife0026 (3).JPG



Plate 094. Remnants of a mature orchard over pasture.

fife0119.JPG



Plate 095. A mature orchard in a farmhouse walled garden. There are plans to remove the veteran trees seen here espalliered against the wall.

FIFE0038\_a.JPG



Plate 096. Two mature, unmanaged and unused fruit trees - a remainder of a small domestic garden orchard.



Fife0154.JPG



Plate 097. A small domestic orchard with a mix of veteran and newly planted trees.

FIFE0222\_d.JPG



Plate 098. A large community orchard planted and maintained by Greener Kirkcaldy in a Ravenscraig Walled Garden.



Fife0513 (4).JPG



Plate 099. An 80 year old Stirling Castle apple tree in a small home garden orchard.

Fife0514(3).JPG



Plate 100. A young fruit tree trained against a rock wall in a home garden newly set up in a disused quarry.

FIFE0189\_damson.JPG



Plate 101. CLEAR Buckhaven worked with Buckhaven Primary School and the local rotary club to restore and develop an area of waste ground, turning it into a productive Forest Garden and orchard outdoor learning space for the local school and community. The space is productive and well used.

FIFE0212\_b.JPG



Plate 102. One of CLEAR Buckhaven community orchards



FIFE0213\_a.JPG



Plate 103. One of the CLEAR Buckhave community orchards planted on site of a demolished derelict house.

FIFE0557\_GenViewOrchardChickens\_02-12-2016 1...



Plate 104. A young orchard in a shady garden, grazed by chickens.



FIFE0223\_c.JPG



Plate 105. A young community forest garden at Dunnikier Park, created by Fife Council, Greener Kirkcaldy and school pupils. The trees have suffered much damage from deer and vandalism.

FIFE0201\_b.JPG



Plate 106. A small fruit tree planting by CLEAR Buckhaven, suffering from vandalism.

FIFE0225\_a.JPG



Plate 107. One of the small community roadside orchards planted by CLEAR Buckhaven.

FIFE0226\_c.JPG



Plate 108. One of CLEAR Buckhaven community orchards - a mix of fruit trees and native woodland species.



FIFE0227\_d.JPG



Plate 109. A CLEAR Buckhaven community orchard planted by school pupils next to a football field.

FIFE0228\_a.JPG



Plate 110. One of CLEAR Buckhaven's 'wild' orchards along a footpath.



FIFE0229\_a.JPG



Plate 111. A small domestic orchard containing several newly planted perry pear trees varieties. Fruit is used to produce perry by the keeper.

FIFE0161\_e.jpg



Plate 112. A community orchard planted at Lochore Meadows Park in 2009. There are 65 trees in total, though a few of these seem to be dead, some struggling but the site looks generally well maintained.

FIFE0021wallpear.JPG



Plate 113. An espalliered veteran pear tree in a small domestic orchard. The keeper estimates its age at 200 years.

fife0090.JPG



Plate 114. A remnant of 20+ veteran trees under a wall of an estate garden. The area is currently used for cattle grazing.



FIFE0190\_a.JPG



Plate 115. CLEAR Buckhaven's Community Growing Space is a very well designed, well tended and productive community garden with an orchard of over 100 apple, pear and plum trees. A few apples are trained as stepovers.

FIFE0190\_c.JPG



Plate 116. Main orchard planing at the CLEAR Buckhaven's Community Growing Space with the trees planted in straight rows in beds also growing herbs and fruit bushes.

FIFE0231\_.JPG



Plate 117. A small orchard planted in a private garden by CLEAR Buckhaven - an a example of several such plantings in the area.

FIFE0233\_d.JPG



Plate 118. One of CLEAR Buckhaven's 'wild' orchards at View Forth.



FIFE0234\_a.JPG



Plate 119. An orchard of 30 trees planted near a block of flats by CLEAR Buckhaven.

FIFE0235\_c.JPG



Plate 120. One of CLEAR Buckhaven's small community orchards.

FIFE0236\_a.JPG



Plate 121. A community orchard planted by CLEAR Buckhaven in a sheltered housing courtyard. Note the unusual mulch for on the orchard floor.

FIFE0162\_h.jpg



Plate 122. Community orchard planted in Townhill country park by Soroptomist International of Dunfermline and Fife Countryside Rangers in 2010.



FIFE0187\_f.jpg



Plate 123. The garden at National Trust for Scotland's Culross Palace contains a large number of fruit trees, scattered around the grounds. It is thought most of them were planted in the early 1990s.

FIFE0237\_b.jpg



Plate 124. An ageing large orchard in what used to be an estate walled garden, now converted to flats. The orchard area is used by residents and maintained but trees are clearly in decline and not being replaced.

FIFE0237\_e.jpg



Plate 125.

FIFE0063.jpg



Plate 126. A small hedge of damsons planted at a farm - they never fruited.



FIFE0064 8.jpg



Plate 127. Part of a young neglected orchard in a house garden. The new owner is in the process of restoring it.

FIFE0156\_P1013932.JPG



Plate 128. A community orchard site (one of several in Ness Braes area) planted and actively managed by CLEAR Buckhaven since 2010.



FIFE0158\_NessBraesTopViewforthSteps (12).JPG



Plate 129. Another community orchard planted by CLEAR Buckhaven. This site contains a linear orchard running along the Fife Coastal Path with well over 100 fruit trees, mostly apples. It is well used by the community due to proximity to the path.

FIFE0218-B.jpg



Plate 130. A small orchard of fruit trees on dwarfing root stock in a home garden.



FIFE0411b.jpg



Plate 131. A community orchard planted in March 2014 using funding from Anstruther Improvement Association.

## ANNEX 2: METHODOLOGY

### A2.1 Methodology for GIS Deskstudy

The following methodology was implemented for the Deskstudy.

GIS system: MapInfo Professional v11.5 software with Data Capture Tool

Identifying locations; Various sources of data to determine orchard locations:

- Visual search of aerial and historic mapping.
- Existing survey data. Sites listed in existing surveys are reassessed.
- Additional existing datasets:
  - ♦ The OS MasterMap 'Orchard' attribute.
  - ♦ RCAHMS-Historic Land-use Assessment database
  - ♦ Regional orchard projects datasets
  - ♦ National Trust for Scotland Demeter Plants Database
  - ♦ Agricultural Census, historic data (not site specific)
  - ♦ Dunn 1885 Apple Congress report (time constraints meant that only a few sites from this marvellous tome were considered)
  - ♦ and other publically available datasets, such as community orchard listings.

A more detailed description of the deskstudy methodology and its results are published in reports for Scotland as a whole. These are available at [www.scotlandthefruit.org.uk](http://www.scotlandthefruit.org.uk)

### A2.2 Methodology for Field Verification

The implementation of field verification is structured as follows:

- Fieldwork is devolved to a local collaborating organisation. Ideally this is a competent local not-for-profit organisation with a track record demonstrating ability to organise and deliver locally.
- Local Facilitator. The local collaborating organisation employs or contracts a person, the Local Facilitator, to be the local interface and organiser of volunteer surveyors. This has been a paid role.
- Recruitment of surveyors. The local organisation uses various channels to recruit volunteer surveyors. The channels include local press, presence at events, membership lists, other organisations, and formal & informal networks.
- Resources are provided by the National Coordinator (in this case Crispin Hayes Associates). Site specific resources such as site location maps and candidate site lists are shared via cloud services with the Local Facilitator. Other generic material is distributed via [www.scotlandthefruit.org.uk](http://www.scotlandthefruit.org.uk) which is used as the project website. This includes the webforms used to record survey data.
- Allocation. The Local Facilitator allocates sites to volunteers, and manages their progress, ensures instructions including the risk assessment are understood.
- Mentoring. Some volunteer surveyors are very competent at all aspects. Others require a little mentoring. The Local Facilitator carries out this role, if necessary taking the volunteer on a training site visit.
- Survey Data. The Local Facilitator ensures that survey data is submitted together with photos, and that all files are identified with the site unique identification. Quality checks are also carried out, and queries referred to volunteers.
- Data processing. Further quality checks are carried out on the data, and corrections made, if necessary with reference to the Local Facilitator and the volunteer surveyor.



- Merging. The field verification data is added to the Deskstudy data for each site via the Geographical Information System and other database tools.
- Amendments and snagging. Revision of site boundary and other Deskstudy details are carried out on a site by site basis. Snagging is carried out as required.
- Output. Further work may be required: for example redacting personal data fields, and extracting some site subsets, before the finalised dataset is output.

#### A2.3 Field Verification time input statistics for this area

Some statistics were recorded on the time input of various aspects of the Field Verification.

Time-on-site is reported on each surveyform by the surveyor. The average time on site in this area was 32 mins. The maximum time on site was reported as 240 mins, while the minimum was 10 mins.

In Fife, the total time-on-site was recorded as 104 hours.

This does not include preparation or travel time, just the time on site.

The time to fill in the survey webform is recorded automatically by the forms service. It shows that on average it took 29 mins to complete a submission in this area.

The total time recorded for filling the survey webforms is 81 hours for this area.

This does not include preparation, fettling photos and ensuring all file uploads have the correct Orchard ID as filenames.