

Ancient Orchards on the Banks of the River Tay

Dr Crispin W. Hayes*

July 2008

*Contact details: CW Hayes Associates: Eco-Consultancy
Cupar, Fife, KY15 5SQ
www.eco-consultancy.co.uk
0845 458 8335

Published in:

Landscape Archaeology and Ecology, Volume 7, 2008. pp63-75 ISSN 978-1-904098-09-6

Abstract

The paper reports on two major surveys of traditional orchards bordering the River Tay in the east of Scotland. In 2007 a survey was conducted on the Carse of Gowrie to investigate the ancient orchards of that area - and to ascertain their location, extent and condition. The Carse is the low lying riparian ground between Perth and Dundee, and was once famous for its apples, plums and pears: Monorgan pears and Lass O'Gowrie apples to name two indigenous varieties. The paper documents individually those orchards still remaining at least to some extent, as well as those with no visible remains.

Earlier in 2003, a survey of mature fruit trees in the riparian fruit town of Newburgh, Fife was carried out. This is located across the water on the south side of the River Tay. Newburgh resides beside the ruins of Lindores Abbey, and this perhaps gives some indication of the roots for this unusually high concentration of mature fruit trees – around 1000 in this isolated small town, the majority of which have been individually documented in the survey.

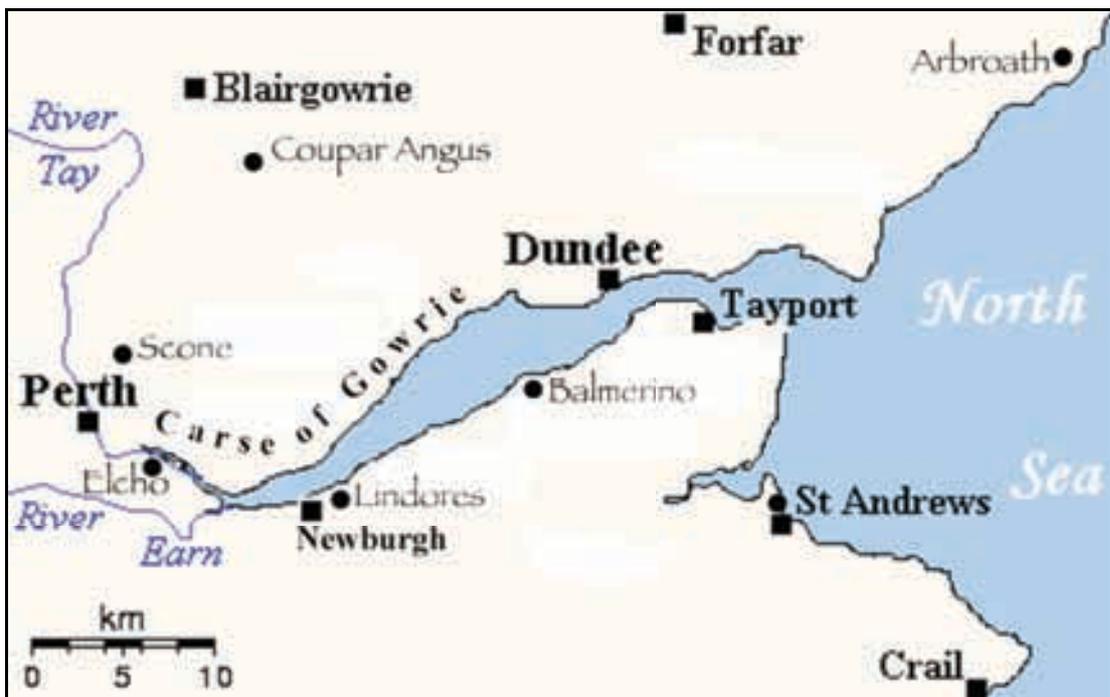
The history of orchards beside the Tay goes back a long way. Monks brought pomo-culture to the area in the 12th century along with improved agricultural practices. The paper documents these origins together with some analysis of reasons and timing of their demise.

1 Introduction

The River Tay has long been a geographical entry point into the heartland of Scotland. Indeed since Neolithic times, settlement has moved inland and up the River to Loch Tay and beyond, up in the central highlands. Therefore it is no surprise that the Tay also appears to be a route of access for later monastic settlement, and with that the culture of growing fruit.

This paper considers two areas beside the estuarine lower reaches of the Tay, once it has broadened out into a wider tidal zone close to the east coast of Scotland. This part of the River is shown in Figure 1 below. The first area is on the south bank of the River and is the ‘fruit town’ of Newburgh in Fife. This ancient place is literally packed with large old orchards in long gardens emanating from the High Street. Secondly, just over the water from Newburgh, is the Carse of Gowrie. This is the low lying riparian strip to the north of the River between Perth and Dundee. It is a highly productive agricultural area and has a rich fruit heritage.

Figure 1: The Lower Reaches of the River Tay in the east of Scotland



Source: modified from base map in Wikimedia Commons

Note: Map shows locations of monastic relevance with circular mark. Towns shown with a square mark.

2 Historical Context

The presence of orchards in this area is due to a number of reasons as discussed below. However a key precursor to their success are the favourable conditions of both soils and climate, making this one of the two major areas for commercial orchards in Scotland – the Clyde Valley in the west being the other area.

2.1 The Monastic Influence

The origins of the orchard cultivation beside the lower reaches of the Tay appear to stem from the direct influence of monastic establishments that surround this areaⁱ. Firstly let us consider the concentration of religious establishments in the immediate area, as shown in Figure 1.

To the north is Coupar (or Cupar) Abbey at Coupar Angus. This was founded in 1161 by Cistercian monks, from Melrose Abbey in the Scottish Borders. To the west is Scone Abbey, a house of Augustinian canonsⁱⁱ founded in the early 1100s. Upstream also were the Cistercian nuns of Elchoⁱⁱⁱ.

Over the water on the south side of the Tay is Lindores Abbey at Newburgh. This was founded in 1191 as a daughter house of Kelso Abbey in the Scottish Borders^{iv}. The monks were of the Tironensian Order, Tiron being near Chartres in France. Along the east coast Arbroath Abbey was founded by the same order 1178. Like Coupar Angus, Balmerino Abbey on the south of the Tay was founded by Cistercians from Melrose, though later in 1227.

Thus it is clear that these centres of learning and power were becoming well established during the early 13th century. But what of the connection between monasteries and Pomology, and indeed agriculture in general. Evidence for this is available in some detail in the various records of the monasteries, such as the *Rental Book of the Cistercian Abbey of Cupar-Angus*^v.

The monks at Coupar Angus appear to have been particularly significant in terms for the Carse of Gowrie. Lands there were gifted to them by the landowners, the Hayes of Errol. These lands were not in the present condition of being highly productive agricultural land. They were poor & wet unimproved lands. However, the monks enjoyed ‘privileges’ (Papal Bull – in effect a tax break from the Pope) on the land that they brought into cultivation – and thus draining and cultivation was incentivised. The monks in turn incentivised the growing and maintenance of orchards, and it appears were particularly fond of pears^{vi}.

The creation of larger commercial orchards may have come later. Storrie^{vii} suggests that it was only after the Act of Union in 1707 that sufficient stability prevailed for the planting of fruit to become a more general.

2.2 Economic Significance of Orchards in Recent Era

Turning now to consider these ancient orchards in a more contemporary context, research of the historical record indicates that although the orchards were very much part of the culture, they have not been a key part of the rural economy for well over a century. The ‘Statistical Accounts’ prepared by the clergy of each parish are a useful record in this respect^{viii}. The table below shows the typical levels of produce and their value for the Parish of Longforgan on the Carse of Gowrie at that time.

Figure 2: Economic Value of Produce in Longforgan Parish, 1845

795 Scots acres of wheat, supposed to yield 3265 qrs. 4 bush. at L.2, 11s. 5d. per qr., being average of fiars for the last seven years,	L. 8895 1 1½
710 do. of barley, yielding 3469 qrs. 2 bush. at L. 1, 8s. 5½d.	4931 5 9½
970 do. of oats yielding 5090 qrs. 2 bush. at L. 1, 1s. 9d.	5585 12 11½
238 do. of pease and beans, yielding 922 qrs. 2 bush. at L. 1, 7s. 7½d. do.	1273 17 1¼
358 do of potatoes, at L. 9, 11s. 6d. per acre,	3427 17 0
467 do. of turnips, at L. 3, 3s. per do.	1471 1 0
555 do. of cutting grass, at L. 6, 6s. per do.	3496 10 0
294 do. of pasture, at L. 3, 5s. per do.	955 10 0
974 do. of do. at L. 1, 7s. 6d. per do.	1339 5 0
Produce of quarries,	3000 0 0
orchards,	500 0 0
Thinning of wood,	1800 0 0
Total yearly value of raw produce,	L. 36,128 0 0

Source: Second Statistical Account p417

Orchards are the smallest item in the account of produce. It is worth bearing in mind that Longforgan Parish contained the orchards of Templehall/ Monorgan, Castle Huntly, Rawes and Overyards.

This is a more detailed record than many parishes but it encapsulates the general picture. At £500 per annum it represents just 1.4% of the value of parish produce.

2.3 Decline and Globalisation

At the outset of this research it was expected, that the decline of the orchards of the Carse of Gowrie had really only happened post World War Two, with the intensification and specialisation of agriculture during the so – called green revolution. However, the historical record makes it clear that the decline in orchards began over a century earlier in the Victorian era. Hodd^{ix} states:

"The late eighteenth century and the first part of the nineteenth century probably saw the Carse orchards at their most productive, but during the second half of the nineteenth century circumstances combined to cause a decline that continued during the early years of the present [20th] century."

In 1975 Adrian Hodd wrote what is still perhaps the seminal contemporary paper on orchards in the Carse, bringing together much of the history and creating a better understanding of the long slow decline. A key factor during the 19th century appears the growth in grain for export. This balance between grain and fruit – the competing priorities of land-use and of labour - seems likely to hold one key to the demise of the orchards.

A further aspect not discussed in the literature is that of mechanisation. Many of the orchards were silvo-arable systems where the orchard floor had crops grown in a rotation. Hodd cites evidence that orchard fruit yield was doubled by having an arable undercrop. In 1810, Gorrie & Machray record that 16 of the orchards on the Carse were cultivated with an arable rotation, and 12 were in grass or pasture. The latter half of the 19th Century saw horse draw mechanisation beginning to become available. Ploughs, harrows and seed drills may well have been able to work satisfactorily between the rows of trees. But the coming of the horse drawn mechanical reaper (invented in 1831) and the reaper-binder (1872) was different. It is not clear when they first came to the Carse. However it is likely that the unwieldy binder would have been incompatible with the confines of what we may call a 'pomo-arable' system. This again was detrimental in the contest for land and labour. Therefore, it is suggested here that mechanisation was one factor that led to orchards not being available for arable production, and this led to a reduction in their relative value.

A further factor was globalisation. In the late Victorian era, it was already playing its part. Apples and pears were being imported from North America and Europe. In 1884 Robertson^x wrote

"I was truly sorry to see so many large orchards in the Carse with so very few of the large kinds - apples that are really worth being sent to market, and likely to be able to compete with those brought from the Continent and from America"

It seems that the orchards of the Carse had been suffering from poor and inadequate management even then. Robertson states:

“The cultivation of fruit in this country, especially in Scotland, has been neglected of late. In the Carse of Gowrie, as well as elsewhere, many good orchards have been allowed to run to waste. There has been a great outcry as to bad seasons, and not without good cause, but bad culture has as much to do with it as bad seasons . . .”

Fifty years ago in 1958, Turner^{xi} wrote that

“these orchards have not within living memory, been managed correctly”

Thus it can be concluded that the decline of the orchards of the Carse was caused by multiple factors - that have been at play for well over a century.

3 The ‘Fruit Town’ of Newburgh, Fife

3.1 Background

Newburgh lying as it does beside the ruins of the Abbey of Lindores is a town of fruit trees. The reputation of Abbey in terms of fruit was well known: *“The monks . . . were pioneers of improvement, and were the first to adopt every discovery calculated to increase the productiveness of the soil, of which, from their intercourse with their brethren, both at home and abroad, they had the earliest intelligence. To this source can be traced the excellence of the fruit, especially admirable varieties of pears, for the orchards of Newburgh are so justly celebrated”*^{xii}

The town lies on the north slope of a volcanic plug, and hence the black soils are free draining and mineral rich. *“Nestled snugly beneath the brow of the picturesque and craggy hills, it offers the spectator a series of terraced gardens . . . their well furnished slopes, in the luxuriance of their fruitage, offering a pleasing contrast to the bald and rugged mountain masses up which they climb. . .”*^{xiii}

The layout of the town is instructive. Essentially a single main street runs parallel to the river, but set back a few hundred metres up the slope. On each side of this High Street are a continuous collection of terraced dwellings together with alleys to the rear. Each dwelling block has a long garden to the rear – typically 8 to 15m wide and 50 to 100m long. Almost without exception these large gardens are substantially given over to mature fruit trees. Most have 12 to 20 mature apples, pears and plums trees.

Figure 3: Maps of Newburgh showing Layout of Town & Fruit Trees

The growth form of these trees is commonly as a standard or half-standard. The orchards were used to graze a house cow or keep a pig. Old stone sties and small byres can still be seen at the back of several of the dwellings. Keeping of livestock was quite compatible with this type of tree form and indeed more compatible than mowing the grass with a motor mower today!

On the outskirts of the town are some large detached houses with walled gardens and orchards – the largest ‘Taybank’ containing 54 mature trees.

3.2 The Newburgh Survey of 2003

In 2003 the author set out to conduct an exhaustive survey of mature fruit trees in the Town, working with and on behalf of Newburgh Orchard Group (NOG). It set out to create a historical snapshot of the orchards and also form the foundation for further development work.

The survey recorded data about individual trees, about orchards and their keeper’s. Anecdotal and personal accounts were an important part of the survey.

From preliminary fieldwork it was estimated that there were a total of around 500 trees to be surveyed. The survey^{xiv} spent a total of 13 days fieldwork during September and October 2003, and individually recorded a total of 841 mature trees in 69 orchards. Though we set out to carry out an exhaustive survey of Newburgh, limitations of time and budget prevented

this. However many more trees than anticipated were recorded, and the work was judged a great success. At the end of the survey, and with a much clearer knowledge of what it had not been possible to include in the survey, it was estimated that there were a total of around 1000 mature fruit tree in Newburgh.

3.2.1 Findings of the Survey

Detailed results can be found in the survey report that is cited above. To summarise here:

- 385 trees were apples mainly estimated to be less than 100 years old. Of these majority were for culinary not desert use. Bramley predominated.
- 278 trees were plum, most of which were estimated to be around 100 years old. Of these Victoria predominated, though there was a good number other varieties some of which were quite unusual.
- 140 trees were pear mainly estimated to be 100 years or older. Common varieties such as William's Bon Chretien and Conference were frequently found. Others identified that were less common were Glasgow Yellow (shortlived, sweet and ready for Glasgow's trade holidays) and Benvie. Many pears were not identified even tentatively. The lack of a workable pear identification key in English is a serious barrier to systematic identification. Therefore local knowledge and anecdotal history were put to good use. The Lindorsii pear – of which only a single example is known – is reputed to be locally bred and unique to Newburgh.

3.2.2 Condition of the Trees

Most trees were found not to have been pruned recently, and a significant number though not the majority were entirely unpruned or overgrown. Some pears had become very large and tall trees, but still apparently yielded a heavy crop of small fruit. Despite not being actively managed most trees were found to be in a fairly sound state. The state of health is of course quite relative. In commercial orchard terms most, in particular the aged plum trees, would be condemned. However the old, hollow and sometimes recumbent plum trees frequently produce excellent yields of high quality fruit.

3.2.3 Personal and Anecdotal History

Analysis of the length of time that individuals or families had been keeper's of an orchard showed that there was a lengthy connection in many cases. The earliest recorded connection was an orchard in the family since 1910. Around 30% of orchards had been with the current keeper for more than 35 years.

There were numerous personal anecdotes recorded relating to various different aspects of the orchards, such as:

- Using the Fruit: “granny says when the starlings start at the pears – that was the time to pick them”
- Selling the Fruit: “ used to sell the plums up at Bridge of Earn Hospital when the wife worked up there”
“ Bramleys: used to take 10lb lots to Beryls of St Andrews, a fruit seller. About 60lb in all – used to get £11 in 1989 – hardly worth it”
- On Pruning: “Don’t reckon to prune older trees – they don’t like it”
- On individual trees: “ A good bottling pear – but needs to be caught early”
“ kids said they took the fruit down and used it for apple fights!”

Figure 4: Mature trees are put to multiple uses in Newburgh



4 The Carse of Gowrie

4.1 Background

The Carse of Gowrie is a large area of some 25km in length between Perth to Invergowrie outside Dundee, and stretching from the River Tay several km north to a cut-off that we have defined as 30m above Ordnance Datum. Today the Carse of Gowrie is well known as a centre of soft fruit production, that brings together two landscape features; expanses of polytunnel, together with encampments of caravans housing the seasonal pickers - who these days travellers from the East rather than travellers of our own. However, it's ancient orchard heritage is less well known contemporarily, and indeed what remained of the historic orchards themselves was not recorded until this survey.

In the survey^{xv}, those orchards that still exist on the Carse have been determined by on-the-ground survey along with those that no longer exist. The orchards that we are considering on the Carse are of a different scale to those considered in Newburgh. Here we are in general looking at orchards that are on an agricultural scale – the size of a farm field or indeed large walled gardens. These orchards will have contained anything between fifty and several thousand trees.

4.1.1 Carse Orchards in the Historic Record

Orchards have been recorded in historical documents on the Carse at various intervals over the centuries. Hodd^{xvi} cites three historical snapshots which are useful to tabulate in this context. Roy's Military Map of 1750, Gorrie & Machray in 1814 and the Ordnance Survey map of 1860s. The table below shows when each orchard was mentioned. This gives some suggestion as to when various orchards were created and when they were lost, though it should not be taken as exhaustively accurate.

Table 1: Carse of Gowrie Orchards Recorded Since 1750

	Roy's Military Map 1750	Gorrie & Machray 1814	OS map 1860s	Historic Orchard	Parish/Area
				Annat Cottage	Rait
yes	yes			Ardgath	Errol
		yes		Balgay	Inchture
		yes		Ballindean	
		yes		Bathaydock	
				Benvie	
	yes			Bogmiln	Grange
yes				Castle Huntly	
yes				Clashbenny	St Madoes
yes	yes			Craigdallie	Kinnaird
	yes			Drimmie	Inchture
yes				Errol Park	
	yes			Errol Village	Errol
yes	yes	yes		Fingask	
		yes		Flatfield	
				Friaton/ Barnhill Toll	
	yes	yes		Glencarse House	
	yes			Glendoick	
		yes		Gourdiehill	
		yes		Grange	
	yes			Hill (Errol Parish)	Errol
		yes		Horn	Inchmichael
	yes			Inchmartin	Errol
	yes			Inchture	
yes				Kilspindie	
	yes			Kinfauns Castle	
		yes		Mains of Kinnaird	
	yes	yes		Megginch	
yes (Leys)	yes			Midleys	Grange
	yes	yes		Muirhouses	Grange
				Murie	Errol
yes				Mylnefield	
		yes		New Farm (Errol)	
	yes			Newbigging	
		yes		Newton of Glencarse	
	yes	yes		Onthank (now Broomhall ?)	Inchture
	yes			Overyards	Longforgan
yes				Panshill	by Glencarse
				Pilmore	
yes	yes	yes		Pitfour	St Madoes
yes				Pitroddie	
	yes (Pow of Err)	yes		Port Allen	
	yes	yes		Powgavie	Grange
		yes		Rait	
	yes	yes		Rawes	Longforgan
				Rossie Priory	
	yes	yes		Seasides	
	yes	yes		Seggieden	
		yes		Shipbriggs	Megginch
		yes		Templehall/ Monorgan	
	yes	yes		Waterybutts	Grange

4.2 The Carse Survey of 2007

The historical research provided a list of the archaic sites where orchards could be expected. This list was complimented by additions gleaned anecdotally from local people and people with a professional, academic or personal connection. Various editions of Ordnance Survey and other maps were also consulted.

Part of the purpose of the survey was to physically verify the existence of the orchards. In this respect, it was equally important to verify that an orchard had been completely removed as that it remained intact. Thus visits to sites where orchards were believed to no longer exist, were scheduled along with those that were understood to remain.

4.2.1 Data Collection

A wide variety of data was collected. In addition to photographic records which are discussed below, a small database was used record information collected. Several categories of data contribute to each record of an orchard:

- Contact data for orchard keeper
- Keeper use and knowledge of orchard
- Size & location
- Survey management data
- Biodiversity criteria, including condition of trees
- Historical notes
- Survey notes including anecdotal material from keeper and others
- Photographic record

The biodiversity criteria recommended by PTES were used in a modified format for this survey. ^{xvii}

4.2.2 Survey Findings

Over 50 sites were visited and individually recorded during the course of the survey. The findings presented below briefly summarise the findings. Fuller details are available in the survey report cited above.

4.2.3 Historic Orchards Where No Significant Remains Exist

The following orchards were verified to no longer exist to any significant extent. In several cases their final demise was relatively recently.

Table 2: Historic Orchards Verified to No Longer Exist

Historic Orchard	Parish/Area	Assessed by	Last existed	How lost	Comments
Annat Cottage	Rait	visit	1970s	Old age	now garden
Balgay	Inchture	visit	1980s	Cleared	for agriculture
Benvie		visit			now agriculture
Castle Huntly		visit			now pasture
Errol Park		visit			now garden orchard only
Errol Village	Errol				now built on ?
Glencarse House		visit			now pasture/ woodland
Glendoick		visit			now woodland/ horticulture
Gourdiehill		visit	1989	Cleared	for a housing estate
Hill (Errol Parish)	Errol	verbal			
Horn	Inchmichael	visit	1970s	Cleared	for farm buildings & agric.
Kilspindie		visit			now garden
Kinfauns Castle		visit	1974	A90 road	Home Farm Orchard below Castle
Mains of Kinnaird		visit			now pasture
Midleys	Grange				now part of Errol Airfield Industrial site?
Murie	Errol	verbal			
New Farm (Errol)		verbal			
Onthank	Inchture				now Broomhall feed mill ?
Overyards	Longforgan	visit			now garden
Pitfour	St Madoes	visit	1968	Cleared	for agriculture
Powgavie	Grange	visit	1990s	Old age	now pasture
Rait		visit			now pasture/ housing
Rawes	Longforgan	visit	1990	Old age	now pasture
Rossie Priory		visit			now pasture
Seaside		visit			now pasture
Seggieden		visit			now pasture
Shipbriggs	Megginch	visit			now woodland
Waterybutts	Grange	visit			now pasture/railway

Of the list above it is perhaps worth describing a couple.

Gourdiehill

Patrick Matthew's famous orchard was once the largest orchard in Scotland, reputed to have 10,000 trees on its 35 acres. It was planted by Matthews in the mid 19th Century. In about 1860 two of Matthew's sons emigrated to New Zealand. There, they set up the first commercial orchard in the Antipodes with seed and trees from Gourdiehill ^{xviii}

The site of the former orchard is now devoid of fruit trees. A large part of this is now arable, but the eastern end of the orchard was cleared to build houses, as described in the survey notes:

A Plant Contractor from Blairgowrie said that he had been contracted in 1989 by a developer to clear the orchard in order for the housing estate to be built. He also demolished the big house at Gourdiehill (it had suffered a serious fire many years before). He said they left what trees they could.

When the site was visited during the survey it was not easy to find any fruit trees. A resident assisted in locating the solitary veteran tree – a pear - that remained. It had a hard fruit, not very pleasant to eat. There had also been another very large old pear but it was felled last year on safety grounds because it was leaning.

Figure 5: The Last of 10,000 trees at Gourdiehill



Pitfour

The history of Pitfour Orchard was brought vividly to life by the family that used to live and work in the orchard until they sold the land in 1968. The survey notes:

Orchard used to be part Pitfour Castle estate. The correspondent's father rented the orchard but then bought it in 1920's. It was 10 acres of apples, pears, plums. Bramley's handpicked and would store until May. Sold in Perth. Worcester Pearmain, Kilwinning Pear, Victoria Pear were main table varieties.

They also grew strawberries and saltgrass, and did some salmon fishing. Bought Upper Mains of Pitfour in 1949 after renting from 1943. Before that they lived in a wooden house in the orchard which they build in 1923. There was a well in the orchard. Grazed cattle in orchard.

Sold orchard to Nethermains of Pitfour in November 1968. Shortly after the sale, the orchard was cleared for agriculture.

Figure 6: Pitfour Orchard today with the former owner, and in 1940s



4.2.4 The Existing Smaller Orchards

The historic orchards that still exist have been divided into two categories by area; Large orchards are those considered to be on an agricultural scale, that is they occupy a whole field. They would have been created as a commercial venture. Small orchards occupy a lesser area, which may be the corner of a field, a walled or private garden. Small orchards may have partly commercial but it is likely that their size and proximity to the steading meant a key function was supplying the owner's table.

The smaller orchards that were surveyed are shown in the Table below.

Table 3: The Remaining Smaller Historic Orchards of Carse of Gowrie

Orchard	Parish/Area	Assessed by	Condition
Wester Ballindean		visit	abandoned but fair
Carse Grange		visit	fair/ good
Clashbenny Farm	St Madoes	visit	depleted but remnants good
Inchyra Farm		visit	abandoned but fair
Inchyra House		visit	depleted but remnants good
Newton of Glencarse		visit	depleted but remnants good

Details of one example are given below.

Carse Grange

Carse Grange orchard is located on the north of the Errol road in Grange. Immediately to the south of the road is another larger orchard known as Grange.

Carse Grange orchard was originally part of the eponymous farm on the road that leaves the village to the north heading for Inchmichael. Like several other orchards, Carse Grange was bisected by the new railway in the 1850s. As a result the orchard is now in three parts. To the north of the railway in a triangular field only 3 aged trees remain; an apple and two pears. The orchard to the south of the railway is divided into two private gardens of 'The Retreat' and 'Orchards of Carse Grange'.

Survey notes from a visit to 'The Retreat':

Planted hedge and trees (eg. birch) around orchard and garden in early 1990s. Has kept wind out and benefited the veteran trees in this orchard. Fruit still a good size.

Around 20 veteran trees, some falling over but still fruiting well.

Pears: Christie, Craig, and possibly Rattray, Hazel, Maggie Duncan

Apples. some new trees that gap fill have been created from grafts of old trees - Codlings. Other varieties Lass of Gowrie (new tree) and Arbroath Oslin

Old varieties of apples and pear that are unsuitable for the table are used for juicing and then freezing.

Never sprayed.

The Retreat has some of the best examples of veteran trees that remain in the Carse on a garden scale.

Survey notes from 'Orchards of Carse Grange':

Abuts western side of 'The Retreat' garden

All trees planted after previous owner moved there in 1925. They ran it as a small holding for top fruit and soft fruit. They sold fruit from a cart in Dundee in the 1930s

Mainly mature apple and plum trees remain.

Figure 7: Fine old pear at the Retreat at Carse Grange



4.2.5 The Existing Large Orchards

The large orchards that remain in the Carse are shown in the table below:

Table 4: The Remaining Larger Historic Orchards of Carse of Gowrie

Orchard	Parish/Area	Assessed by	Condition
Bogmiln	Grange	visit	odd remnants
Craigdallie	Kinnaird	visit	damson thicket
Fingask		visit	depleted but new plantings
Flatfield		visit	depleted but remnants good
Friaton/ Barnhill Toll		visit	depleted but remnants good
Grange		visit	depleted but remnants good
Megginch		visit	a large number of good trees
Muirhouses	Grange	visit	still a few good remnants
Newbigging		visit	depleted but remnants good
Port Allen		visit	a large number of good trees
Templehall/ Monorgan		visit	depleted but remnants good

Details of some orchards are given below.

Bogmiln

The orchard now has merely a few odd remnants spread the length of the field. The field is used for grazing cattle.

Survey notes:

- Field with just 6 big old pear trees in it, and 5 plums that border the farmhouse garden. Lovely old remnants.
- General depletion by windblow according to owner.
- Don't use fruit.
- Owner stated that not really interested in doing much with orchard.

Fingask

Fingask orchard represents a rare piece of heritage. It has been in the ownership of the same family for just over 400 years. The orchard has remnants of a large collection of trees, but new trees have been planted meaning that this orchard should endure.

Notes from the survey:

- Lots of good old trees although they are getting near the end of their life. Around 30 remain. Mainly pears and a few apples. Orchard set in long gully with steep sides at it's head. Around 400m long and amounting to 2 – 3ha.
- Some of orchard area (and probably some old trees) have been lost by the recent creation of a lochan at the southern part.
- Some recent replanting, around 70 trees - apples, modern varieties mainly at south east. Also some oaks and a hedge in the last couple of years.
- Good set of Estate papers about Fingask in Bell Library, Perth.
- Butlers daybook 1850-6 copy are available at £5 from Fingask - included details of routing of orchard.
- Don't use much fruit because pears are sour. Pheasants love pears.

Megginch

Megginch has probably the most intact large orchard remaining on the Carse. It is well sheltered and still has approximately 100 veteran apples, pears, plums, damsons, greengages, medlars and cherries. A small number of the trees are in the two walled gardens – espaliered or fan trained. Some of these are thought to have been planted in 1820. The majority are in the main orchard, which is an L shaped field to the north and east of the walled garden.

Survey notes:

Megginch - beautiful isle. It is on an area of ground rising to 15m above river.
According to legend the site of a monastery. The present owners family has had the property since 1661.
Field orchard mainly pears and plums. Walled garden mix with more apples.
A lot of fallen trees recently cleared up into large heap.
Traditionally a basket of plums was sent the Queen each year from the orchard.
Mains of Megginch which is neighbouring to the east, also used to have an orchard in the field north of the house. Pulled out in 1980s.

Figure 8: The Big Orchard at Megginch



Port Allen

Port Allen, also historically known as Pow of Errol, has one of the finest remaining orchards on the Carse. It is large in area and still has approximately 80 veteran trees, including apples, pear and plum. Fruit on many of these trees is still of a good quality.

The orchard formerly straddled the Pow, extending further west. The orchard smaller area was to the west of the Pow and the larger area to the east. The area west of the Pow is now devoid of trees and is pasture. A few remnants grow on the steep bank down to the Pow at the field margin. The orchard in the east area remains in good stead.

Survey notes:

The orchard is part of Errol Estate, and is tenanted.

Keeper said that orchard mentioned in historical documents in 1662, in connection with commissioning of new horse mill at Port Allen.

This orchard abandoned for around 35 years until recently, though a lot of local people still came and picked fruit from it up to the present day.

Current tenant highly enthusiastic and plans to replant significant part of orchard.

Plans to make jam, sell fruit. More out of curiosity than purely commercial venture.

Figure 9: Port Allen Orchard



4.3 Analysis of Reasons for Orchard Loss

The majority of the historic orchards entirely cease to exist. Compiling the data and talking to the people on the ground it seems clear that there are a handful of themes that have led to these orchards disappearing. Three key reason are evident:

- agricultural pressure
- benign neglect and old age
- housing pressure

Clearance for Agriculture

Clearance for agriculture arises from several sources:

- a). Economic pressure -the orchards are not an obvious economic proposition in their current form;
- b). Grants, incentives and advice to clear orchards from government and quasi-government organisations such as agricultural extension services and research stations for the past 50 years;
- c). Tidying up what has become a scruffy part of the farm, often near the main house. Maintenance is not quick or easy with modern machinery but clearance is.

For landowners that are minded to, it is easy to establish a felling rationale on grounds of safety with the cooperation of their insurance provider. In one example on the Carse, thirty trees have been removed from one orchard in the last two years on grounds of safety – only a dozen remain.

Benign Neglect and Old Age

The loss of orchards through benign neglect and old age is a major reason for their disappearance. Individual trees obviously have a finite life. Windblow appears to be a significant factor in finishing off large old trees. Most keepers report the loss of several trees every year. However, if the orchard as an entity is to endure, then new trees must be planted when old trees are lost. New plantings are rare in these traditional orchards and self seeding also appears rare with the exception of damsons and rootstocks. Therefore it is inevitable that benign neglect eventually leads to total loss of the orchard.

Housing

Finally housing pressure is significant and may well be the key factor for many of the remaining orchards. Planning gain is obviously highly lucrative and the demand for houses is great in these areas. This coupled with the typically scruffy, unkempt appearance of neglected orchards can lead to the assumption that they are 'wasteland'. Thus the apparent lack of use of the land can make neglected orchards appear ripe for development. Orchards are not currently considered as part of our heritage in planning terms and there is currently no presumption for their preservation.

5 Conclusions

The following conclusions are drawn from this work:

Orchard Status

- These surveys have been timely. Most of the orchards that were once beside the River Tay no longer exist. This has been confirmed by site visit.
- The orchards have been in demise for over a century. Clearance of orchards has accelerated over the last 50 years.
- Orchards are still under pressure of total or partial destruction.
- Housing development is a major pressure for some orchards because planning gain is so lucrative.
- There is currently no presumption in favour of historic orchards in the planning process.

Fruit

- No orchards are operated commercially.
- In general fruit is not used to a great extent, though in a few orchards it is very actively used.
- Local people still make use of the fruit from abandoned orchards. The orchard's owners are usually content about it.
- Knowledge of varieties and their characteristics such as when to pick and how to store is generally poor. Old varieties of pears have a particular problem in this respect.

Management

- Most orchards have been neglected in terms of their management for at least half a century.
- Neglected orchards often have high biodiversity value.
- Veteran trees in the orchards satisfy multiple criteria of a biodiverse habitat.
- There is a general request for advice on how to management these old trees.
- Most trees in the orchards are very aged. Old pear trees may typically be 200 years old. The ongoing loss of trees indicates that most are near the end of their life.
- New plantings need to be made soon if orchards are to survive in the long term.

Acknowledgments: The survey works reported as part of this paper was carried out on behalf of Perth and Kinross Countryside Trust (www.pkct.org) and Newburgh Orchard Group.

References & Endnotes

- ⁱ Easson, DE (ed.) (1947), *Charters of the Abbey of Coupar Angus. Volume 1. Charters I to CXVIII*, (Perth Library edn., Edinburgh: Scottish History Society/University of Edinburgh.)
- ⁱⁱ Easson, D.E. (1957), *Medieval Religious Houses, Scotland*, (Longmans).
- ⁱⁱⁱ Dowden, Rev. John (ed.) (1903), *Chartulary of the Abbey of Lindores 1195-1479*, (Perth Library edn., Edinburgh: Scottish Historical Society/ University of Edinburgh)
- ^{iv} Hunter-Blair, D.O. (1913), 'Benedictine Abbey of Lindores', *IX (Catholic Encyclopedia)*, New York: Robert Appleton Company), p270.
- ^v Rogers, Charles Rev. (ed.) (1879), *Rental Book of the Cistercian Abbey of Cupar-Angus. Vol 1*, (Perth Library edn., London: The Grampian Club)
- ^{vi} Rogers, Charles Rev. (ed.) (1879), *Rental Book of the Cistercian Abbey of Cupar-Angus. Vol 1*, (Perth Library edn., London: The Grampian Club)
- ^{vii} Storrie, David L (1949), 'Apples and Pears in Scotland', *The Fruit Year Book* 28-35.
- ^{viii} anon (ed.) (1845), *The Statistical Account of Perthshire. Vol X Perth. (commonly known as the Second Statistical Account)*, (Perth Library edn., Edinburgh: William Blackwood)
- ^{ix} Hodd, ANL (1975), 'The cultivation of orchard fruits in the Carse of Gowrie, 1750-1900', *Scottish Geographical Magazine*, 91 79-90.
- ^x Quoted in Hodd (1975)
- ^{xi} Quoted in Hodd (1975)
- ^{xii} Laing, A (1876), *Lindores Abbey and Its Burgh of Newburgh. Their History and Annals*, (Edmonston and Douglas (Edinburgh)).
- ^{xiii} anon (1850) *Fifeshire Journal*. 24th September 1850.
- ^{xiv} Hayes, Crispin W (2003), *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).
- ^{xv} Hayes, Crispin W (2007), *Historic Orchards of the Carse of Gowrie. Phase 1 Survey: An Investigative Study on their Location, Extent and Condition*. (Report to Perth and Kinross Countryside Trust. Available www.crispinwhayes.com/projects)
- ^{xvi} Hodd, ANL (1975), 'The cultivation of orchard fruits in the Carse of Gowrie, 1750-1900', *Scottish Geographical Magazine*, 91 79-90.
- ^{xvii} PTES is the London based NGO People's Trust for Endangered Species. It has been working the biodiversity of traditional orchards in England. www.ptes.org
- ^{xviii} Dempster, WJ (1983), *Patrick Matthew and Natural Selection*, (Perth Library edn., Edinburgh: Paul Harris Publishing).