Orchards of Fife's Tay Coast:

2009 Survey to Determine Location and State



Report to Fife Coast and Countryside Trust

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Finally we would like to acknowledge the use of 'out of copyright' Ordnance Survey 1st Edition maps in this report.

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1 Introduction

There has been a considerable resurgence of interest in traditional orchards in recent years. This interest arises on several counts; their heritage and cultural importance, their value as a source of local food both in economic and food culture terms, and their high biodiversity value.

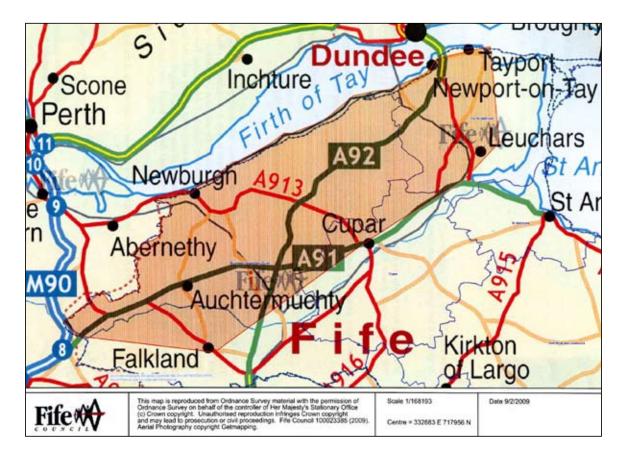
1.1 Scope of Survey

The aim of the study is to determine the location and state of traditional orchards on Fife's Tay Coast. The main focus is on traditional orchards, with old orchards and mature trees being given the most status. This correlates with greater heritage and cultural significance, and higher biodiversity value.

1.1.1 Geographic Area

The geographic area was determined by the client. It constitutes the area of Fife on the Tay Coast, stretching south, to be bounded by the River Eden and the Lomond Hills.

Figure 1: Orchard Project Area



1.1.2 Newburgh

Newburgh is an orchard town, located at the north west of the geographic area being considered. It probably has the largest concentration of mature fruit trees of any town in Scotland. It is therefore highly relevant in the context of traditional orchards. However, a Survey of Newburgh's Orchards¹ was carried out in 2003. It individually recorded 850 trees – and was not exhaustive. There are likely in excess of 1000 mature fruit trees in Newburgh. Because Newburgh has been surveyed in detail previously, it has been excluded from this survey. Indeed a few orchards outside Newburgh that were included in the 2003 survey – such as Lindores Abbey and Kinnaird Farm – were excluded from visits in this survey, in order to prioritise new finds.

However, no assessment of traditional orchards on Fife's Tay Coast could be complete without Newburgh being considered. Therefore this document should be read alongside the report on the 2003 Newburgh Orchard Survey² in order to gain a holistic view of this area.

2 Deskstudy to Locate Potential Orchard Sites

The purpose of the deskstudy was to create a list of orchards that were most likely to have interesting or significant remains, in order that they could be prioritised for survey visit.

2.1 Historical Aspects

The Tay Coast of Fife has close proximity to the Carse of Gowrie, which is recognised as one of Scotland's great orchard areas. The importance of monastic locations to the growth of pomoculture has been well established³. The previous survey work conducted by the consultant has also documented the rich orchard heritage on the south bank of the Tay, at Newburgh. There is some evidence that the orchard culture permeated further into Fife, and this is one focus of the study.

Thus, a review of the historical aspects of orchards in this area has to a significant extent been carried out already. Within the scope of the project, little further literature review was carried out.

¹ Hayes CW (2003) *Taking Stock: Newburgh's Orchard Heritage*. Report to Newburgh Orchard Group.

² Newburgh Orchard Survey available for free download at: http://www.crispinwhayes. com/projects.html

³ Hayes, C.W. (2008) Ancient Orchards on the Banks of the River Tay. *Landscape Archaeology and Ecology*, 7, 63-75.

2.2 Preliminary Search by Map and Aerial Image

The Perth Office of Forestry Commission Scotland (FCS) contributed greatly to this project by carrying out an extensive preliminary search and screening process for orchard sites in north-east Fife. The outcome of this work was approximately 200 sites identified, screened and documented. Appendix A shows their workplan.

This preliminary work formed the basis for the majority of sites subsequently visited.

2.3 Other Evidence

The *Inventory of Gardens and Designed Landscapes*⁴ was searched for sites with comments relevant to orchards. The Inventory was originally compiled in the late 1980s. It has now been extended in an online version which is administered by Historic Scotland. Unfortunately, the presence of orchards and fruit trees is not one of the specific criteria that has been recorded. There are however comments regarding various aspects of the gardens, and these sometimes indicate fruit trees or orchards.

In their 'Assessment of Significance: Horticultural', orchards appear not to carry much weight. However a list of properties likely to have orchard remnants was collated from the Inventory.

The Survey of Gardens and Designed Landscapes in North East Fife⁵ was also consulted. This is a wider ranging document than the *Inventory*, containing many more sites. However, the description and other detail is very brief; it was found to be of more useful for finding sites, rather than analysing them.

2.4 Engaging with Communities

Part of the rationale for the project was to engage with communities, to learn where their orchards are. This engagement took various forms:

- an 'orchard survey' stand in the Orchard Zone at the Big Tent festival on 25th & 26th July 2009.
- an 'orchard survey' stand at the Apple Day⁶ in Falkland festival in 18th October 2009. Event incluced live juicing of fruit, cooking demonstration and kids activities

⁴ Land Use Consultants (1987) *An Inventory of Gardens and Designed Landscapes in Scotland. Volume 4: Tayside, Central, Fife.* [updated and enlarged Inventory now at http://www.historic-scotland.gov.uk/index/heritage/gardens.htm]

⁵ Historic Gardens Study Unit, University of Dundee and the Garden History Society (1996) *A Survey of Gardens and Designed Landscapes in North East Fife*.

⁶ organised by Fife Coast & Countryside Trust, with the help of local orchard enthusiasts

- an 'orchard survey' stand at Leuchars & District Horticultural Show, Balmullo, 31st October 2009. Event included live juicing of fruit.
- a web page and downloadable survey form created & hosted by the client in consultation with the author.

Information emerging from this engagement of the community was fed into the survey and formed a second important source of potential sites.

2.5 Further Mapping & Aerial Image Assessment

The sites that were identified in the process described above, were then subjected to a further careful assessment. Each site was evaluated by looking at historic⁷ and contemporary⁸ maps, and then comparing these with contemporary aerial images. The aerial images available for use were from FCS and Google. FCS have an up-to-date aerial image dataset that is less than 2 years old. Google Maps 'satellite' has aerial images of similar resolution for this area, but they appear to date from around 2000. FCS images appear to be taken late in the year, according to the absence of leaves on trees and the low angle of the sun. Conversely, Google's aerial images appear to be taken during summer; leaves are on trees and there is less shadow. Both image sets were used, but for assessing walled gardens and small trees, the Google image set was found to be optimum.

Thus an assessment was made of an orchard site, and a score attributed to it according to the likelihood of orchard remnants being present.

This assessment process was carried out for:

- the best 150 sites identified by the FCS preliminary screening
- approximately 30 additional sites identified by other means

2.6 List of Prospective Sites

The process described above created a list of prospective sites together with a score of the probability of orchards remaining. The list of sites is not exhaustive, and it is likely that knowledge of other orchards will emerge. The list provided a basis for fieldwork that is described below. It was not possible to include all prospective sites in the survey.

⁷ typically OS 1st edition 25inch and 6 inch series. Surveyed 1853-4, published 1855-6.

⁸ OS Explorer series. 1:25000.

3 Survey Methodology

The deskstudy provided a list of sites where orchards could be expected. The agreed aim of the fieldwork was to visit the best 50 or so orchards, as time allowed.

Various editions of Ordnance Survey and other maps were used. The client provided large scale printouts at 1:10,000 of the survey area. For fieldwork, the following contemporary editions of the 1:50,000 OS Landranger series were used as working maps:

No. 59	St Andrews (Edition C2 – 2007)
No. 58	Perth & Alloa (Edition B2 – 2007)

Prospective orchard sites were marked on the maps.

The fieldwork for the survey was conducted over seven days between 22nd October and 23rd November 2009.

3.1 Data Collection

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

- Location data
- Keeper use and knowledge of orchard
- Size & content
- Survey management data
- Biodiversity criteria, including condition of trees
- Historical notes
- Survey notes including anecdotal material from keeper and others

The biodiversity criteria devised for traditional orchards by PTES⁹ were used in a modified format for this survey.

The software used for the database is FileMaker Pro v7, which is a versatile cross-platform application¹⁰. It can export data in a number of formats including MS Access and XML. An example of a record for one public orchard is shown in the figure below.

⁹ PTES is a London based NGO that has been working on traditional orchards in the south of England. <u>www.ptes.org</u>

¹⁰ www.filemaker.com

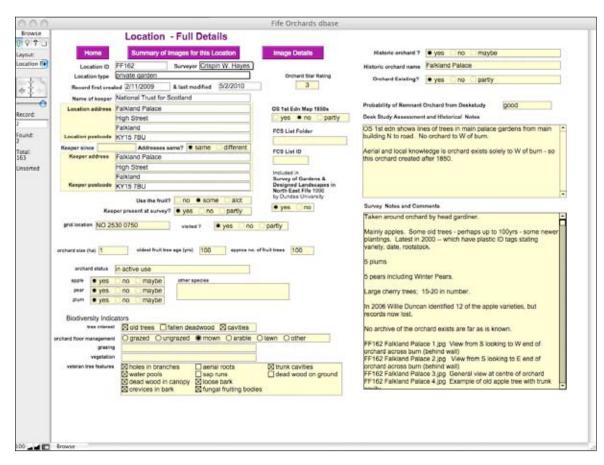


Figure 2: Example of Database Form

Data was recorded on site, directly to laptop computer. This was for accuracy, speed and to avoid transcription errors.

The database was designed and intended as a foundation and ongoing, evolving resource. As such it constitutes a major output from this initial phase of the project to secure the future of the Fife Orchards.

3.2 Photographic Records

Photographic records constitute an important method of recording orchard condition and extent. In some cases they also assist in recording location. As such they are one of the cornerstones of this survey.

Digital still photos formed the basis of the photographic record. These images are 3.2 Mega pixel, a resolution with appropriate detail for screen and print reproduction. They are stored as jpeg files.

Most locations have a number of images that help to build a picture – a historical snapshot – of the orchards as they existed in autumn 2009. Photo filenames and descriptions are given in the Survey Notes field of the database.

3.3 Location Information

A handheld GPS unit (Garmin GPS 72) was used to record the grid reference of locations. The unit was set up to give a 10 digit reference in British National Grid format – thus providing an apparent resolution to the nearest metre. However, GPS systems in the UK do not have a generally available ground station calibration (such as WAAS in USA), and nor was a specialist differential system employed. Thus accuracy is stated to be within 15 metres. Consequently in most cases, the data recorded has been rounded to a realistic 8 digit reference.

A conventional 6 digit grid reference, read off the OS Explorer map has been used as a backup, and for locations were it was not possible to use the GPS unit. This provided the location to the nearest 100 metres.

It was anticipated that this and other data could be exported to a GIS application in the future.

The use of GPS to map the boundaries of orchards was considered. It was concluded that the limitation in accuracy of GPS, together with poor reception under the orchard canopy, meant that it is not a useful tool for these fairly small areas.

3.4 Data Protection

A cautious approach has been taken in regard to data protection requirements. Firstly the data is stored as a computer record. Secondly, the data contained information that may be considered of a personal nature such as a person's name and associated address. Therefore, permission was sought from those named on the database, and they were asked to sign a form showing their consent. There were some exceptions, most commonly when the person was not available to sign the form – and their name had been given by a third party, such as an employee. The original signed data protection form is held by the client.

The data protection form does not constitute permission from individuals for their details to be passed to third parties or for their names and personal data to be published. Additional permission would need to be sought for this. It is therefore intended that any publication of orchard records be in an anonymised form.

Ongoing data protection is the responsibility of the client.

4 Survey Findings

A total 82 sites were visited and individually recorded during the course of the survey. A further 3 were added with details being given by telephone or email. Details of all 85 sites are given in Table 1 below.

An additional 79 sites were recorded on the database but were not visited, either because the desk study indicated the low probability of orchard remains or in a few cases because no fieldwork time remained. Details of the unvisited sites are given in Table 2.

The location of orchards by map grip reference is given in Appendix B.

Full details of the survey are recorded in the database, and it should be considered as the primary repository of survey results together with the photo archive. Photos are described in the 'Survey Notes' field of the database. A printout of the survey forms from the database is given in Appendix C.

4.1 Headline Summary

Of the 85 sites 'visited', 76 are considered to have an orchard to some extent. The breakdown is as follows:

- 71 orchards have apple trees
- 37 orchards have pear trees
- 62 orchards have plum trees
- 18 orchards have fruit trees of other species; such as greengage or cherry

There were 9 orchard sites where no fruit trees were found.

Where appropriate, the orchard keeper¹¹ was asked if the fruit from the orchard was used. Of the respondents:

- 22 orchard keepers said they used 'a lot' of their fruit.
- 25 orchard keepers said they used 'some' of their fruit.
- 4 orchard keepers said they used none of their fruit.

These figures give some indication of the level of engagement and enthusiasm of the orchard keepers surveyed.

The findings presented summarise the data collected. For full details of individual orchards the database should be consulted.

¹¹ The term 'keeper' is used in preference to owner, tenant or proprietor. The longevity of a traditional orchard means that the person is often the transient party not the orchard.

Table 1: Orchard Sites Visited During This Survey

Location ID	Orchard	Location	Type of orchard	Visited	Apples	Pears	Plums
FF001	Stirton Farm	by Rathillet	private garden	partly	no	no	no
FF002	The Grange	by Stirton	private garden	yes	no	no	yes
FF003	Birkhill House	Birkhill	walled garden	yes	yes	yes	yes
FF004	West Flisk Manse	Newburgh	walled garden	partly	maybe	maybe	yes
FF005	Monimail Tower Project	Monimail	walled garden	yes	yes	yes	yes
FF006	Woodmill Mains	by Lindores	walled garden	yes	yes	no	yes
FF007	Mugdrum House	Newburgh	walled garden	yes	yes	no	yes
FF008	Ballenbreich	by Newburgh	rough ground□	partly	yes	no	yes
FF009	Logie Farm	by Flisk	private garden	yes	yes	no	yes
FF010	Temple Knowe	Moathill Road, North	private garden	partly	yes	maybe	yes
FF016	Old Schoolhouse	Balhelvie	garden	partly	yes		,
FF017	Balmerino Abbey & Farmhouse	Balmerino	walled garden	yes	yes	yes	yes
FF019	Hayston	Balmullo	garden	partly	no	no	no
FF022	Howe	Glassart Glen	walled garden	partly	yes	yes	yes
FF025	Hilton House	Cairnie	walled garden	yes		no	yes
FF027		by Flisk	-	-	yes		
	Balhelvie	,	walled garden	yes	yes	yes	yes
FF028	Easter Kinnear	by Kilmany	walled garden	yes	yes	no	yes
FF030	Beech Cottage	Kedlock Feus	garden	partly	no	no	no
FF031	Cairnie House	Cairnie	walled garden	yes	yes	yes	yes
FF033	Lordscairnie	Cairnie	walled garden	yes	yes	no	yes
FF034	Pitbladdo	Cairnie	walled garden	partly	no	no	yes
FF038	Caldwells Farm	Collessie	walled garden	yes	yes	no	yes
FF039	Carphin Mansion House	Luthrie	walled garden	yes	yes	no	yes
FF040	The Walled Garden	Dalgairn	walled garden	yes	yes	yes	yes
FF043	Carslogie House	Cupar	walled garden	partly	no	no	no
FF045	Cuparmuir Walled Garden (Ferrymuir)		walled garden	partly	no	no	no
FF046	Craigfoodie	by Dairsie	walled garden	yes	yes	yes	yes
FF047	Pittormie House	Pittormie	walled / other	yes	yes	no	no
FF048	Arnots Dron	Dairsie	garden	yes	yes	no	no
FF049	Eden Grove	Dairsie	walled garden	yes	yes	yes	yes
FF062	East Hall	Fernie	walled garden	partly	yes	-	-
FF066	Todhall House	Dairsie	walled garden/ other	partly	yes	no	no
FF068	Forgan Manse	Forgan	walled garden	partly	yes		yes
FF069	Myreside	Forgan	private garden	yes	yes	yes	yes
FF071	Wester Friaton	near Forgan	walled/other	yes	yes	yes	yes
FF073	Upper Urguhart	by Gateside	garden	yes	yes	yes	yes
FF074	Walled garden at Gateside House	Gateside	walled garden	yes	yes	no	no
FF075	Edenshead House	Gateside	walled garden	yes	yes	yes	yes
FF077	Priory Farmhouse	Priory Lane	walled / other	-	yes	yes	yes
FF081		,		yes		-	
	Berryhill	Grange of Lindores	walled garden	partly	yes	no	yes
FF082	Abdie House	Grange of Lindores	walled garden	yes	yes	yes	yes
FF085	Easter Kilmany	Kilmany	walled garden	yes	yes	yes	no
FF086	Cruivie	Kilmany	walled garden	partly	yes	maybe	yes
FF089	Cunnoquhie	Letham	walled garden	partly			
FF091	Leuchars Castle Farmhouse	Leuchars	walled garden	yes	yes	yes	yes
FF093	Milton	Leuchars	walled garden	yes	yes	no	yes
FF094	Earlshall	Leuchars	walled garden	yes	yes	yes	yes
FF097	Cairneyhall	Lindores	walled / other	partly	no	no	no
FF100	Denmylne	Lindores	walled / other	partly	yes	yes	yes
FF101	Walled Garden of Pitcairlie	Nether Pitcairlie	walled / other	yes	yes	yes	yes
FF102	Wester Lumbenny	Newburgh	walled garden	yes	yes	maybe	maybe
FF104	Luthrie House (field orchard)	Luthrie	field	yes	no	no	no
FF105	Starrbank House	Luthrie	walled / other	yes	yes	yes	yes
FF115	Parbroath Farm	Parbroath	walled garden	partly	,		
FF119	Weddersbie Farm	Collessie	garden	yes	yes	yes	yes
FF120	Rossie House	Rossie	walled garden	yes	yes	yes	yes
FF122	Lochiehead	Rossie	walled garden	yes	yes	yes	yes
FF124	Wellfield House	Strathmiglo	walled garden	yes	yes	yes	yes
FF126	Mansefield	Strathmiglo	walled garden	yes	yes	no	no
FF131	Chesterhill	Tayport	walled garden	partly	yes	no	no
FF133	Wormit Farm	Naughton Road	walled garden	yes	yes	yes	yes
FF137	Pillars of Hercules	Strathmiglo Road	agricultural field	yes	yes	no	yes
FF137 FF138	Kilgour Farmhouse	Falkland	walled garden				
FF138 FF139	Wellfield Steading		walled / other	yes	yes	no ves	yes
	5	Strathmiglo		partly	yes	yes	yes
FF140	14 Middleflat,	Auchtermuchty	private garden	partly	yes	yes	yes
FF141	5 Todhall Farm Cottages	Dairsie	private garden	yes	yes	no	no
FF143	Hill of Tarvit Mansion House	Cupar	walled / other	yes	yee	no	yes
FF145	Middle Foodie	Dairsie	private garden	partly	yes	no	yes
FF156	Uthrogle Farm	Uthrogle	walled garden	yes	yes	yes	yes
FF157	North Dron	Dairsie	walled garden	yes	yes	yes	no
	Seggie House	Seggie	walled garden	partly			
FF158		Logie	private garden	yes	yes	no	yes
FF159	Lucklaw House		private garden	yes	yes	yes	yes
	Kilmany Grange	Kilmany	process games of	,			
FF159 FF161 FF162		High Street	private garden	yes	yes	yes	yes
FF159 FF161	Kilmany Grange	,		-	yes yes	yes maybe	yes yes
FF159 FF161 FF162	Kilmany Grange Falkland Palace	High Street	private garden	yes		•	
FF159 FF161 FF162 FF164	Kilmany Grange Falkland Palace 17 Crossgate	High Street Cupar	private garden walled garden	yes yes	yes	maybe	yes
FF159 FF161 FF162 FF164 FF165	Kilmany Grange Falkland Palace 17 Crossgate 3 Millgate	High Street Cupar Cupar	private garden walled garden walled garden	yes yes yes	yes yes	maybe no	yes no
FF159 FF161 FF162 FF164 FF165 FF166 FF167	Kilmany Grange Falkland Palace 17 Crossgate 3 Millgate Millford House Eden Villa	High Street Cupar Cupar Cupar	private garden walled garden walled garden walled garden walled garden	yes yes yes yes partly	yes yes yes no	maybe no yes no	yes no yes yes
FF159 FF161 FF162 FF164 FF165 FF166 FF167 FF168	Kilmany Grange Falkland Palace 17 Crossgate 3 Millgate Millford House Eden Villa 8 The Barony	High Street Cupar Cupar Cupar Millgate	private garden walled garden walled garden walled garden walled garden private garden	yes yes yes partly yes	yes yes yes no yes	maybe no yes no no	yes no yes yes yes
FF159 FF161 FF162 FF164 FF165 FF166 FF167 FF168 FF169	Kilmany Grange Falkland Palace 17 Crossgate 3 Millgate Millford House Eden Villa 8 The Barony The Barony	High Street Cupar Cupar Cupar Millgate beside River Eden	private garden walled garden walled garden walled garden walled garden private garden public space	yes yes yes partly yes yes	yes yes yes no yes yes	maybe no yes no no yes	yes no yes yes yes yes
FF159 FF161 FF162 FF164 FF165 FF166 FF167 FF168 FF169 FF170	Kilmany Grange Falkland Palace 17 Crossgate 3 Millgate Millford House Eden Villa 8 The Barony The Barony Meadowwells Farmhouse	High Street Cupar Cupar Cupar Millgate beside River Eden Collessie	private garden walled garden walled garden walled garden walled garden private garden public space private garden	yes yes yes partly yes yes yes	yes yes no yes yes yes	maybe no yes no no yes no	yes no yes yes yes yes yes
FF159 FF161 FF162 FF164 FF165 FF166 FF167 FF168 FF169 FF170 FF171	Kilmany Grange Falkland Palace 17 Crossgate 3 Millgate Millford House Eden Villa 8 The Barony The Barony Meadowwells Farmhouse Hillcrest Cottage	High Street Cupar Cupar Cupar Millgate beside River Eden Collessie Denmylne	private garden walled garden walled garden walled garden private garden public space private garden private garden	yes yes yes partly yes yes yes partly	yes yes no yes yes yes no	maybe no yes no no yes no no	yes no yes yes yes yes yes yes
FF159 FF161 FF162 FF164 FF165 FF166 FF167 FF168 FF169 FF170	Kilmany Grange Falkland Palace 17 Crossgate 3 Millgate Millford House Eden Villa 8 The Barony The Barony Meadowwells Farmhouse	High Street Cupar Cupar Cupar Millgate beside River Eden Collessie	private garden walled garden walled garden walled garden walled garden private garden public space private garden	yes yes yes partly yes yes yes	yes yes no yes yes yes	maybe no yes no no yes no	yes no yes yes yes yes yes

Where 'partly' is shown in the 'Visited' field, this indicates that an attempt was made to visit the site, but that it was not possible to personally verify the existence of the orchard.

Table 2: Orchard Sites Included but Not Visited

Location ID	Orchard	Location	Type of	Probability
			orchard	Orchard
				Remains
FF011	Myres Castle	Auchtermuchty	walled / other	med
FF012	Pitlour Park	Auchtermuchty	walled / other	poor
FF013	Reediehill	Auchtermuchty	walled garden	med
FF014	Denmuir	Ayton	garden	med
FF015	Ayton Farm	Ayton	walled garden	poor
FF018	Balmullo Farm	Balmullo	walled garden	med
FF020	Pusk	Balmullo	walled/other	poor
FF021	Över Rankeillor	Bow of Fife	walled garden	v. poor
FF023	Daftmill	Bow of Fife	walled garden	
FF023			-	poor
	Lappie	Burnside	walled/other	med
FF029	St Fort (East)	by Newport	walled garden	poor
FF032	Murdochcairnie	Cairnie	parkland	poor
FF035	Hillcairnie	Cairnie	garden	med
FF036	Newton Farm	Collessie	walled garden	poor
FF037	Kinloch	Collessie	walled garden	med
FF041	Springfield House/ Kinloss House	Cupar	walled garden	poor
FF042	Kilmaron Castle	Cupar	walled garden	poor
FF044	Hilton of Carslogie	Cupar	walled garden	med
FF050	Pitcullo	Dairsie	walled garden	med
FF051	Clayton	Dairsie	walled garden	
	,			poor
FF052	Dunbog House	Dunbog	garden	poor
FF053	Dunbog Manse / Farm	Dunbog	walled garden	good
FF054	Dunbog School	Dunbog	walled garden	poor
FF055	Glenduckie	Dunbog	walled / other	poor
FF056	Woodmill Farm	Dunshalt	walled garden	good
FF057	Raecruick	Dunshalt	garden	med
FF058	Millfield	Falkland	walled garden	med
FF059	Falkland School	Falkland	walled garden	med
FF060	Summerfield	Falkland	walled garden	v.poor
			-	
FF061	Lathrisk House	Falkland	walled garden	poor
FF063	Fernie Castle	Fernie	walled garden	v. poor
FF064	Flisk Manse	Flisk	walled garden	good
FF065	Denbrae	Foodie	walled garden	poor
FF067	Foxton	Foodie	walled garden	v. poor
FF070	Commerton House	Forgan	walled garden	poor
FF072	Shiels	Freuchie	walled garden	med
FF076	Naughton House	Gauldry	walled / other	poor
FF079	Birns	Giffordtown	walled garden	poor
FF080	Easter Kilwhiss	Giffordtown	garden	
			-	poor
FF084	Kilmany Cottage	Kilmany	walled garden	poor
FF087	Mount	Kilmaron	walled garden	med
FF088	Lizzie Wells	Kinloch	walled garden	poor
FF090	Wards	Leuchars	garden	med
FF092	Pitlethie	Leuchars	walled/other	poor
FF095	Craigsanguhar	Leuchars	walled garden	poor
FF096	Kinnaird Farm	Lindores	walled garden	, good
FF098	Lindores House	Lindores	walled garden	med
FF099	Mains of Lindores	Lindores	orchard field	v.poor
FF103	Logie House	Logie	walled garden	med
FF106	Melville House	Monimail	walled garden	poor
FF107	Pathcondie	Monimail	walled garden	v.poor
FF108	Whinnypark	Monimail	garden	poor
FF109	Muirside	Moonzie	garden	poor
FF110	Torr of Moonzie	Moonzie	walled garden	poor
FF111	Moonzie School	Moonzie	garden	good
FF112	Moonzie Manse	Moonzie	walled garden	med
FF113	Lindores Abbey	Newburgh	walled / other	good
FF115 FF114	Balmeadowside	Parbroath	walled garden	-
				poor
FF116	Sturton/ Stirton	Rathillet	walled garden	poor
FF117	Rathillet House	Rathillet	walled garden	poor
FF118	Lochmalony House	Rathillet	walled garden	poor
FF121	Rossie Farm	Rossie	walled garden	poor
FF123	Flass	St Fort	walled garden	med
FF125	Burnside/ Gleneden	Strathmiglo	orchard field	med
FF128	Mouton/ Morton	Tayport	walled garden	poor
FF129	Scotscraig Mains	Tayport	walled garden	med
FF130	Albert Street	Tayport	garden	med
FF132	Scotscraig	Tayport	walled garden	poor
FF134	Kilburns	Wormit	walled garden	med
FF135	Newton	Wormit	walled garden	poor
FF146	23 Well Street	Cupar		good
FF147	15 Crosshills	Auchtermuchty		good
FF148	Woodmuir Terrace	Newport on Tay		good
FF149	House in the Hollow	Logie		good
FF151	Ardlogie	Logie		-
	5	-		good
FF152	Dr Muirs Garden	Auchtermuchty		med
FF153	Lumquat House	Auchtermuchty		med
FF154	Pitlair Park	Bow of Fife	1	med

4.2 The Best Remaining Orchards

To provide a focus on the orchards with the finest remains, the visited orchards were further scored. This is recorded in the database as the field 'Orchard Star Rating' - with 5 being the best orchards.

The criteria for the best remaining orchards were:

- size & age of orchard
- number of mature trees remaining
- historical significance
- pomological significance unusual varieties or forms of growth

Condition of orchard or trees was excluded as a criterion, as were biodiversity indicators.

There were 10 orchards considered as '5 star', and a further 10 orchards considered '4 star'. A final group of 16 '3 star' orchards is also included.

Location ID	Orchard	Location	Oldest Tree est. yrs	Approx. No of Trees	Star Rating
FF082	Abdie House	Grange of Lindores	80	25	5
FF027	Balhelvie	by Flisk	80 90	25	5
FF100	Denmylne	Lindores	90 60	22 40	5
FF094	Earlshall	Leuchars	90	40 75	5
FF025	Hilton House	Cairnie	90 80	38	5
FF173	Mount Pleasance	South Road	100	13	5
FF175	Rankeilor Mains Walled Garden	by Springfield	150	28	5
FF169	The Barony	Cupar	100	30	5
FF124	Wellfield House	Strathmiglo	90	30 40	5
FF133	Wormit Farm	Naughton Road, Wormit	100	20	5
11133		Naughton Koau, wornin	100	20	J
FF164	17 Crossgate	Cupar	60	6	4
FF168	8 The Barony	Cupar	110	5	4
FF003	Birkhill House	Birkhill	100	40	4
FF038	Caldwells Farm	Collessie	70	12	4
FF049	Eden Grove	Dairsie	100	25	4
FF167	Eden Villa	Millgate	100	7	4
FF171	Hillcrest Cottage	Denmylne	60	9	4
FF005	Monimail Tower Project	Monimail	80	40	4
FF007	Mugdrum House	Newburgh	100	15	4
FF119	Weddersbie Farm	Collessie	80	12	4
FF031	Cairnie House	Cairnie	70	10	3
FF131	Chesterhill	Tayport	50	4	3
FF046	Craigfoodie	by Dairsie	100	25	3
FF086	Cruivie	Kilmany	60	12	3
FF162	Falkland Palace	Falkland	100	100	3
FF143	Hill of Tarvit Mansion House	Cupar	60	36	3
FF161	Kilmany Grange	Kilmany	80	10	3
FF122	Lochiehead	Rossie	50	35	3
FF166	Millford House	Cupar	100	4	3
FF120	Rossie House	Rossie	80	55	3
FF105	Starrbank House	Luthrie	40	5	3
FF040	The Walled Garden	Dalgairn	110	8	3
FF156	Uthrogle Farm	Uthrogle	70	20	3
FF139	Wellfield Steading	Strathmiglo	50	10	3
FF004	West Flisk Manse	Newburgh	80	15	3
FF071	Wester Friaton	near Forgan	80	7	3

Table 3: The Best Remaining Orchards

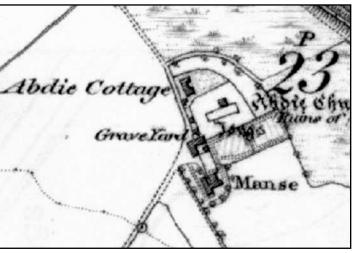
The 10 best orchards are reported indivdually below.

4.2.1 Abdie House Orchard

The former manse at Adbie has a two small walled gardens that adjoin one another. It is shown on the OS 1st edition map in the same form as it is found today.

In west walled garden are some apples and plums together with larger cherries though the latter may be ornamental. In the east walled garden are, around 14 old apple trees and 5 old plum trees. All trees look to be around 80 or more years old. There has been some pruning of apple trees in recent years. This is a fine old orchard and relatively intact.

In addition to the walled gardens, there are a large old pear and an old cherry plum near the house.



Abdie House: OS 1st Edition of 1850s

Looking from one walled garden into the other with fruit trees evident



4.2.2 Balhelvie Farm Orchard



Balhelvie is a good example of a farmhouse orchard, overlooking the River Tay. The low walled garden is shown existing in 1850s on the OS 1st edition map – complete with some lines of trees.

The orchard is a mix of old and mid age trees. There are a total 22 mature trees: apples, pears, plums, damson and greengage. The older plums are around 80-90 years old. The younger trees were planted in 1960.



4.2.3 Orchards of Denmylne House & Hillcrest Cottage

At Denmylne, just below Den of Lindores two old orchards exist, both with aged plum trees. Denmylne is shown on the OS 1st edition with most of the buildings as they are laid out currently. To the north west of the castle ruins and house, a garden is shown with avenues of trees. Hillcrest and its neighbouring cottages are not shown. The area occupied by the cottages

Balhelvie: OS 1st Edition map of 1850s (above). The southeast end of Balhelvie today (right) and their gardens is shown as a further large section of garden to the north east of the castle and steading.

Denmylne Orchard. Adjoining the castle is a private house now known as Denmylne. The private garden has around 40 apple, pear and plum trees most of which are mature. This orchard was included in the Newburgh Orchard Survey of 2003 and therefore will not be detailed further here.





Hillcrest Cottage. Neighbouring property, and further up the hill is Hillcrest Cottage. It is included in this survey. The Hillcrest orchard consists of 9 plum trees of around 60 years of age. They are prolific bearers and the keeper sells plums during the season. It is possible that these are also part of a much older orchard, predating 1850.

Denmylne Orchard from northwest (above), Hillcrest from road at southeast, with steading in foreground (below)



4.2.4 Earlshall Garden Orchard

This notable house and walled garden dates from the 16th century, but was remodelled by famous Scottish architect, Robert Lorimer in the late 19th century. Above one of the garden entrances is inscribed *"Here shall ye see no enemy bvt winter and rovgh weather"*. Lorimer also worked on Kellie Castle on the East Neuk, and Hill of Tarvit Mansion House, by Cupar. All have orchards.

Earlsholl: OS 1st Edition map of 1850s



The OS 1st edition shows the outline of the Earlshall walled garden as it is today, but surprisingly it is shown bare; devoid of any detail, tree or path. The walled garden was probably originally laid out in the early 17th century¹². Although Groome¹³ states that the property continued to be inhabited into the 19th century, it is generally accepted that Earlshall was almost derelict by 1891 when Lorimer came to restore it. Therefore, it is possible that the garden too had fallen into disuse and dereliction. It is thought that the garden was used to graze livestock prior to Lorimer starting work on it¹⁴.

The 1895 edition of the OS map shows some trees, and the quartered path layout as it remains today. However the yew trees on the topiary lawn were transplanted (mature) from a garden in

Edinburgh by Lorimer. Thus the quartered vegetable garden could be a result Lorimer's work or the unearthing of earlier designs.

There are significant orchard remains at Earlshall. They comprise two parts: A small orchard in the south west of the walled garden. In the north, fruit trees are part of the vegetable garden. The whole garden had been neglected for some years when the current owners came to the property in 1999.



Small orchard at south

Small orchard at south. This orchard has around 25 mature trees, mainly apple and some plum. The trees are not large. The keeper says that 10 years ago this area was totally overgrown. A crab apple is a recent addition to this area.

The area was also known as the Pet Cemetery. It is reputed to be the place where cats, dogs, and even horses were buried.

^{Land Use Consultants (1987) An Inventory of Gardens and Designed Landscapes in} Scotland. Volume 4: Tayside, Central, Fife. The Stationery Office, London.
Groome, F.H. (Ed.) (1894) The Ordnance Gazetteer of Scotland; a survey of Scottish topography, statistical, biographical, and historical. William Mackenzie, London.
Land Use Consultants (1987) An Inventory of Gardens and Designed Landscapes in Scotland. Volume 4: Tayside, Central, Fife. The Stationery Office, London.

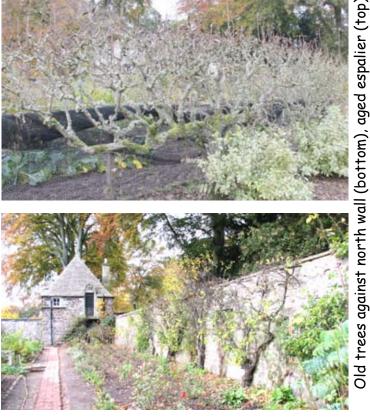
Fruit trees in the vegetable garden at north.

This area is quartered - interior of quarters are beds for vegetables and soft fruit. Espaliered fruit trees (mainly apples) surround the vegetable beds and grow against the walls. The posts and wires are long gone but the trees are mature and were trained to shape long ago. Some of these apple trees are quite old – perhaps 80 or more years.

Against the north wall, there are plums and apples growing. The plums are in poor condition, not large trees and appear to be suffering from rot at the base.

There are 3 new rows of young espaliered apples created by current keepers. These are located at the north west of the garden, near the buildings.

In total there are approximately 50 fruit trees, old and young, at the north of the garden.



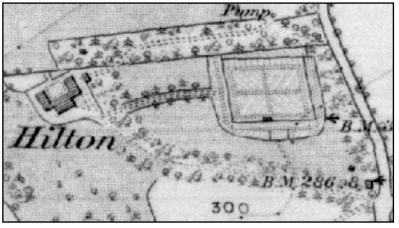
4.2.5 Hilton House Walled Garden

The OS 1st edition shows a large walled garden, quartered by paths. No trees are shown. Today, the walled garden exists much as it is shown on the 1850 map. The property has been in the current keeper's family for several generations. The keeper attributes preservation of the character of the garden to her grandmother who had the property until recently.

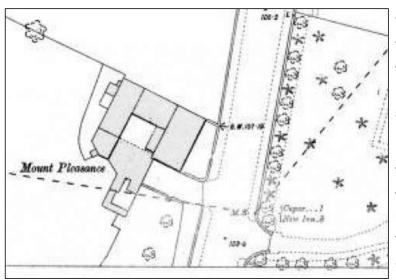
The walled garden is now mainly ornamental, with some vegetables and fruit. Inside the

walls, there are 14 old trees on inside of the east and north walls. Outside the walls there are 24 old trees on the west, south and east sides. Some of the trees are cordoned but many are fan or espalier trained. A lot of the trees still produce significant quantities of good fruit. To summarise, there remains approximately 38 mature apple and plum trees, the oldest of which are around 80 years old.

The good number of mature wall-trained trees makes this orchard one of the best examples in a country house walled garden in the east of Scotland.



Hilton: OS 1st Edition map of 1850s



Mount Pleasance: Detail from OS map of Cupar town 1893 Edition. Orchard is shown truncated by the bottom edge of the map.

4.2.6 Mount Pleasance Orchard

This orchard is located at the south east threshold of Cupar. It is not shown on the 1854 OS map of the Town of Cupar, but is shown on the 1893 edition of the town map.

The orchard has some fine remnant trees, which have been recently depleted in number by the collapse of the adjoining retaining wall that carries the road. The orchard has 3 apple trees around 100 years old. There are 9 other younger plum and apple trees. Finally

there is 1 fine aged pear, further up the sloping site, beside the driveway to the house. This is probably in excess of 100 years old. This is likely to be the best remaining garden orchard in Cupar.



Mount Pleasance orchard; partly damaged by the collapse of the retaining wall supporting the road. Reconstruction works at right of frame.



4.2.7 The Orchard at Rankeilor Mains

The walled garden at Rankeilor Mains was built in 1801 and has been in the current owner's family since 1873. The OS 1st edition map shows a large polygonal walled garden with paths and many trees. Of great significance is that it shows that the field to south and west of the walled garden was also a large orchard of several acres. Orchards of this size are unusual in Fife.

Rankeilor Mains Orchard and Walled Garden: OS 1st Edition map of 1850s The orchard that remains today is fairly limited, compared to its former extent. Within the walled garden, no fruit trees remain. The west half of the walled garden is now an amenity for a house built at the northern wall. The east half of the walled garden is let to an amenity horticulture nursery. This tenancy includes the orchard strip outside the wall as described below.

Outside the walled garden exists a 10m wide strip of orchard that follows the wall. This is part of orchard area shown on the 1850 map. Trees remain growing against the wall; 15 plum, apple and pear trees. Many of these are several decades old; but there are 2 pear trees at the east end that are significant aged specimens. One has a metal tag showing it to be "Louis Bonne of Jersey". Both trees are approximately 150 years old.

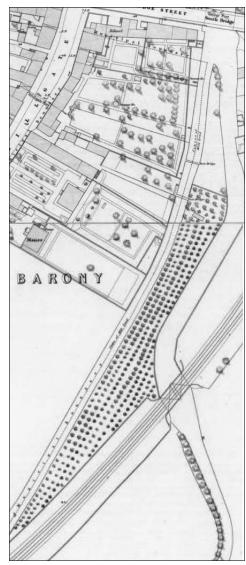
There is a further row of free standing trees around 7m away from wall; 13 apple trees in all, of approximately 50 years in age.

Aged pear trees on outside wall at Rankeilor Mains.



4.2.8 The Barony Orchards, Cupar

The OS 1st edition Town Map of Cupar in 1854 shows dense planting of this orchard beside the River Eden. The orchard stretched in a strip south to where the former mill lade meets the railway embankment. The scale of the orchard probably numbered in the hundreds of trees.



A small farm on the outskirts of Cupar was situated in what is now the grounds of No.8 The Barony. The garages were formerly cattle byres. The mill lade shown on the map formed the municipal boundary – the cows walked across a foot bridge from the farm, over the mill lade, and grazed within the orchard. The former owner sold the riparian Barony Orchard strip to Fife Council in 1970. He thinks many of the trees date from the 1840s, as a century later when he was a boy, they were already mature trees. Before he sold it, he reports that much of the fruit was stolen by the children of the town. What was not stolen was used or given to friends.

Today, the orchard is a public space with a paved footpath running its length and then on to Cupar Mills. The area is low lying and susceptible to flooding. There remains 10 large old pear trees spread along the length of the riverside. The pears are likely well in excess of 100 years old. There is also 1 old apple. Old trees near the path have been subjected to some very severe crown-reduction pruning – more arboricultural than horticultural. The orchard floor is uncut – and is dominated by nettles and undergrowth.

There are also numerous (~20) young fruit trees planted as part of a communal orchard.

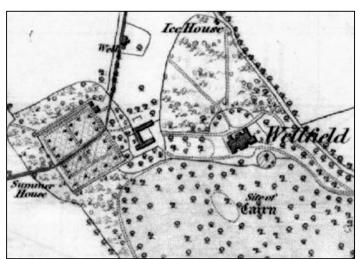
No. 8 The Barony still retains some fruit trees including 2 aged plums.

Aged pear trees; remnants of The Barony Orchard on riverside path



4.2.9 Wellfield House Walled Garden

The walled garden at Wellfield House is unusual in that it is divided by a burn running across it. The burn divides the garden into a northern half and a southern half. The OS 1st edition shows the large walled garden in 2 sections and with paths much as it is found today. The glasshouses outside the southern wall of the garden, where now there are pear cordons and peaches growing, are not shown as existing in 1850.



The walled garden has been used for a number of purposes over recent decades. Part of it was used

as a tree nursery as the overgrown remnants testify. The orchard used to cover the southern half of the walled garden. A large section of the southern half is now fenced off, and contains long grass and rabbits, for training gun dogs. Most of the trees in this section have not survived.

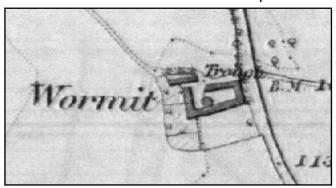
Around the periphery, fruit trees are still found against the walls. The burn forms a feature with a stone arched bridge together with a beech hedge

formed into an arborial arch. The burn 'corridor' is lined to the north and south by 2 rows of espaliered trees. There are some very old and overgrown apple tree, on wires and on the walls. There are also some old pears and plums, both free standing and on the walls.

In total around 40 fruit trees remain, the oldest one being around 80 years old. All quite neglected. There were formerly 3 gardeners, but the last one retired 25 years ago. Trees in general have not been maintained in recent years. Some are very overgrown; some essential maintenance is done by estate staff.

4.2.10 Farmhouse Orchard at Wormit Farm

The garden orchard at Wormit Farm is shown on the OS 1st edition map, with the indication of some trees present. It is located to the south of the farmhouse and to the west of the adjacent steading. Today the farmhouse is derelict and the garden is abandonned – apart from the fruit trees. Paths through the undergrowth and nettles indicate that fruit is still being picked from these mature trees.



Wellfield walled garden: OS 1st Edition map of 1850s

> Old apple in walled garden at Wellfield

Wormit Farm: OS 1st

Edition map of 1850s

In front of house and at right in foreground; two large & aged apple trees at Wormit Farm Parts of the stone retaining wall at the east have collapsed, and part of the wall at the west is missing or collapsed. However there are still many old fruit trees. At the south end there are 10 plums and 6 small pear trees. There is also an old plum tree in the south east corner. Perhaps most interesting are the 2 very tall and large old apple trees on the eastern edge up towards the house. One is 60 to 80 years old. The other appears to be older. It is the oldest, largest apple tree seen in the course of this survey.

In total there are approximately 20 mature trees, with the oldest ones being around 100 years old. This is a valuable traditional orchard.



4.3 Biodiversity Aspects of Orchards

Biodiversity aspects in the context of this survey, are assessed according to the suitability of the habitat in terms of allowing a biodiverse ecosystem to exist, rather than any actual measurement of biodiversity. Thus a number of criteria were recorded that relate to:

- the presence of 'veteran' trees
- the condition of the trees
- likely niche habitats in the trees
- the vegetation on the orchard floor
- the management of the orchard floor

A summary of biodiversity related information held on the database is shown in the tables below.

Location ID	Orchard	Location	Type of orchard	Approx no. of trees	Status	Old trees?	Fallen deadwood	Cavities
FF140	14 Middleflat,	Auchtermuchty	private garden	6	in active use	yes		
FF164	17 Crossgate	Cupar	walled garden	6		yes		
FF165	3 Millgate	Cupar	walled garden	1	in active use	yes		
FF141	5 Todhall Farm Cottages	Dairsie	private garden	10				
FF168	8 The Barony	Cupar	private garden	5		yes		yes
FF082	Abdie House	Grange of Lindores	walled garden	25	in active use	yes	yes	yes
FF048 FF027	Arnots Dron Balhelvie	Dairsie	garden	10 22	in active use			
FF027	Ballenbreich	by Flisk by Newburgh	walled garden rough ground□	10	in active use	yes	yes	yes
FF017	Balmerino Abbey & Farmhouse	Balmerino	walled garden	9		yes yes		
FF081	Berryhill	Grange of Lindores	walled garden	10		yes		
FF003	Birkhill House	Birkhill	walled garden	40	in active use	yes		yes
FF031	Cairnie House	Cairnie	walled garden	10	in delive use	yes		yes
FF038	Caldwells Farm	Collessie	walled garden	12	in active use	yes	yes	yes
FF039	Carphin Mansion House	Luthrie	walled garden	15		yes	,00	yes
FF131	Chesterhill	Tayport	walled garden	4		yes		,
FF046	Craigfoodie	by Dairsie	walled garden	25	in active use	yes		
FF086	Cruivie	Kilmany	walled garden	12		yes		
FF100	Denmylne	Lindores	walled / other	40	in active use	yes		
FF094	Earlshall	Leuchars	walled garden	75		yes		yes
FF062	East Hall	Fernie	walled garden	5		,		7
FF085	Easter Kilmany	Kilmany	walled garden	4		yes		
FF028	Easter Kinnear	by Kilmany	walled garden	7	in active use	yes		
FF049	Eden Grove	Dairsie	walled garden	25		yes		
FF167	Eden Villa	Millgate	walled garden	7	in active use	yes		yes
FF075	Edenshead House	Gateside	walled garden	35	in active use	yes		,
FF162	Falkland Palace	High Street	private garden	100	in active use	yes		yes
FF068	Forgan Manse	Forgan	walled garden	10		yes		
FF143	Hill of Tarvit Mansion House	Cupar	walled/ other	36	in active use	yes		
FF171	Hillcrest Cottage	Denmylne	private garden	9	in active use	yes		
FF025	Hilton House	Cairnie	walled garden	38	in active use	yes		
FF022	Howe	Glassart Glen	walled garden	22	in active use			
FF138	Kilgour Farmhouse	Falkland	walled garden	9		yes		yes
FF161	Kilmany Grange	Kilmany	private garden	10	in active use	yes		
FF091	Leuchars Castle Farmhouse	Leuchars	walled garden	25	in active use			
FF122	Lochiehead	Rossie	walled garden	35	in active use	yes		yes
FF009	Logie Farm	by Flisk	private garden	10	in active use	yes		
FF033	Lordscairnie	Cairnie	walled garden	16	in active use			
FF159	Lucklaw House	Logie	private garden	23	in active use			
FF126	Mansefield	Strathmiglo	walled garden	2				
FF170	Meadowwells Farmhouse	Collessie	private garden	9	in active use			
FF145	Middle Foodie	Dairsie	private garden	7				
FF058	Millfield	Falkland	walled garden		in active use			
FF166	Millford House	Cupar	walled garden	4	in active use	yes		yes
FF093	Milton	Leuchars	walled garden	16		yes		
FF005	Monimail Tower Project	Monimail	walled garden	40	odd remnants	yes	yes	yes
FF173	Mount Pleasance	South Road	private garden	13	in active use	yes		yes
FF007	Mugdrum House	Newburgh	walled garden	15	odd remnants	yes	yes	yes
FF069	Myreside	Forgan	private garden	8				
FF157	North Dron Old Schoolhouse	Dairsie	walled garden	5 10	odd remnants	yes		
FF016		Balhelvie	garden		in active use			
FF172 FF137	Ormiston Farm House Pillars of Hercules	Newburgh Strathmiglo Road	walled garden agricultural field	9 300	in active use in active use	yes		
FF034	Pitbladdo	Cairnie	walled garden	300	in active use			
FF034 FF047	Pittormie House	Pittormie	walled / other	4 10				
FF175	Rankeillor Mains Walled Garden	by Springfield	walled garden	28	in active use	yes		
FF120	Rossie House	Rossie	walled garden	55	in active use	yes		
FF105	Starrbank House	Luthrie	walled / other	5	in active use	yes		yes
FF010	Temple Knowe	Cupar	private garden	6		, 65		, 65
FF169	The Barony	Cupar	public space	30		yes	yes	yes
FF002	The Grange	by Stirton	private garden	3		yes	,00	, 00
FF040	The Walled Garden	Dalgairn	walled garden	8	in active use	yes		yes
FF066	Todhall House	Dairsie	walled / other	10		,00		, 25
FF073	Upper Urguhart	by Gateside	garden	16		yes	yes	yes
FF156	Uthrogle Farm	Uthrogle	walled garden	20		yes	, 50	, 20
FF101	Walled Garden of Pitcairlie	Nether Pitcairlie	walled / other	30	in active use	yes		
FF119	Weddersbie Farm	Collessie	garden	12	in active use	yes	yes	yes
FF124	Wellfield House	Strathmiglo	walled garden	40	long abandonned	yes	yes	yes
FF139	Wellfield Steading	Strathmiglo	walled / other	10	2	yes		
FF004	West Flisk Manse	Newburgh	walled garden	15		yes		
FF071	Wester Friaton	near Forgan	walled/other	7	in active use	yes		
FF102	Wester Lumbenny	Newburgh	walled garden	15		, 55		
	Woodmill Mains	by Lindores	walled garden	8	in active use			
FF006								

Table 4: Orchard Size, Status and Features

The table shows that many orchards have significant numbers of veteran trees, fallen deadwood and trees with cavities. Cumulatively, there is significant biodiversity value in these orchards.

Location ID	Orchard	Location	Orchard Floor Management	Grazed by	Main floor species
FF140	14 Middleflat,	Auchtermuchty	lawn		
FF168	8 The Barony	Cupar	lawn		
FF082	Abdie House	Grange of Lindores	mown		
FF048	Arnots Dron	Dairsie	mown		
FF027	Balhelvie	by Flisk	grazed	sheep	grass
FF008	Ballenbreich	by Newburgh	mown		grass
FF003	Birkhill House	Birkhill	mown		
FF031	Cairnie House	Cairnie	other		
FF038	Caldwells Farm	Collessie	mown		grass
FF100	Denmylne	Lindores	lawn		
FF094	Earlshall	Leuchars	other		
FF028	Easter Kinnear	by Kilmany	other		
FF049	Eden Grove	Dairsie	mown		
FF167	Eden Villa	Millgate	other		
FF075	Edenshead House	Gateside	lawn		grass
FF162	Falkland Palace	High Street	mown		
FF143	Hill of Tarvit Mansion House	Cupar	mown		
FF171	Hillcrest Cottage	Denmylne	other		
FF025	Hilton House	Cairnie	other		
FF138	Kilgour Farmhouse	Falkland	lawn		
FF161	Kilmany Grange	Kilmany	other		grass
FF091	Leuchars Castle Farmhouse	Leuchars	mown		
FF122	Lochiehead	Rossie	other		
FF166	Millford House	Cupar	other		
FF093	Milton	Leuchars			thistles
FF005	Monimail Tower Project	Monimail	ungrazed		grass
FF173	Mount Pleasance	South Road	grazed		grass
FF007	Mugdrum House	Newburgh	ungrazed		grass
FF157	North Dron	Dairsie	mown		
FF172	Ormiston Farm House	Newburgh	other		
FF175	Rankeilor Mains Walled Garden	by Springfield	mown		grass
FF120	Rossie House	Rossie	other		
FF169	The Barony	Cupar	ungrazed		nettles
FF002	The Grange	by Stirton	mown		
FF040	The Walled Garden	Dalgairn	mown		grass
FF066	Todhall House	Dairsie	lawn		
FF073	Upper Urquhart	by Gateside	ungrazed		nettles
FF156	Uthrogle Farm	Uthrogle	ungrazed		
FF101	Walled Garden of Pitcairlie	Nether Pitcairlie	mown		grass
FF119	Weddersbie Farm	Collessie	ungrazed		brambles
FF124	Wellfield House	Strathmiglo	ungrazed	other	grass
FF133	Wormit Farm	Naughton Road	ungrazed		

Table 5: Orchard Floor Management

As can be seen from the table, grass is the main species recorded as the floor. Although most orchard floors are cut mechanically, many are left as rough grass & undergrowth.

Table 6: Veteran Tree Features

Location ID	Orchard	Location	holes in branches	crevices in bark	loose bark	trunk cavities	dead wood in	dead wood on	water pools	fungal fruiting	aerial roots	sap runs
							canopy	ground	•	bodies		
FF140	14 Middleflat,	Auchtermuchty		yes	yes							
FF168	8 The Barony	Cupar	yes	yes	yes	yes	yes					
FF082	Abdie House	Grange of Lindores	yes	yes	yes	yes	yes		yes			
FF027	Balhelvie	by Flisk	yes	yes	yes	yes	yes					
FF008	Ballenbreich	by Newburgh		yes								
FF017	Balmerino Abbey & Farmhouse	Balmerino		yes	yes							
FF081	Berryhill	Grange of Lindores		yes								
FF003	Birkhill House	Birkhill		yes	yes		yes					
FF031	Cairnie House	Cairnie		yes	yes							
FF038	Caldwells Farm	Collessie	yes	yes	yes	yes	yes	yes				
FF039	Carphin Mansion House	Luthrie	yes	yes	yes	yes	yes					
FF046	Craigfoodie	by Dairsie		yes	yes							
FF094	Earlshall	Leuchars	yes	yes	yes	yes	yes		yes			
FF085	Easter Kilmany	Kilmany	-	yes	yes							
FF028	Easter Kinnear	by Kilmany		yes	yes							
FF049	Eden Grove	Dairsie	yes				yes					
FF167	Eden Villa	Millgate	yes	yes	yes	yes	yes					
FF075	Edenshead House	Gateside		yes	yes	-						
FF162	Falkland Palace	High Street	yes	yes	yes	yes	yes		yes	yes		
FF143	Hill of Tarvit Mansion House	Cupar	yes	yes	yes				,	,		
FF171	Hillcrest Cottage	Denmylne	,	yes	yes							
FF025	Hilton House	Cairnie		yes	yes							
FF138	Kilgour Farmhouse	Falkland	yes	yes	yes		yes					
FF161	Kilmany Grange	Kilmany	,	yes	yes		yes					
FF091	Leuchars Castle Farmhouse	Leuchars		,	yes							
FF122	Lochiehead	Rossie	yes	yes	yes		yes					
FF009	Logie Farm	by Flisk		yes	,							
FF166	Millford House	Cupar	yes	yes	yes	yes	yes					
FF093	Milton	Leuchars	,	yes	,	,	yes					
FF005	Monimail Tower Project	Monimail	yes	yes	yes	yes	,	yes				
FF173	Mount Pleasance	South Road	yes	yes	yes	yes		yes	yes			
FF007	Mugdrum House	Newburgh	yes	yes	yes	yes	yes	yes	yes			
FF157	North Dron	Dairsie		yes	yes			,				
FF172	Ormiston Farm House	Newburgh		yes	yes							
FF175	Rankeilor Mains Walled Garden	by Springfield	yes	yes	yes							
FF120	Rossie House	Rossie	yes	yes	yes		yes					
FF105	Starrbank House	Luthrie	yes	yes	yes	yes	yes					
FF169	The Barony	Cupar	yes	yes	yes	yes	yes	yes				
FF002	The Grange	by Stirton	· ·	,		,	yes	,				
FF040	The Walled Garden	Dalgairn	yes	yes	yes	yes	yes					
FF073	Upper Urguhart	by Gateside	yes	yes	yes	yes	yes	yes				
FF156	Uthrogle Farm	Uthrogle	,	yes	yes	,	,	,				
FF101	Walled Garden of Pitcairlie	Nether Pitcairlie		yes	yes		yes				yes	
FF119	Weddersbie Farm	Collessie	yes	yes	yes		yes	yes				
FF124	Wellfield House	Strathmiglo	yes	yes	yes	yes	yes	yes	yes			
FF071	Wester Friaton	near Forgan	,	,	yes	,	,	,	,			
FF133	Wormit Farm	Naughton Road	yes	yes	yes		yes					

The table shows that the veteran trees in most orchards have multiple features of biodiversity interest.

4.4 Significant New Orchards

While the main focus of this survey has been mature traditional orchards, the significance of new plantings in new locations or on former orchard sites should be noted.

4.4.1 Orchards at Pillars of Hercules Organic Farm

There are 2 new orchards at Pillars of Hercules, totalling around 300 trees. Neither orchard is historic. These are summarised below.

Orchard 1 was planted in 1992 to the south of the road to Kilgour. It totals around 200 trees grown as small open-centred trees, and cordons in numerous rows. Mainly apples with some plums. Details of varieties are recorded on the survey database.

Orchard 2 was planted in 2008 and 2009 to the north of the road. It consists around 100 trees in 3 rows; running north-south along the western boundary of the farm. All these trees are apple; various old and new varieties: Sunset, Tydeman's Early, James Grieve, Kidds Orange Red, Ribston Pippin, Falstaff, Red Devil, Katy, Discovery, Fiesta.



4.4.2 New School Orchards

While not included in this survey, it should be noted that in recent years *Fife Coast and Countryside Trust* have planted orchards at many schools and community sites in this area. The list of sites¹⁵ is shown in the table below.

Cordons established in 1992 at Pillars of Hercules Farm.

Location	No. of Trees
Auchtermuchty Primary School	30
Gateside Primary School	24
Falkland Primary	8
Dunshalt Park	8
Auchtermuchty Common	10
Gaddon Loch	10
Stratheden Hospital	20
Strathmiglo Community Woodland	30
Newport Primary School	20
Bell Baxter School	20
Kilmaron Primary School	10
Balmerino Primary School	6
Rathillet Primary School	5
LMCP	30
Madras College	12
Tip Point	20
Dairsie Primary School	5
Leuchars Primary School	5
Newburgh Orchard Group	20
Pitcairn	4

Table 7: New Orchard plantings by FCCT

The table shows that around 300 new fruit trees have been planted to date.

4.4.3 Millfield

A new orchard has been planted at Millfield in Falkland. The OS 1st edition map shows the walled garden divided by paths into 2 halves with four trees set prominently near inside corners. The aerial image indicated the garden to no longer contain significant trees. However, late in the survey, information came to light that a new orchard had been planted on behalf of the owner in 2008/2009. The details of the new plantings¹⁶ are given in the table below.

Table 8: New Plantings at Millfield

Cultivar	No. of Trees	Rootstock	Spacing (m)	Use	Provenance
Cambusnethan Pippin	1	MM 106	5	Eating	Clydesdale
Couls Blush	1	MM 106	5	Eating	Ross-Shire
Hawthornden	3	M 25	7	Cooking	Mid-Lothian
Hoods Supreme	1	MM 106	5	Eating	Angus
James Grieve	5	M 25	7	Eating	Mid-Lothian
Lass O' Gowrie	1	MM 106	5	Eating	Perthshire
Maggie Sinclair	1	MM 106	5	Cooking	Clydesdale
Stirling Castle	2	M 25	7	Cooking	Stirlingshire
Thorle Pippin	6	M 25	7	Eating	Scotland
Wheelers Russett	1	MM 106	5	Dual use	Clydesdale
White Melrose	1	MM 106	5	Cooking	Melrose

5 Conclusions

The character of orchards along Fife's Tay Coast has been shown to be different than other parts of Scotland that are considered to be orchard areas. In Fife, and with the exception of Newburgh, orchards are predominantly a private affair. They are located in private gardens – mainly walled – and it is suggested that their primary purpose was to provide fruit for the proprietor's table, and not income from commerce.

The quantity of walled gardens that have emerged during this survey has also been unexpected. Some 120 out of 163 sites considered. The walled garden – when carefully sited with a good aspect, as all later gardens were – is an excellent technology to make the best of our climate.

The survey recorded over 1500 fruit trees on 75 sites. The 'best remaining' orchards have many interesting features and great value between them.

There are few large orchards in Fife. Those that existed in the past such as Luthrie and Rankeilor Mains are respectively, non existent and much depleted. Falkland Palace orchard is of moderate age and size, containing 100 trees. The new orchards at neighbouring Pillars of Hercules contain 300 trees. In time these may become important historic orchards.

While there are many interesting orchards reported on here, this survey further demonstrates that the town of Newburgh has such a significant concentration of orchards that its critical mass as a unique orchard town must be better recognised.

The following additional conclusions are drawn from this piece of work:

Orchard Status

- 36 remaining orchards have some significant heritage & biodiversity value.
- 10 orchards are considered 'best remaining' in terms of heritage interest.
- Orchards are still under pressure of total or partial loss.
- Walled gardens have been popular places to conduct alternative activities: breeding pheasants, gundog training, christmas tree nurseries, grazing of horses or livestock, and building houses. This usually though not always, leads to the loss of orchard remnants.
- The few large field scale orchards that did exist in Fife have been lost to grazing.
- There is currently no presumption in favour of historic orchards in the planning process.

Fruit

- One new orchard is operated commercially. Some fruit is bought commercially from other traditional orchards.
- In general, fruit is used to some extent, and in some orchards it is very actively used.
- Local people still make use of the fruit from some abandoned orchards.
- Much fruit goes to waste.

Management

- Most orchards are neglected in terms of their management.
- Neglected orchards often have high biodiversity value.
- Veteran trees in the orchards satisfy multiple criteria of a biodiverse habitat. These Fife orchards showed a significant quantity of veteran tree features.
- A balance between tree health & productivity, and biodiversity aspects needs to be found.
- New plantings need to be made soon if orchards are to survive in the long term.

6 Recommendations

The following recommendations are made to the client.

- Awareness Raising. Raising the awareness of the value of these orchards in terms of heritage, fruit, potential economic benefits, and biodiversity should be an ongoing theme. This awareness raising work needs to speak to various important communities: the public; professionals such as planners, developers and those involved in built heritage; and owners, landowners and farmers.
- 2. Engagement. The owner's of orchards should be engaged with, to explore management options and how they can be supported in maintaining the orchard and augmenting the current stock.
- 3. Mode of engagement. In engaging with owners, a carrot rather than a stick style should be employed. For example, tree preservation orders may preserve trees but they will not preserve an orchard in the long term. Therefore, 'intrusive' instruments such as TPO should be avoided in all but the most extreme conditions, as they are likely to create a hostile relationship that will be counter-productive to the future of the orchard.
- 4. Creating a Rationale for Orchard Retention. As well as engaging with orchard keepers, a rationale for retaining their orchards needs to be developed and promoted to them. Orchards on Fife's Tay Coast have essentially been private affairs. The rationale needs to focus on this type of orchard.
- 5. Management Best Practice. Management best practice needs to be developed and disseminated. Best practice needs to take into account various factors that may be contradictory. For example maximising biodiversity may hinder fruit production. Best practice should be part of the engagement process.
- 6. Planning. The remaining orchards and especially those classified as the 'best remaining' need to be accorded a status that creates a presumption against planning permission being granted. It is possible that this may be achieved by heritage status such as 'designed landscape' or by biodiversity status such as UK Biodiversity Action Plan priority habitat. Engagement with local biodiversity officers in order to upgrade the status of orchards will help to ensure further orchards are not lost. Local planning officers should be made aware of the best remaining orchards, and their rare status.
- **7. Further work.** Other parts of Fife also have historic orchards. This should be explored to gain a full picture of Fife's orchard heritage.

Appendix A: FCS Workplan for Preliminary Screening of Sites

NORTH EAST FIFE AREA

DESK-BASED ORCHARD SURVEY

ITENTS:	Maps:	Original outline map of area to be analysed Summary Map of area analysed 4 x maps (scale 1:50,000) showing grid squares in detail
	Sets of Folders:	broken down into 5 categories and divided into sections based on grid reference analysis. (see notes below)
	Also enclosed:	Maps and aerials of a few larger villages/towns not analysed in detail but with potential areas.
OS 6" 1850 - 1	Initial Analysis/breal	kdown

Using the OS 6" 1850 maps supplied by the National Libraries for Scotland website, the entire area was painstakingly trawled for potential sites. For ease they were divided into grid reference squares to ensure no areas were missed. Copies were made of potential areas. These were numbered as they occurred. For example, under GR 400/100 the 3^{rd} site found would have been numbered 4/1 (3). (Early on (relates to 400 and some 300 GR squares) some of the "Garden" sites were not numbered but only given a *.)

Sites were then divided up as follows, using coloured "post-its". A quick note was made of the analysis, under (a):

Any potential orchard site (high potential)GreenAny walled garden, with or without trees (medium potential)PinkAreas showing cultivation, with or without trees (low potential)Orange

b) Aerial Photography/up-to-date Maps - Analysis and further breakdown

Using the aerials and maps supplied under the Forestry Commission Browser, the potential areas were then examined for their potential status nowadays. Copies of aerials and up-to-date maps were made of all the potential areas (except those with low potential). Further quick notes were added to the "post-its" (section (b).

Sites were then finally divided into sets of folders as follows:

(a) high potential (green) - (b) high/medium/low potential

- (a) medium potential (pink) (b) high potential
- (a) medium potential (pink) (b) medium potential
- (a) low potential (orange) (b) medium potential
- (a) low (orange) or medium (pink) potential low potential

For ease, the folders were also split according to grid reference squares, as follows:

GR areas 400 x 100; 400 x 200 GR areas 300 x 100; 300 x 200 GR areas 200 x 000, 200 x 100, 200 x 200 GR areas 100 x 100; 100 x 000

Where applicable, an additional sheet, copied from "A Survey of Gardens and Designed Landscapes in North East Fife" was also included.

Note: there were a lot of areas of parkland adjacent to large houses (mostly described as such by the "Gardens" survey. These areas were not analysed. However it was considered that some of these areas might also contain areas of orchard and may need further examination.

Harriet Lindsay, August 2009

CON

a)

Appendix B: Grid References of Orchards Surveyed

Location ID	Orchard	Br	itish National Grid Ref
FF001	Stirton Farm	NO	3579 2167
FF002	The Grange	NO	3603 2270
FF003	Birkhill House		3377 2331
FF004	West Flisk Manse		3133 2251
FF005 FF006	Monimail Tower Project Woodmill Mains		2981 1413 2717 1527
FF007	Mugdrum House		2250 1796
FF008	Ballenbreich		2729 2017
FF009	Logie Farm	NO	2877 2086
FF010	Temple Knowe		373 147
FF011 FF012	Myres Castle Pitlour Park		2417 1099 2092 1116
FF013	Reediehill		2092 1110
FF014	Denmuir		3024 1882
FF015	Ayton Farm	NO	3019 1930
FF016	Old Schoolhouse		3035 2165
FF017 FF018	Balmerino Abbey & Farmhouse Balmullo Farm		3583 2467 4270 2063
FF019	Hayston		4197 2002
FF020	Pusk		4402 2060
FF021	Over Rankeilor		3246 1360
FF022	Howe		223 137
FF023 FF024	Daftmill		3155 1220 4219 1687
FF024 FF025	Lappie Hilton House		4219 1687 3681 1654
FF027	Balhelvie		3078 2188
FF028	Easter Kinnear	NO	4044 2309
FF029	St Fort (East)		4220 2557
FF030 FF031	Beech Cottage Cairnie House		3800 1991
FF031	Murdochcairnie		3702 1696 3542 1957
FF033	Lordscairnie		3507 1789
FF034	Pitbladdo		3629 1715
FF035	Hillcairnie		3647 1855
FF036	Newton Farm		2929 1291
FF037 FF038	Kinloch Caldwells Farm		2799 1231 2676 1317
FF039	Carphin Mansion House		3203 1954
FF040	The Walled Garden		3723 1526
FF041	Springfield House/ Kinloss House		
FF042	Kilmaron Castle		3620 1610
FF043 FF044	Carslogie House Hilton of Carslogie		3522 1432 3394 1424
FF044	Cuparmuir Walled Garden (Ferryn		
FF046	Craigfoodie		4075 1800
FF047	Pittormie House		4171 1851
FF048	Arnots Dron		4264 1790
FF049 FF050	Eden Grove Pitcullo		4219 1687 4141 1925
FF051	Clayton		4309 1835
FF052	Dunbog House		2868 1807
FF053	Dunbog Manse / Farm		2860 1790
FF054	Dunbog School		2887 1842
FF055 FF056	Glenduckie Woodmill Farm		2851 1872 2483 0961
FF056 FF057	Raecruick		2483 0961 2569 0997
FF058	Millfield		2501 0716
FF059	Falkland School		2566 0733
FF060	Summerfield		2378 0821
FF061 FF062	Lathrisk House East Hall		2738 0835 3390 1531
FF062	Fernie Castle		3191 1478
FF064	Flisk Manse		3129 2248
FF065	Denbrae		3903 1859
FF066	Todhall House		3974 1703
FF067 FF068	Foxton Forgan Manse		3909 1633 4385 2610
FF069	Myreside		4380 2575
FF070	Commerton House	NO	4346 2510
FF071	Wester Friaton		4264 2589
FF072	Shiels		2828 0895
FF073 FF074	Upper Urquhart Walled garden at Gateside House		1911 0819 1862 0928
FF074	Edenshead House		1844 0919
FF076	Naughton House		3738 2467
FF077	Priory Farmhouse		3831 2378
FF079	Birns		2939 1190
FF080 FF081	Easter Kilwhiss Berryhill		2793 1076 2593 1593
FF081 FF082	Abdie House		2602 1634

.63		Orcharus Su	iveyea
Locatio	on	Orchard	British National
<u>ID</u> FF084	ĸ	ilmany Cottage	Grid Ref NO 3871 2190
FF085		aster Kilmany	NO 3890 2190
FF086		ruivie	NO 4033 2227
FF087			NO 3397 1621
FF088 FF089		izzie Wells Junnoquhie	NO 2745 1243 NO 3125 1510
FF090		/ards	NO 4709 2252
FF091	L	euchars Castle Farmhouse	NO 4522 2213
FF092		itlethie	NO 4582 2193
FF093 FF094		lilton arlshall	NO 4466 2053 NO 4647 2109
FF095		raigsanguhar	NO 3951 1917
FF096		innaird Farm	NO 2727 1747
FF097		airneyhall	NO 2733 1574
FF098 FF099		indores House lains of Lindores	NO 2636 1670 NO 2601 1758
FF100		enmylne	NO 2492 1757
FF101	V	alled Garden of Pitcairlie	NO 2387 1471
FF102		/ester Lumbenny	NO 2265 1566
FF103 FF104		ogie House uthrie House (field orchard)	NO 4081 2063 NO 3330 1949
FF105		tarrbank House	NO 3350 2005
FF106	Μ	lelville House	NO 2992 1379
FF107		athcondie	NO 2933 1434
FF108 FF109		/hinnypark luirside	NO 2944 1384 NO 3497 1695
FF1109		orr of Moonzie	NO 3497 1695 NO 3497 1713
FF111		loonzie School	NO 3458 1727
FF112		loonzie Manse	NO 3409 1765
FF113 FF114		indores Abbey almeadowside	NO 2435 1847 NO 3172 1818
FF114		arbroath Farm	NO 3238 1774
FF116		turton/ Stirton	NO 3578 2157
FF117		athillet House	NO 3588 2076
FF118		ochmalony House	NO 3671 2007
FF119 FF120		/eddersbie Farm ossie House	NO 2613 1301 NO 2660 1196
FF121		ossie Farm	NO 2563 1248
FF122	L	ochiehead	NO 2533 1307
FF123		lass	NO 4109 2579
FF124 FF125		/ellfield House urnside/ Gleneden	NO 1932 0990 NO 2190 0896
FF126		lansefield	NO 2185 1050
FF128	Μ	louton/ Morton	NO 4666 2601
FF129		cotscraig Mains	NO 4496 2846
FF130 FF131		lbert Street hesterhill	NO 4564 2890 NO 4383 2769
FF132		cotscraig	NO 4457 2812
FF133	V	/ormit Farm	NO 3950 2573
FF134		ilburns	NO 3776 2520
FF135 FF137		ewton illars of Hercules	NO 4014 2460 NO 2405 0819
FF138		ilgour Farmhouse	NO 2223 0804
FF139	V	/ellfield Steading	NO 1926 1022
FF140		4 Middleflat,	NO 241119
FF141 FF143		Todhall Farm Cottages ill of Tarvit Mansion House	NO 3983 1712 NO 381119
FF145		liddle Foodie	NO 4045 1745
FF146		3 Well Street	NO 375148
FF147		5 Crosshills	NO 236115
FF148 FF149		loodmuir Terrace louse in the Hollow	NO 416273 NO 404205
FF151		rdlogie	NO 408211
FF152		r Muirs Garden	location unclear
FF153		umquat House	NO 243137
FF154 FF156		itlair Park throgle Farm	NO 319120 NO 3377 1340
FF157		orth Dron	NO 4264 1790
FF158		eggie House	NO 446191
FF159		ucklaw House	NO 4043 2050
FF161 FF162		ilmany Grange alkland Palace	NO 3860 2160 NO 2530 0750
FF162 FF164		7 Crossgate	NO 2530 0750 NO 3741 1434
FF165		Millgate	NO 3742 1425
FF166	Μ	lillford House	NO 3740 1425
FF167		den Villa The Barony	NO 3744 1424
FF168 FF169		The Barony he Barony	NO 3751 1422 NO 3752 1412
FF170		leadowwells Farmhouse	NO 2727 1331
FF171	н	illcrest Cottage	NO 2498 1755
FF172		Irmiston Farm House	NO 2456 1692
FF173 FF175		lount Pleasance ankeilor Mains Walled Garden	NO 3752 1368 NO 3286 1174
	1	and the second s	

Appendix C: Printout of Survey Forms from Database

Printout omitted from this public edition of the report to preserve the privacy of participants.