Reviving the Clyde Valley Orchards



Strategy Report to:

Rural Development Trust

Clyde Valley Orchard Group

Clyde and Avon Valley Landscape Partnership

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by Dr Crispin W. Hayes CW Hayes Associates Cupar, Fife, KY15 5SQ. 0845 458 8335 www.eco-consultancy.co.uk

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Summary

Background

This report sets out the process of developing a strategy and an action plan for reviving the orchards of the Clyde valley alongside identifying projects for implementation over the next five years. It will inform the development of the Landscape Conservation Action Plan (LCAP), a key component of the Stage 2 bid by Clyde and Avon Valley Landscape Partnership (CAVLP) to the Heritage Lottery Fund (HLF) as part of a partnership project that will run until 2016.

The orchards in the Clyde Valley are of historic, cultural and landscape importance. At one time, they made a significant contribution to the local economy, providing jobs for many local people in cultivation of a range of soft and tree fruits and tomatoes over the past two hundred years, however the income generated from these activities has steadily declined. The orchards themselves make a significant and important contribution to both the scenic value and landscape character of the Clyde Valley.

The important contribution to the landscape has been under threat as traditional orchards decline in economic importance and orchards fall out of active management regimes. However, over the past few years, interest in orchards has begun to grow and some new owners with an interest in growing fruit, have begun to revive old orchards.

The decline of the orchards of the Clyde Valley is a relatively recent story, played out over the last two to three decades. The orchards of the Clyde Valley were worked much later than elsewhere in Scotland, due to the predominance of plums. Apples were the former dominant species, for which the Valley was well known however now plum trees predominate, and have done so since the late Victorian era. This creates a limitation on the products that can be made, because in the current market, the range of value-added products from plums is quite limited. In the long-term, a return to a greater number of apple trees will enhance the utility of the fruit produced.

Review

A review of previous studies in particular the Ironside Farrar 2001 orchard survey has shown that by far the majority of trees were plum however, numbers of trees do not relate directly to the quantity of fruit produced. A mature apple tree will produce many times the fruit of a young plum tree and of the apple trees in the Valley the majority are culinary varieties, again limiting their commercial scope. While there were some shortcomings, such as the age of the

data, these studies provide an important and solid foundation for developing projects aimed at reviving traditional orchards in the Valley.

Biodiversity studies have been carried out in the orchards, and more are in progress. However the biodiversity case for orchard habitats has yet to be made strongly for orchards in the Clyde Valley. No endemic species have been found so far, and the biodiversity knowledgebase for orchard habitats is in need of further growth.

Growers have reported that the poor economic returns of growing fruit for wholesale led to the gradual closure of the business throughout the Valley. Even local wholesale markets such as Glasgow provide insufficient return to cover the cost of picking. Never-the-less there is an unmet demand for fruit in Scotland and the challenge is to connect buyers with producers. The retail market for fresh fruit is strong but it is of short duration (without investment in storage facilities) and prices are held down by imports and supermarket competition. Thus it can provide only a minor part of a business income. The wholesale market is difficult because there are few wholesale buyers in Scotland. However, there appears to be a healthy opportunity for niche products such as premium apple juice, other value-added products, and non-fruit orchard products such as honey. Both direct selling and the wholesale of value-added products have been successful for other producers. Those buyers paying the most expect the highest quality. Fruit for juice needs to be of a higher quality than that for cider production. Apples have the most ready sizeable market in terms of wholesale, though local plums still have a significant retail opportunity but their season is very short.

The existing policy framework and funding provides little direct support to orchards in the Clyde Valley, and indirect support is weak. Policies on the historic environment are not applied to orchards, and recognition and protection of the orchard habitat is not proactively implemented. Local producers have not benefited from SRDP funding or other agrienvironmental schemes. Conversely the situation in mainland Europe is very different. EU rural development funding is widely used to support traditional orchards there. Nature conservation organisations are more active in recognising the biodiversity benefits of extensively managed orchards, to the extent that in Germany one has promoted an orchard juice programme called Streuobst that helps to secure the longterm biodiverse management of orchards.

Consultation & Survey

Engaging and listening to the community is a vital part of developing and then implementing a revival of the Clyde Valley orchards. Without a significant element of the community actively supporting the strategy, it will not be successful in the long-term. Throughout the strategy development the community have been invited to be part of the process.

Early in the process there was a public meeting to jointly develop a vision and a consultation of all orchard keepers and supporters on the draft strategy followed. This consultation received responses from nearly half of the community of orchard owners and supporters.

The key outcomes of the keeper consultation were that:

- there was clear support for a revival and the draft strategy;
- keepers have limitations in capacity especially around maintenance;
- there was firm support for a new community business and a brand to be established;
- there was a willingness to engage with the developing revival process.

A questionnaire-based survey of orchards was also undertaken to update previously held data, and to determine current practices. Around half of recorded owners responded. A wide range of useful data has been collected, about the trees and their condition, the fruit and its use, and the management of the orchards.

The key outcomes of the updating survey of orchards were that:

- the orchard resource has contracted since 2001,
- there has been a significant loss of plum trees though they still form around 65% of orchards trees;
- capacity to manage the orchards including picking all the fruit is limited;
- there remains a sizeable un-utilised fruit resource which goes to waste;
- income never exceeds costs in the current economic framework; and
- there is significant potential for high biodiversity but some management methods,
 such as treatment of the orchard floor, need to be amended.

The Strategy

The vision for reviving the orchards of the Clyde Valley is to ensure that a critical mass is established of working traditional orchards that provide fruit and value-added products in a way that ensures economic sustainability, but that are managed extensively for biodiversity, heritage and aesthetic benefits.

At its core the strategy for the revival of the orchards is concise and simple:

- working the orchards creates the most secure future;
- new products and new markets are identified & exploited in order to make economic use of the fruit;
- maintenance of the mature orchards is recognised as a costly but un-economic activity, and a grant system is created to bring the orchards back into order;
- balanced & careful management of orchards is incentivised so that the interests of production and biodiversity can both be met;
- rural businesses that work directly and indirectly with the orchards are created and fostered, and bolster the local economy and employment;
- cultural activities around the orchards, together with awareness-raising, education & training are given a high priority.

Recommendations & Action Plan

15 projects are identified to implement the strategy over the next 5 years. The projects are built around 4 themes as shown below:

Research to Develop the Knowledgebase

- K1 Survey of Orchard Resource, Historical mapping, and GIS Project
- K2 Deepening Biodiversity & Management Plan Project
- K3 Fruit Variety Collaboration Project

Enterprise Development

- D1 Clyde Valley as a Brand & Orchard Products Market Project
- D2 Community Business & Orchard Products Project
- D3 Supporting Local Environmental Standards Project
- D4 Woman Rural Entrepreneur Project

Engaging and serving the Needs of Orchards

- E1 LP Orchard Grant Scheme Project
- E2 Old Orchards, New Revival Project
- E3 Certification Assistance Project

Outreach for Engagement with Wider Community

- C1 Young People Education programme
- C2 iOrchard Project
- C3 Advantage Volunteer & Training programme
- C4 Fruitful Fairs Project
- C5 International Connections Project

A project delivery framework is proposed that reflects the importance of continuity and perseverance. The task is considerable and the community must be engaged fully in order to ensure that they join the journey to revive the orchards. The project management is proposed to mainly rest with RDT, because it has the capacity, skills and experience to undertake this work now; it is also an autonomous legal body. It should manage on behalf of the whole client group and the wider community. Projects involving orchard work should be managed by a new social enterprise, indeed the organisation's start up should be based on these. The new social enterprise should in time build capacity to be able to take on more of the wider project management. CVOG has an important role to play as an interface with the community for all projects. Indeed, it has an important role to play as a key partner in the whole revival. Developing the capacity of the organisation is a task that needs to be undertaken if it is to play its role to the fullest extent.

An inventory of orchards that forms the draft Register of Heritage Orchards for the Clyde Valley is given in the Appendices.

1 Introduction

The Clyde Valley rightly holds great affection for all those interested in orchards throughout Scotland. It is perhaps the most important orchard resource within Scotland, followed by the Carse of Gowrie and the Carse of Stirlingshire. Much important work has already been undertaken in the Clyde Valley over the past decade in a concerted effort to ensure the survival of this orchard landscape. This strategy report seeks to build on that work, and by addressing key structural issues, create a rationale for the longterm survival of this important landscape.

1.1 Background

The decline of the orchards of the Clyde Valley is a relatively recent story, played out over the last two to three decades. In other parts of Scotland, commercial orchards ceased to be worked around 50 years ago, and their decline began well before that. Part of the reason that the orchards of the Clyde Valley were worked much later than elsewhere, could the predominance of plums which is not found elsewhere, apart from perhaps on a smaller scale at Newburgh in Fife. The Clyde Valley changed from apples to plum in the late Victorian era, and many orchards were planted with the Victoria Plum that only became commercially available in 1844. The plum market was perhaps less susceptible to foreign competition because the fresh fruit is so perishable compared to fresh apples and pears. Records show that apples have been shipped to and from Scotland for centuries, and thus competition has been more intense for longer. The critical mass of growers in the Clyde Valley, their skills, the unsuitability of the land for arable crops and the diversity of fruit and horticultural crops grown are all likely to have contributed to the endurance of working orchards in the Clyde Valley.

Many orchards in the Clyde Valley find themselves with their proprietors retired, or sold to new owners, many of whom are also retired. There are currently only a handful of orchards that are worked semi-commercially for plums.

Over the last decade the decline of the orchards has continued, albeit good work has been done to raise awareness regarding their value. Experience shows elsewhere that unless orchards are worked, they will not survive in the local term. The fate that awaits them is either woodland, with the orchard trees being engulfed by younger and more vigorous broadleaf trees; or grassland, with all orchard trees finally having fallen and rotted. In Scotland, there are plenty examples at various states of progression to both endpoints.

1.2 Scope & Methodology

While the area that the wider project that this strategy contributes to, is that of the Clyde and Avon Valley Landscape Partnership area, this Strategy is loosely restricted to the area of the Clyde Valley from Lanark to Overtown because this is where all but a few orchards lie.

The scope and methodology has been prescribed in the client's Statement of Requirements. To briefly summarise them, the following were required:

- an update of the ownership and condition of orchards
- a report that provides a strategy for reviving the orchards for the five year period 2011-16.
- an action plan identifying projects to be delivered
- recommendations on project management and delivery

1.3 Structure of Report

The report is structured in 5 parts:

Part 1: Review

Part 2: Consultation & Survey

Part 3: Strategy

Part 4: Recommendations & Action Plan

Finally, much use is made of Appendices in order to lighten the main text to that which is strictly necessary.

Part 1 Review

2 Reviewing Work in the Clyde Valley to Date

2.1 Context of Clyde Valley in Local Plans

A summary of regional and local plans together with strategies of relevance to the Clyde Valley orchards is given in Section 15.1 part of the appendices.

The main area of orchards is centred on the mid-Clyde Valley, identified as an Area of Great Landscape Value (AGLV) in the Glasgow & Clyde Valley Joint Structural Plan (Rev. 2006). The AGLV extends from east of Lanark through the middle Clyde Valley to Hamilton and includes the valleys of the Rivers Nethan and Avon.

2.2 Clyde Valley Orchard Survey 2001

In 2001, the Clyde Valley Orchard Survey was carried out on behalf of SNH, Scottish Enterprise and South Lanarkshire Council; the main contract was awarded to Ironside Farrar Ltd. The latter sub-contracted the orchard fieldwork to Heritage Environmental Ltd¹ (HEL), and the historical research to Fiona M. Jamieson². The Ironside Farrar report³ was delivered in 2002, and subsequently reformatted and put into the public domain as an SNH commissioned report⁴ in 2004. In both editions of the Ironside Farrar report, the sub-contractors reports were identified as appendices but made available only as separate documents. Little of the survey data resulting from the orchard fieldwork was put in the public domain, even in an anonymised form.

HEL Orchard Field Data Collection

HEL's orchard fieldwork was carried out between 31 August and 10 October 2001. It was comprehensive; for each site of the 63 sites surveyed, approximately 80 fields of data were recorded; including location, ownership, fruit trees, varieties, management and attitudes, threats and general comments, Phase 1 Habitat and Boundary features, and mapping orchard extents. A further 8 sites were identified that were not surveyed because of a lack of access. Orchard areas, ownership boundaries, vegetation types, target notes and other data relating to the Phase 1 Habitat Survey were transcribed to a Geographical Information

¹ Smith, S.M., Bates, M.A. & Osborn, R. L. (2002) Clyde Valley Orchard Survey. A report for Ironside Farrar Ltd. by Heritage Environmental Ltd.

² Jamieson, F.M. (2001), Clyde Valley Orchards: Historical Research.

³Ironside Farrar (2002), *The Clyde Valley Orchards. A Unique Scottish Landscape.* A report to Scottish Natural Heritage, Scottish Enterprise Lanarkshire, and South Lanarkshire Council.

⁴ Ironside Farrar (2004) A Clyde Valley orchards survey. Scottish Natural Heritage Commissioned Report No.023 (ROAME No. F02LI21).

System (GIS). The resulting GIS data were delivered to the client as GIS files⁵ together with a printout of the areas covered.

However much of the detail of the survey was not included in the HEL's final report, which was quite brief, given the amount of data collected. Even less of the detail found its way into Ironside Farrar's report. For example, nowhere in either report are the numbers, age or condition of the fruit trees reported on in detail, although this information was collected. Though a list of varieties was included, no numbers of individual varieties was presented, again although these data were collected. These data could have been collated and presented in graphical form, which would have added clarity and depth to the final report, as well as being very useful for ongoing development.

A further factor is that the HEL survey data was passed to the client as 71 separate Word documents⁶, making the subsequent analysis extremely laborious. A database or spreadsheet containing the total survey data would have been highly desirable. The result has been in effect, the detailed data has been not been available in a useful form for the last decade.

Some of the work of collating data has been carried out as part of this strategy review, and is presented in Section 2.3. A composite pdf of the all the survey forms has been created as part of this work, so now the whole of the dataset is at least searchable. The composite pdf file is on the data disc provided to the client.

Biodiversity Assessment by HEL

The biodiversity assessment of orchards by HEL is understood to be made on the basis of Phase 1 Habitat survey practice. These are intentionally generalised techniques, which focus on ground vegetation and a few notable mammal species. As observed in Clarkson's review⁷ of the Ironside Farrar report, important indicator species for orchards were not used to determine the biodiversity value. PTES⁸ have carried out orchard surveys for the whole of England, and have a dedicated set of biodiversity indicators that assess the trees as well as the orchard floor; for example, standing dead wood, trunk cavities, water pools in trees. This sort of data was omitted from the HEL survey. In terms of biodiversity indicators, HEL survey forms ascribed vegetation classifications, asked about current tree management, and sometimes made general comments that are relevant. No specific other biodiversity indicators were used.

⁵ ESRI format, plus printouts as Postscript files

⁶ Each of 3 pages. An example is shown in Appendix 3 of Ironside Farrar's report.

⁷ Clarkson, R. (2007), Reviving Orchards in the Clyde Valley. A feasibility study of the potential for orchard renovation and development, (Report to the South Lanarkshire Rural Partnership LEADER+ Programme).

⁸ People Trust for Endangered Species. Their orchard survey page at http://www.ptes.org/index.php?page=206

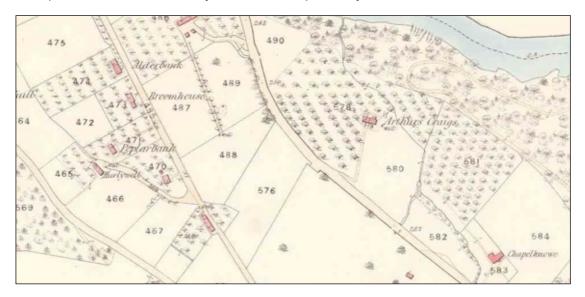
In the HEL report, discussion and analysis is fairly limited. Comments on Species of Significance are generalised; for Birds & Insects, it merely states that neglected orchards are a suitable habitat for those species associated with open scrub. So while HEL's conclusion may be accurate that manicured orchards are of little or no biodiversity value, it overlooks other orchards especially those that are older and unmanaged, in which there may be substantial but unrecognised biodiversity value. This is a significant limitation of the report.

Historical Research by Jamieson

Jamieson's report is a competent and interesting account of the Clyde Valley orchards as a whole. It includes a chronology from 1456 to 1952 of relevant references in the literature. There is much useful information including the change of the balance of orchard species in the late Victorian era from dominance of apples to dominance of plums.

Though the report does identify many individual orchards, in some cases with a commentary, no historical mapping has been carried out to determine the historical extents of individual orchards. The Ordnance Survey 1st edition compiled in the 1850s was a particularly detailed mapping process, at a very large scale. So, Hazlebank for example, is shown below.





The southern part of Hazlebank in the map shows that there were many orchards in the area, including many that are still there today. However, most of the southern part one of the largest orchards, Orchardville is shown without any trees, and there have been significant changes at Chapelknowe and Arthurs Crag.

The lineage of an orchard area has a bearing on many aspects of interest, such as the cultural heritage and biodiversity. The continued presence of fruit trees over many centuries can create rich and uncommon habitats.

The inclusion of historical mapping in the Historical Research would no doubt have added to our knowledge of the individual Clyde Valley orchards and their associated communities. It is however recognised that the scope of the brief, together with limitations of time and budget, may well have played a major part in its omission.

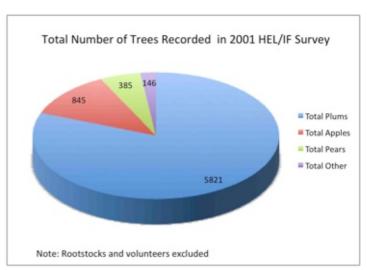
Ironside Farrar 2002 Final Report

The Ironside Farrar report brought together and summarised elements from both the HEL report and maps, and Jamieson's report. It also added a substantial body of Landscape Character assessment, some 32 pages in length, which is generic in nature. Section 4.5 of the assessment brings the orchards into context, together with some highly descriptive pictures of orchard scenes, blossom, fruit and fruit picking. Section 4.6 looks to the future and notes the decline of the orchards equates to a decline in the distinctiveness of the landscape character. One limitation of the report is the quality of reproduction of many of the figures. The quality of the background map on both the Orchards Distribution figure and the Orchard Types and Areas figure means that it is not possible to identify the location of individual orchards.

Aside from the limitations discussed above, the report has been an important foundation for ongoing development and revival of the Clyde Valley orchards.

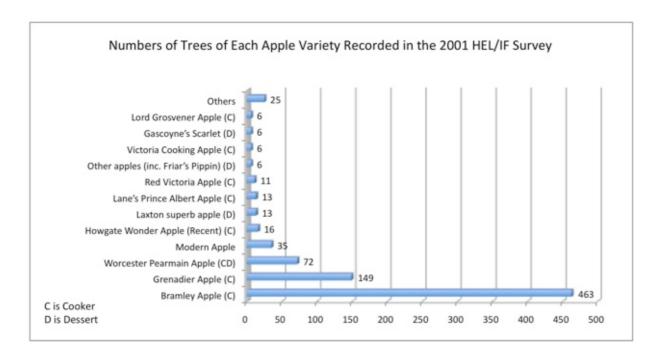
2.3 Retrospective Analysis of 2001 Survey Data

Parts of the 2001 survey data have been transcribed into a more useful format in a spreadsheet, and collated to produce summary data for graphical presentation. The survey data that have been transcribed are; the numbers of trees and varieties, the age of trees and the quality of trees. The latter appear to be a rather subjective assessment, of which the precise criteria are unclear.



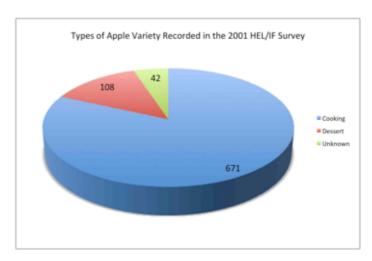
The graph showing the total number of trees recorded by species is adjacent. It shows that by far the majority of trees, some 81% were plum. Of the other species 12% of trees were apple and 5% were pear. Note that these are numbers of trees and do not relate directly to

the quantity of fruit produced. A mature apple tree will produce many times the fruit of a young plum tree. However it is very clear that plum numbers were very dominant.



In terms of a contemporary commercial use of fruit, knowing the types of fruit available is very useful. Analysis of apple varieties is shown in the graph to the right. As can be seen Bramley is dominant, with 463 trees recorded, just over half of all apple trees. Grenadier, also a cooking apple is the second most frequently found with about 150 trees, some 18% of apple trees. Worcester Pearmain is third in quantity with 72 trees, some 9% of apple trees. It is an early cooking apple that matures to a dessert apple. Quarry Park is recorded as having 3 Beauty of Bath apple trees, for which a premium juice can be produced. There is a ready market for this fruit for juicing.

Looking at the balance between cooking and dessert apples, the adjacent graph shows that most apples trees were culinary (82%) and a minority dessert (13%). For the purposes of this discussion, varieties that are considered dual purpose have been ascribed Dessert status.



Where to Find the Fruit

In terms of where to find the fruit, a ranking of orchards has been carried out for each of the species, and also for culinary & dessert apples.

Table 1: Tree Species; Top 10 Orchards Ranked by Numbers of Trees

Plum	No. of	Apple	No. of	Pear	No. of
	trees		trees		trees
Orchardville	1005	Lammas Knowe	94	Oak Orchard	64
Chapelknowe	866	Catcraig	80	Quarry Park	29
Byrewood Nursery	421	Upper Cairniepark	52	Mashock Cottage	29
Clydebrae	380	Linneville	38	Underbank House	28
Watson	251	Orchard Bank	34	Lammas Knowe	25
Stewart Gill	240	Byrewood Nursery	33	Stewart Gill	17
Upper Cairniepark	172	Orchardville	30	Burnbank	16
Lammas Knowe	170	Burnbank	29	Carfin	14
Alderbank	154	Watson	28	Pathhead Orchard	13
Braehead House	131	Chapelknowe	26	Birkhill Farm	13
Total in Top 10	3790	Total in Top 10	444	Total in Top 10	248
·				·	
All sites	5821	All sites	845	All sites	385

For all species that Top 10 orchards contain the majority of trees for that species. For apples the Top 10 orchards contain 53% of all apple trees.

Dessert apples are likely to be an important focus if juice is produced, and therefore the location of dessert and cooking apples is highly relevant. The table below shows the Top 10 Orchards in this respect.

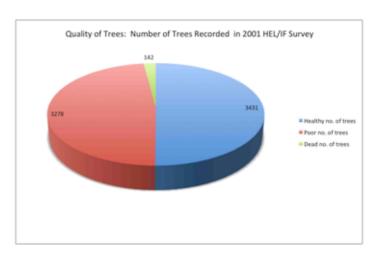
Table 2: Types of Apple; Top 10 Orchards Ranked by Numbers of Trees

Cooking Apples	No. of trees	Dessert Apples	No. of trees
Catcraig	80	Upper Cairniepark	12
Lammas Knowe	70	Watson	12
Upper Cairniepark	40	Lammas Knowe	10
Linneville	34	Burnbank	10
Byrewood Nursery	32	Underbank House	9
Orchard Bank	28	Orchard Bank	6
Chapelknowe	26	Stonebyres	5
Orchardville	26	Linneville	4
Brodiehill	20	Orchardville	4
Burnbank	19	Quarry Park	4
Total in Top 10	375	Total in Top 10	76
All sites	671	All sites	108

Again the majority of trees for both types were located within the Top 10 Orchards. The low numbers of Dessert Apple trees indicates that for most orchards they were planted sparingly, and perhaps not for commercial output.

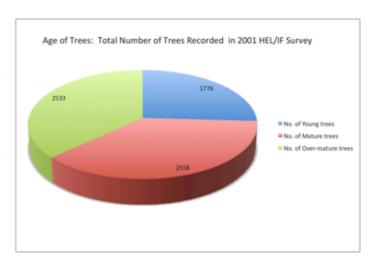
Tree Health

The health of trees in orchards was assessed by the survey, with a fairly crude division on the proportion of the whole orchard as Healthy, Poor, and Dead. The adjacent graph shows that around half of trees were considered Healthy, and a little under half were Poor.



Age of Trees

The age of trees in orchards was assessed by the survey, with a fairly crude division on the proportion of the whole orchard as Young, Mature, and Over-mature. The graphs shows a fairly even split; a little over a third of trees were Mature and Over-mature, and just a quarter were considered Young.



The relevance of these results from the 2001 survey data needs to be considered. We know from survey work carried out as part of this strategy research that there has been a significant demise of orchards over the last decade. Plum trees in particular, perhaps because they are the shortest-lived orchard tree, have suffered a particular reduction. The data for Apple and Pear trees being longer lived, are likely to be still relevant today.

2.4 Subsequent Studies on the Clyde Valley Orchards

In 2007, a feasibility study⁹ was commissioned into the revival of the Clyde Valley orchards. This comprehensive report reviewed the Ironside Farrar 2001 survey, looked at initiatives elsewhere in the UK and made a number of recommendations about future work.

One outcome of the report was a 3 year project of orchard development, for which a project officer was appointed. The project raised awareness, engaged with the public and orchard owners, and ran events for schools, for the public and fostered orchard enterprise. A full report of the work carried out has been produced ¹⁰.

A further study¹¹ of relevance to the orchard community was carried out in 2008. This research engaged with the active orchard community to assess their attitudes. This report concludes "the Clyde Valley orchard community place a high value on the orchards. Individuals throughout the community expressed a range of different ways of valuing the orchards. Common ways that the involved community values the orchards are biodiversity, historical heritage, economics, social factors, food quality, education, and for their aesthetics. The value ranked highest by the most community members was biodiversity, with heritage and economics being the next most commonly rated as very important."

2.5 Biodiversity Studies

The biodiversity of the traditional orchard habitat has not been thoroughly researched. Recent work has been carried out in England, with a study of six orchards¹². In Scotland, we are at the early stages of research, though the 2001 Phase 1 habitat survey in the Clyde Valley was one of the first. On the Carse of Gowrie, a number of studies have been carried out recently; for lichen¹³, for moths, a Phase 1 habitat survey and biodiversity audit¹⁴.

A number of more recent assessments of the biodiversity of the Clyde Valley orchards have and are being made, as described below.

⁹ Clarkson, R. (2007), Reviving Orchards in the Clyde Valley. A feasibility study of the potential for orchard renovation and development, (Report to the South Lanarkshire Rural Partnership LEADER+ Programme).

¹⁰ Clarkson, R. (2010), *The Clyde Valley Orchards Project. Phase II Final Report.* (Report to the South Lanarkshire Rural Partnership Leader Programme)

¹¹ Johnson, Helen (2008) A Case Study of the Clyde Valley Orchards and Orchard Community: A study of the relationship between people and place (MSc Thesis; University of Strathclyde).

¹² Natural England (2009), Research Report NERR025. Biodiversity studies of six traditional orchards in England.

¹³ Douglass, J (2010), A Lichen Survey of 3 Orchards in the Carse of Gowrie.

¹⁴ ECOS Countryside Services (2010), Carse of Gowrie Orchards Habitat Survey and Biodiversity Audit. Report to Carse of Gowrie Historic Orchard Forum .

2.5.1 Lichen Study 2010

A survey of lichens in eight orchards in the Clyde valley was carried out to increase our knowledge of the biodiversity of these sites and as a preliminary to further investigation of the wildlife in the Clyde Valley orchards. The survey¹⁵ was carried out and reported in 2010, and a subsequent summary report¹⁶ was issued in 2011.

The study sites were selected to represent the different types of orchards most typically found in the area, based on level of management. A total of 83 lichen species was recorded from the trees sampled, ranging from 30 to 50 different species at each site. No rare species were recorded, but the survey found one nationally scarce lichen and one species identified for the first time in the area. Many other species seldom recorded in Lanarkshire were also found making a valuable contribution to national lichen records. All the sites in the study contained lichen species that were indicators of clean air and four of the orchards contained lichens considered to be indicators of ecological continuity, their presence suggesting that they are particularly old habitats.

There is a lack of published data on orchard lichen from other parts of Scotland but the results of this study compare favourably with a number of recent surveys carried out in England. The fairly good numbers of lichen species recorded in these orchards, including uncommon species and those indicative of old habitats, together with the knowledge that lichens are important to a range of wildlife, suggest that there is good potential for some of the Clyde Valley orchards to be of significant biodiversity value. Further studies of other species groups commonly found in orchards, such as fungi, invertebrates, moss, birds and ground flora, are needed to increase our knowledge of their biodiversity value and species habitat requirements.

2.5.2 Biodiversity Study 2011

A comprehensive biodiversity study was commissioned in the period when this report was being compiled. Although the fieldwork has not been carried out at the time of writing, the statement of requirements indicates the scope of the forthcoming work: "The prime purpose of the research is to provide important information about the biodiversity of our orchard resource, the role that they play in the unique mosaic of habitats within the Clyde Valley, and to identify actions that can bring about an increase in the biodiversity value of orchards and the surrounding area, without adversely affecting their productivity"

¹⁵ Lisewski, Vivyan (2010), Lichen communities of the Clyde Valley Orchards, (Royal Botanic Garden Edinburgh).

¹⁶ Clarkson, R. (2011), Lichen Communities of eight Clyde Valley Orchards: Summary Report.

The areas of focus for the study are:

- Orchard floor habitat survey
- Orchard boundaries
- Lichens
- Bryophytes
- Fungi
- Invertebrates

The study is due to report in November 2011.

3 Review of Market Conditions & Business Opportunities

Growers have reported that the poor economic returns of growing fruit for wholesale led to the gradual closure of the business throughout the Valley. Even local wholesale markets such as Glasgow provided insufficient return to make the work feasible. The increasing power of the supermarket buyer and their driving down of the cost of supply has of course played a major role as well.

There is no suggestion here that the Clyde Valley should become suppliers to supermarkets, or indeed any other undifferentiated wholesale market. There are however opportunities in novel markets and niche markets. The revival of local food as a fashionable or ethical choice provides a good opportunity to restart the business of fruit production albeit in a less intensive manner. There are good reasons to positive about the market for Clyde Valley fruit:

- Ready local markets in the urban areas of central Scotland
- Affluent local markets within easy reach
- Growth in popularity of real juice drinks
- Clyde Valley still enjoys a good reputation for growing
- the Public understand the issues of food miles
- Healthy Eating is widely promoted

The following is a review of various specific markets; for orchard fruit, for orchard juice, and for cider.

3.1 Market for Orchard Fruit

Despite the fact that apples, pears and plums lie in tonnes rotting on the floor of orchards across the growing areas of Scotland, there is an unmet demand for fruit in Scotland¹⁷. Much of the problem is about connecting buyers with producers. This issue has been recognised by orchard community groups elsewhere in Britain, such as Gloucestershire Orchard Group or the Westmoreland Damson Association to name but two. The former organisation has set up a web based service at http://www.orchardmarketplace.org.uk/ that provides a marketplace, and even shows offers and wants geographically via a well-kent internet mapping service.

In the UK, the apple market is worth around £115 million (2007) of which only 31% is home produced ¹⁸. Figures for Scotland alone were not readily available.

In terms of the world market for apple juice, China is the biggest exporter. The EU is the biggest consumer, half of which it imports¹⁹.

There are in Scotland several businesses looking to buy local fruit, and in particular apples. Some of these are listed below.

Thistly Cross Cider, Dunbar

This cider producer²⁰ will buy picked apples for around 10p per kilo. They drop off a number of potato pallet boxes as requested, and then return to collect and pay for the fruit. A pallet box is around 1.5m³ in volume and can be filled with around 900kg of apples, equating to £90 paid. Dessert apple varieties are preferred, but they are quite happy to buy cookers as well. The fruit should be of reasonable quality, only a minority being recent windfalls. The fruit must be fresh with no significant rot. Thistly Cross turns the fruit into some very popular and highly drinkable cider, which they sell direct and through the trade.



Cairn o'Mhor Wines, Errol

The folk at Cairn o'Mhor produce fruit wines²¹ on the Carse of Gowrie in Perthshire. In recent years, they have diversified into apple juice and cider production. They buy local fruit

¹⁷ Personal communications with various cider makers

¹⁸ Apple Facts. Institute of Food Research. http://www.ifr.ac.uk/info/society/spotlight/apples.htm#_edn5

¹⁹ China Apple Juice Concentrate Industry Report, 2008-2009 http://mcgroup.co.uk/researches/A/C10501/China%20Apple%20Juice%20Concentrate%20Industry%20Report,%2020 08-2009.html

²⁰ Personal communications: Peter Stuart, Thistly Cross Cider. http://www.thistlycrosscider.co.uk/

²¹ Personal communications: Ronnie Gillies. www.cairnomohr.co.uk

from both sides of the Tay, but are often interested in orchard fruit from elsewhere in Scotland.

In 2010 they paid 10p per kilo for fruit they picked or up to 30p per kilo for good fruit delivered to them. They paid cash, or by voucher against Cairn o'Mhor beverages with the further incentive of a 25% discount.

Cuddybridge Apple Juice, Innerleithen

This Borders producer²² currently uses only imported fruit, because of quality and out of season availability. Proprietor Graham Stoddart specialises in high end products for the restaurant trade and premium retailers. Their juice has an optimum shelf life of less than 2 months.

Currently, they only sell named single variety apple juices, but are interested in sourcing good quality local fruit. Mixed varieties are possible, but single varieties such as Beauty of Bath would command a significant premium over the prices quote below.

The business operates by buying imported high quality wholesale fruit that is juiced on their own premises throughout the year. In season, they pay around 55p per kilo for blemish-free single variety dessert apples, and would be happy to deal with local orchards on this basis. Out of season there is a further premium, so properly stored high quality local fruit would also have a market.

Graham also thinks there is a market for high quality pear juice, and products such as calvados.

Others

Waulkmill Cider²³ also produces apple juice; they are located south of Moffat near Langholm, and may be interested in buying local fruit, especially organic.

Overton Farm Shop in the Clyde Valley buys plums and soft fruit locally to sell in their shop. They also freeze plums for sale throughout the year.

The above research shows that there is an unmet demand for local orchard fruit in Scotland. Price and quality are key criteria that correlate. Those buyers paying the most expect the highest quality. Fruit for juice needs to be of a higher quality than that for cider production as explained in Section3.7 on mycotoxins. Apples have the most ready sizeable market in

²² Personal communications. Graham Stoddart. http://cuddybridgeapplejuice.co.uk/

²³ www.waulkmill-scottish-cider.co.uk

terms of wholesale, though local plums still have a significant retail opportunity but their season is very short.

3.2 Market for Orchard juice as an Artisanal Product

In Gloucestershire, apple juice is sold by the producer Day's Cottage 24 at farmers markets for £2.30 per 750ml bottle (£3.06/litre) and pear & apple £3.30 per 750ml bottle (£4.40/litre) with 10% discount for a case of 12 bottles.

Cairn o'Mhor sell their local apple juice from their shop and online at around £3 per 750ml bottle (~£4/litre)

Cuddeybridge sell their single variety apple juice through high-end retailers and restaurants for £2.15 per 330ml bottle (£6.51/litre)

3.3 Market for Artisanal Cider & Other Alcoholic Beverages

The UK cider market has grown by 60% between 2005 and 2010, to a value of £2.2bn²⁵. Magners, who altered market perceptions through heavy advertising and a new style of product, largely initiated the change in fortune for cider. However, growth may not continue as strongly with VAT and duty rises on this and other alcoholic drinks.²⁶

There does not appear to be readily available market data for Scotland alone, either from the industry body *Scottish Food and Drink* or other sources. There are numerous artisanal producers in England. In respect of artisanal producers in Scotland, the following is known:

Cairn o'Mhor consider the cider they sell to be a premium product, made from solely from local apples from the Carse of Gowrie. This retails at the modest price of £4 per 750ml bottle. Cider is still a sideline; fruit wines are the main business. Proprietor Ronnie Gillies has indicated that he is open to the idea of collaboration to produce a Clyde Valley cider²⁷.

Cider is the main business for the folk at **Thistly Cross**. They sell their 7.2% cider for £3 per 500ml bottle²⁸. They produce a range of other ciders for around this price.

Waulkmill Cider produce cider which they sell through fayres and farmers markets.²⁹ They plan to move to organic production using local fruit.

²⁴ http://www.dayscottage.co.uk/Buy-Days-Cottage-Juice.html viewed in February 2011

²⁵ Sweet Success In A Dry Market As Cider Sees The Fruits Of Innovation http://www.marketresearchworld.net

²⁶ Cider UK Dec 2010 http://oxygen.mintel.com/sinatra/oxygen/search_results/show&/display/id=480950

²⁷ Personal communications. Ronnie Gillies.

²⁸ http://www.thistlycross.co.uk/products-page/

²⁹ www.waulkmill-scottish-cider.co.uk

Demijohns³⁰ is a delicatessen that sells various artisanal flavoured vinegars, oil and spirits, some of which are orchard products; cider vinegar, sloe gin. 10 year old Somerset cider brandy (i.e. like Calvados) is retailed at £6.20 per 100ml (£43.40/700ml).

Scots Cheer³¹ make and sell Damson Gin for £13.95 per 500ml (£19.53/700ml) at East Linton.

3.4 Summary of Market Conditions

The review above shows that there is a market in Scotland for both fruit and its products. The size of the market for fruit is limited because it is mainly a wholesale prospect, and there are only a few businesses buying fruit. Little retail is undertaken; local small scale retail direct to the public may be quite profitable, though the volume limited. 'End of the lane' selling used to be popular and perhaps could be again – if traffic conditions allow. The short season for retail is also a key constraint. This is particularly true of plums.

Adding value by processing the raw ingredients into a new product such as a bottled juice opens up much larger markets in both retail and wholesale. It also reduces the issues of a short season by creating a product with a longer shelf life. Creating a value added product that has a specific identity, helps to differentiate that product from others on the market.

Example of Product in Wholesale Catalogue



This is more difficult to do with fresh fruit. The breadth of value added products that can be created is also greater than the breadth of fresh fruit products.

3.5 The Business of Juicing

In England juicing of apples is now a fairly common activity on a small scale for many orchard groups, many working on a non-commercial basis. In Scotland, it is a relatively new activity that has spread fast over the last 3 or 4 years, and includes the Clyde Valley Orchard Group. However, the scale of juicing is still small, relative to the available crop.

There is one exception; the major cider producers in southern England, who grow themselves or under contract, thousands of tonnes of fruit each year. But the orchards that produce this fruit are not traditional and are extensive in nature. In the main they are

³⁰ Shop on Victoria Street, Edinburgh. Visited 1st March 2011

³¹ www.scotscheer.co.uk

modern, intensive, and agrochemical fertilisers and pesticides are routinely used³². Therefore it is suggested that this is a different sort of orchard than those we are discussing in this report. This leaves us with the fact that for traditional orchards in Britain, juicing is a modest practice. Is this also the case elsewhere in Europe?

A decade ago Dan Keech³³ made an interesting foray into the orchards of Europe: Spain, France and Germany. He reported³⁴ in detail on the diversity of orchard characteristics and practices. He also reported the revival of orchards, with case studies on various projects.

In one example he describes Rénova (*Renewal*) a small charity set up in France in the 1994 to safeguard fruit varieties and orchard knowledge, and to explore possibilities for promoting orchard produce:

"At the time Rénova was first established, most farmers were leaving their fruit crop on the ground because they couldn't find a market for it. Many thought that Francis was mad trying to get orchards working again. However, some farmers were happy to try juicing and within a year many sceptics had been won over by the quality juice that was being produced. When people realised that their own crop could be better used, they too began to harvest." 355

By 1996, an agricultural cooperative had been formed; it operated 4 mobile presses and pasteurisation equipment servicing 100 growers and producing around 80,000 litres of juice a year.

In Germany, juicing services are common. They take two forms, either a centralised static plant to which fruit is brought, or in some cases a network of local depots where fruit is consolidated to large means of transport. Secondly, mobile press & pasteurisation units that travel through the orchard areas. One advantage of the un-centralised mobile system is that orchard keepers can ensure they receive the juice of their own apples.

This is how local groups operate juice schemes in Germany³⁶:

- Local group buys fruit direct from owners. Payment is cash on delivery, approx €18/100kg (wholesale price is €7 + lag). [2007]
- After sorting, fruit is taken to press for juicing, bottling, labelling. Pressing
 is usually commercial, though there are some that are owned by social
 enterprises.
- Scale: Groups may start as voluntary with small loans/grants. Some grow to become social enterprises with wide output range 5,000–600,000

CW Hayes Associates: Eco-Consultancy

³² National Association of Cider Makers, Growers Updates. www.cideruk.com

³³ former Common Ground Orchard Officer, and subsequently worked on orchards for Sustain

³⁴ Keech, Daniel (2002), Traditional Orchards - Exploring a Sustainable Future, (Report for Winston Churchill Fellowship 2001).

³⁵ Keech (2002) p8

³⁶ Keech, Daniel (2011), Lederhosen and the 'Big Society' – lessons from South Germany. Unpublished presentation at University of Southampton, January 2011

litres/yr per group; 30,000 litres is common. Around 120 groups existed at the time of the research.

- Sales are made to local pubs/restaurants, school juice bars, direct sales, farmers markets etc.
- Sales price around €1.10-1.30/litre. Tetrapak c.€0.60/l.
- €9 (~70p/litre) for a 10 litre bag in a box³⁷.

3.6 Equipment for Juicing

Component units of commercial juicing systems such as scratter, press, continuous pasteuriser etc, together with complete systems are manufactured in Germany³⁸ and elsewhere on the Continent. They are typically able to produce 200 litres of juice per hour. The cost of a unit depends on the specification. For a new German-made mobile system mounted on a trailer, the cost is €65k net (~£55k). Used equipment is available; a 2 year old trailer systems is around £50k (~£42k).

Spent fruit pomace, the byproduct of pressing, can be used in an anaerobic digestion plant as a feedstock for green energy production.⁴⁰

3.7 Quality of Fruit

The quality of fruit required for juicing is an important factor for a potential business. Fruits used to make juice for direct human consumption need to be free of mould and rot. Mouldy or rotten fruit contain higher levels of patulin, a naturally occurring contaminant. Patulin is a mycotoxin produced by various moulds. It is harmful to human health. The legal limit⁴¹ for juice is less than 50ug /kg (50ppb). In 2002 levels of patulin were found in one manufacturer's juice, which resulted in action by the Food Standards Agency to have the juice withdrawn⁴². A subsequent survey of 300 apple juices in 2003, found



³⁷ e.g. http://www.saftmobil.de/Saftmobil.htm or http://www.apfel-paradies.de/preise.php

³⁸ e.g. Gebhardt – Anlagentechnik. http://www.gg-technik.fr/catalogue/ligne-complete-mobile/

³⁹ Personal communications. Burkhard Schmücker, juicing contractor, Germany.

⁴⁰ http://cideruk.com/cider_news/view/green_energy_potential_for_cidermakers/

⁴¹ http://www.food.gov.uk/news/newsarchive/2003/aug/patulincider EU limit. For other products; the acceptable level is 25 ug/kg of solid apple product and 10 ug/kg for products for infants and young children.

⁴² http://www.food.gov.uk/multimedia/faq/patulin/

just 3 samples had mycotoxins at trigger level, again resulting in withdrawal of product⁴³. Patulin is a key concern of Environmental Health officers when inspections are made⁴⁴. Testing is relatively inexpensive.

Patulin is not such an issue for cider, as the fermentation process is known to destroy it⁴⁵. Therefore, the implication may be that a broader sample of fruit can be used for cider production.

3.8 Day's Cottage; Case Study of Small UK Juice Producer

The folk at Day's Cottage have run their own juice company⁴⁶. They were also founder members of Gloucestershire Orchard Group,⁴⁷ who carry out a lot of support work for orchard owners in the area, including running the Orchard Skills Centre. But their main business is orchard juice: apple & pear juice, cider, perry, and cider vinegar. It is made from local fruit and sold around at farmer's markets. They do not sell much online as they find the carriage costs prohibitive. They report that farmer's markets can be a slog, but there is a good regular income from them. After 18 years they still have a thriving business.

3.9 Contract Orchard Services

There is a clear recognition by orchard groups that many orchard keepers need help managing their orchards. Many orchard groups run skill-building workshops on subjects such as pruning.

Another approach adopted by Gloucester Orchard Group is to provide a listing of Skilled Practitioners who are local and reliable, via their website⁴⁸. The latter list is quite extensive and is certainly a valuable resource. In Cornwall, commercial orchard services are offered for restoring old orchards and indeed re-grafting material from old trees ⁴⁹.

In Scotland, there appear to be few⁵⁰ specialist pruning contractors that have a sound level of pomological knowledge and are also capable of undertaking sizeable numbers of orchard trees. We are however fortunate to have a number orchard specialists that can take on more

⁴³ http://www.food.gov.uk/news/newsarchive/2003/mar/apples

⁴⁴ Personal communications with a Scottish apple juice maker

⁴⁵ http://www.food.gov.uk/news/newsarchive/2003/aug/patulincider

⁴⁶ www.dayscottage.co.uk

⁴⁷ www.gloucestershireorchardgroup.org.uk

⁴⁸ http://www.gloucestershireorchardgroup.org.uk/skilled-practitioners/

⁴⁹ http://www.cornishappletrees.co.uk/5.html

⁵⁰ Arboricultural contractors have been used in restoration projects elsewhere in Scotland, eg. www.arboretum-intl.com

modest numbers of trees⁵¹. This indicates that there is a significant market opportunity in Scotland for this sort of work.

3.10 Summary of Business Opportunities

While the examples of businesses discussed above are not exhaustive – there are clearly other opportunities – it does give an indication of the sorts of business that exist elsewhere and are successful. It is perhaps worth noting that there are not an abundance of businesses that are based on the products of plums.

In Scotland, orchard businesses are at a lower state of development than those elsewhere in the UK or on the Continent. However, for Scotland it shows that there are clear opportunities in business.

4 Review of Policy Support

There is a wide range of government and non-governmental policy that pertains to orchards. This is discussed in fuller detail in Section 15.2 in the appendices.

To summarise some of the key policy issues, before looking at EU funding support and NGOs:

Biodiversity Policy

The UK Habitat Action Plan (HAP) for Traditional Orchards is in draft form, and will shortly be adopted in England by *Natural England*. It is unclear⁵² whether SNH is proposing to adopt it in Scotland, though other parties may. The biodiversity value of orchards is less well established in Scotland than in England, largely because the research has yet to be carried out north of the border.

The South Lanarkshire Biodiversity Action Plan does not address the orchards of the Clyde Valley directly, though there are indirect measures that could apply.

These issues are discussed in more detail in Section 15.2.1 in the appendices.

⁵² Personal communincations with SNH officers

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⁵¹ Such as www.appletreeman.co.uk

The Planning System and Formal Recognition of Orchard Sites

In theory, there is provision for protection of orchards within the Planning System, and through other mechanisms such as Conservation Areas, the Historic Environment Record and other measures.

It appears that local practice does not accord significant protection or recognition to the orchards of the Clyde Valley in this respect.

These issues are discussed in more detail in Section 15.2.2 in the appendices.

4.1 EU Rural Support in Scotland: Scottish Rural Development Programme

The Scottish Rural Development Programme (SRDP) is a programme of economic, environmental and social measures, from the European Agricultural Fund for Rural Development funding plus Scottish Government match funding. The current programme is designed to support rural Scotland from 2007 to 2013. Individuals and groups may seek funding to help deliver the Government's strategic objectives in rural Scotland.

Rural Priorities

Part of the SRDP, Rural Priorities are a competitive mechanism to ensure that contracts are awarded for the proposals which are best able to deliver the agreed regional priorities.

Rural Priorities are set out under three broad Axes:

- Axis 1 improving the business viability and competitiveness of agriculture and forestry, by supporting restructuring, development and innovation.
- Axis 2 improving biodiversity and the rural landscape by supporting environmental land management.
- Axis 3 improving the quality of life in rural areas and encouraging diversification of economic activity.

There is also a fourth Axis that uses the LEADER approach to deliver a locally-driven approach to innovation and development administered by local partnerships.

Orchards within Rural Priorities

In terms of orchards within Rural Priorities:

- Management of orchards (restoration / biodiversity) would generally fall under Axis 2 (and sometimes Axis 3).
- Enterprise development or an orchard related business would fall under Axis 3
- Community orchard initiatives would fall under Axis 3, unless they had a strong business focus.

There is a set of Options under each Axis. An applicant would select one/a number of options and demonstrate how the orchard proposals under this option(s) would contribute towards delivery of the regional priority in their particular circumstances. Only those Proposals (or parts of Proposals) that best deliver the Regional Priorities within these Options will receive funding.

Scoring is against a set of criteria and it is understood that it is necessary to score well on a good number of the criteria for a proposal to be successful. This has proved very difficult for orchards because the system is not specifically designed for them. Again, orchards 'fall between the stools', being neither sufficiently agricultural nor adequately woodland. Therefore in its current form, there is little direct support for traditional orchards.

In Tayside orchard owners have been able to access support funding through Regional Priorities, mainly on the basis of Business Diversification.

Regional Priorities

For the Clyde Valley area, there is one Regional Priority⁵³ that is directed to traditional orchards, and there are a number of others that could be used to some effect; two examples of business diversification are given in the table below. There are likely to be other ways to use the SRDP for orchard support, but these mechanisms have yet to be worked out and agreed. In Tayside, the Forestry Commission have agreed guidance for applicants and the judging panel, on what routes are suitable for supporting traditional orchards⁵⁴. A similar discussion is recommended within the stakeholders for the Clyde Valley.

It is regrettable that the orchards of the Clyde Valley are not better recognised within the Regional Priorities; for example within the Biodiversity theme, or indeed in the Built and Cultural Heritage theme. All stakeholders need to take a strategic approach to the next programme period of SRDP in 2014 if traditional orchards are to be able to readily access support.

⁵³ http://www.scotland.gov.uk/Topics/farmingrural/SRDP/RuralPriorities/ClydeValley

⁵⁴ Personal communications. Mike Strachan, Forestry Commission.

Table 3: Clyde Valley Regional Priorities under SRDP in February 2011

Theme	Regional Priority Code	Text	Relevant packages
Landscape	CLY14	conserve historic orchards in the Clyde Valley	5, 15-16 & 18
Diversification of rural enterprise	CLY27	- help improve distinctive and high quality local products that are used to promote the Clyde Valley and Kelvin Valley areas as visitor destination	1, 35 & 36
		- support eco-tourism/green tourism initiatives particularly where local providers work collaboratively. For example; walk-on, cycle-on, ride-on holidays	
Diversification of rural enterprise	CLY32	support groups to become established, constituted and active in their community in the Clyde Valley Region	36

Leader programme

There is a history of the EU's Leader programmes supporting orchard projects in many parts of Europe⁵⁵. There is good fit between most of the Clyde Valley orchard initiatives and the Leader programme, especially where they relate to community benefits. The local Leader programme has funded a number of previous orchard initiatives in the Clyde Valley, that the client group is familiar with.

Cost of Access to SRDP

The cost of accessing funding is a further barrier to its uptake. For the Rural Priorities, the application is an involved 2 stage online application. If it is a land-based application (as opposed to business-based) the land units must be previously registered under IACS⁵⁶ which is a relatively straightforward one-off process, but is further work. If an agent is employed to carry out these tasks, the cost is around £1000 per application. Such high fixed costs clearly makes small-scale applications uneconomic.

Leader entails a fairly large and detailed application form. The process is sufficiently clear that competent and motivated individuals could make the applications themselves, on behalf of a community project. But the scale of work means that it may cost a similar sum if carried

⁵⁵ Leader+ Orchard Co-operation Newsletter. http://www.sustainweb.org/pdf/orch_news_2_07.pdf

⁵⁶ Integrated Administration and Control System operated by Scottish Government.

out by an agent. The grants on offer are likely to be larger and therefore the process is more economic.

Building local SRDP expertise and providing a low cost application service would clearly benefit traditional orchards in the Clyde Valley.

4.2 EU Rural Support: Situation for Orchards outside Scotland

EU rural payments should, in theory, provide support for traditional orchards. Keech reports⁵⁷ that in Germany in 2001, rural support payments were made for traditional orchards:

"Like other Länder, the Saarland state government offers a grant for orchard conservation under their *Kulturlandscaftsprogramm* (cultural landscapes programme), drawn from an EU budget available throughout the Union: (VO) (EG) 1257/99. This is the rural development programme from which our own England Rural Development programme is part-funded, but with the difference in Germany that the states governments have, almost universally, included orchards as a distinct support programme. The fund is available only to farmers who are able to claim a maximum of 900DM/ha per year [~£300/ha/yr], depending on the conditions they fulfil."

A number of other support schemes, for marketing, for free tree stock, and free school apples from local orchards were also included.

In another more recent example from Germany, the state of Baden-Wurttemberg is reported⁵⁸ to have the following programmes in place:

"MEKA Programme (MEKA is an acronym for a market support and cultural landscape scheme). In 2010 it paid €2.50 per tree planted and close to 1.8 million were planted, costing over €4million. The scheme is an agri-environment scheme co-funded by the EU's MEPL II support scheme for rural development. There is also a draft programme for the promotion of traditional orchards by the Baden-Wurttemberg Ministry of Food and Rural Space. It sets out that €10million (of which MEKA is almost half) supports measures to conserve traditional orchards. It is proposed to channel these into three areas of activity:

- increasing the area of traditional orchards in the province,
- improving the co-ordination and networking between existing activities,
- intensifying communication and information to increase awareness.

This will require a significant effort of collaboration between stakeholders from individual landholders, through local groups to parish and provincial decision-makers.

In addition to the MEKA programme, other measures make up the €10million, such as a subsidy for the promotion of organic agriculture, as well as provincial programmes to manage or even buy traditional orchards for nature conservation where these are within designated conservation areas. Some parishcouncils offer support to groups of orchard landholders to co-ordinate their environmental management. This can be very effective in areas of open orchard owned by many people.

Further Provincial and Federal support is available through market structure improvement measures. Between 2000-2006 around €5.8million was invested in schemes to help commercial juicers more productive, efficient and able to support local production. It appears that this investment has resulted an added value production of €25million among the 33 beneficiaries.

⁵⁷ Keech (2002) p12

⁵⁸ Keech (2011) Personal communications with the author.

Finally LIFE+ offers support for ornithological conservation in traditional orchards in two designated areas of the province."

Further commentary on activities for 3 other Lander of Germany are given in Section 15.2.4 Keech⁵⁹ summarises the situation in Germany as:

- (i) the Germans have a relatively high quantity of orchards and knowledge of their location, quality and distribution compared to the UK, and this means
- (ii) states are more willing to co-finance EU support measures and/or interpret their general provisions in favour of traditional orchards;
- (iii) in some states, (such as Bavaria and Baden-Wuertemberg), traditional orchards also benefit from specific rural development and biosphere funds because the
- orchards tend to fall within designated areas for economic restructuring and conservation interest:
- (iv) the work over at least two decades by wildlife NGOs in protecting orchards (described in next section) has been widely acknowledged and valued both from a conservation and an economic development perspective by several provincial governments.



Community apple picking in Germany

England's natural environment body Natural England recognises the importance of cultural landscapes. However, although they formerly supported traditional orchards under various schemes, most recently Higher Level Stewardship Scheme, there is currently little actual support. In theory, funds are available for maintenance, restoration and creation of orchards⁶⁰. The problem is availability of the grant. It is understood that no grants were made for traditional orchards under the scheme either in the current year or the previous year⁶¹.

All legacy agri-environmental schemes are now closed in Scotland and funding for private landowners and managers who wish to restore their orchards or develop a business (but not involve a community component) is through SRDP.

⁵⁹ ibid

⁶⁰ Personal Communications (2011) Lorna Roger & Geoff Newman, Natural England.

⁶¹ meaning financial years 2009 – 2011.

4.3 Wildlife NGO Support for Orchards: Streuobst Case Study

In the UK, the large and well known national wildlife NGOs do not currently have a focus on orchards. This is not because they do not value orchards, just that



other priorities have taken precedence⁶². It has been left to smaller NGOs such as Common Ground and PTES to champion orchards. While they have been very successful in their work, they do not have the resources nor capacity of the larger organisations. In Germany, NABU, one of the larger wildlife NGOs has been championing orchards for 25 years, with great success.

Keech⁶³ reports that in Germany, an awareness of the impact of the decline of orchards was realised in the 1970s and 80s by bird and wildlife conservation NGO, NABU⁶⁴. Since that time it has slowly developed and fostered fruit juice production from traditional orchards in many parts of the country in a programme it has called Streuobst⁶⁵.

The motivation has been that working the orchards would ensure their survival, and through the scheme biodiverse practices could be incentivised. So part of NABU's work is to set up and agree guidelines on wildlife-friendly methods of production. Although there is no inspection regime, it is accepted that the orchards are not sprayed and only natural fertiliser is used.

NABU works by supporting local groups to 66:



- Buy and harvest fruit
- Make, label and market a product (mostly juice)
- Advise on & help with husbandry (incl. nature)

To incentivise biodiverse orchards, NABU offers a premium price (plus a small wildlife levy from sales) if orchards keepers:

- Apply to enter provincial orchards schemes
- Cut hay, or graze



⁶² Personal Communications (2011) anon, RSPB

⁶³ Keech, Daniel (2002), *Traditional Orchards - Exploring a Sustainable Future*, (Report for Winston Churchill Fellowship 2001).

⁶⁴ NABU is Nature and Biodiversity Conservation Union <u>www.nabu.de</u>

⁶⁵ *Streuobst* is a German word referring to a particular form of agroforestry common in continental Europe, featuring an extensive mix of fruit trees with other agricultural crops and grazing.

⁶⁶ Keech, Daniel (2011), Lederhosen and the 'Big Society' – lessons from South Germany. Unpublished presentation at University of Southampton, January 2011

- Encourage nature (e.g. bird boxes, wood piles, manage ponds etc.)
- Allow periodic access (many are open/common)
- Restock with local varieties, restorative pruning

Over the last quarter century, the scheme has grown to include thousands of hectares of orchard throughout Germany. It is an impressive story of how a conservation organisation promoted a broad holistic solution – working the orchards again, in a sensitive manner – that has had focussed outcomes in the organisation's target area, that is to say specific biodiversity benefits. It has helped revive cultural events such as the Cider King, cider trails and apple festivals. It is a good example of conservation and economics working for a common aim. It is also perhaps a lesson on how ambitious the conservation sector could be within the UK.



4.4 Summary of Policy Support

In summary for Scotland, the various policies discussed are potentially very supportive of traditional orchards. However in practice, the delivery of support to orchard owners is currently weak and in all but a few cases, the outcome has been no financial support.

Examples from elsewhere in Europe show that much stronger, holistic support is possible, and that well implemented joined-up-government programmes can be highly effective.

Given the resource in the Clyde Valley, there are great opportunities in the Valley for creative schemes that address the local needs.

Part 2 Consultation & Survey

5 Community Consultation

Engaging and listening to the community is a vital part of developing and then implementing a revival of the Clyde Valley orchards. Without a significant element of the community actively supporting the strategy, it will not be successful in the longterm no matter how much money is spent on the revival.

Throughout the strategy development – which is the scope of the work reported here – the community have been invited to be part of the process. At the start of researching and building this strategy, an open public consultation event began the conversation.

5.1 Open Public Visioning Event; Crossford 17th Feb 2011

On the evening of Thursday 17th February 2011, an open public visioning event was held. The purpose of the event was to engage with the community, raise awareness that a strategy was being developed, and listen & record the views and ideas of the community. In this context the 'community' is defined broadly, containing orchard keepers, orchard supporters but also local members of the general public. The meeting was run using participatory appraisal techniques to ensure that the views of everyone could be heard and recorded.

A full report of the meeting is given in the Appendix, Section 16.1. The report contains verbatim copy of all the participant's comments. These have been grouped into emergent themes. The emergent themes are summarised here. The number of comments gives some measure of the collective importance attached to themes. See the report in the appendix to consult specific comments & event detail.

Participants addressed the following questions:

Aspects We Like

Fruit (8 comments)
Blossom (6 comments)
Landscape (4 comments)
Wildlife (3 comments)
Work (2 comments)
Heritage (1 comments)

Aspects Not so Good

Management of orchards (10 comments)
Waste of fruit (5 comments)
Weather (4 comments)
Animal/Vermin (4 comments)
Business environment (4 comments)
Other (3 comments)

What We Would Like to Happen

Regeneration (14 comments Products (13 comments) Strategy (12 comments) Orchard work (11 comments) Economics (11 comments) Heritage (5 comments)

What We Would Not Like to See Happen

Neglect & Lack of Activity (11 comments)
Change of Use (10 comments)
Excess Admin (7 comments)
No Orchards Left (6 comments)

How?

Organisation (13 comments)
Produce & Product Development (10 comments)
Statutory Issues (9 comments)
Collaboration (8 comments)
Diversify (7 comments)
Funding (4 comments)

Participants, laying out their vision for the next 10 years, also created a Timeline. The outcome was heterogeneous, and though there were clearly ideas that the participants collectively prioritised, further work is necessary to clearly define the vision.

Level of involvement in the ongoing work was recorded by using an Orbits of Participation sheet. 2 people put themselves at the centre, the position of most involvement; a further 8 people put themselves just outside the centre. Finally, 6 people put themselves at the periphery. Other participants did not put themselves forward. Names of those who put themselves forward are given in the Appendix, Section18.2.

The Visioning event enjoyed press publicity both before and after it was held. It has helped raise awareness about the creation of a strategy for revival of the orchards. The views expressed are helping to steer the direction of the strategy.



5.2 Direct Consultation of Owners & Orchard Group Members

The members of CVOG and the orchard owners have been consulted on the proposed strategy of working the orchards to secure their future. As a result of the Visioning Event, together with research detailed in the early chapters of this document, an interim draft strategy was developed. A briefing on the interim draft strategy was written in order to consult on the proposals.

5.2.1 Methodology

The consultation has taken the form of a short questionnaire (shown in Appendix 16.2) asking their views on the draft strategy. A briefing on the draft strategy was sent out with the questionnaire (shown in Appendix 16.3). The consultation was sent out to CVOG members (27no; 18 orchard owners, 9 non-orchard owners) mainly by email. All recorded orchard owners were consulted (71no.) were mailed paper copy of the forms and the briefing, with the exception of those owners who received them by other means: these were CVOG members, and those that were visited in person (6no. owners, 8no. orchards). The latter group were selected for visit because they have existing horticultural businesses and/or important large orchards. Further new contacts emerged and they received forms by email.

Initial mail out and email send took place on 22nd March 2011, with some follow up to individuals as requested. Site visits took place on 17th March 2011. Follow up telephone calls were made to all non-CVOG owners who had not returned forms. Non-responding CVOG members were contacted by their secretary to prompt them.

Orchard Survey forms (as described in Chapter 6 below) were applied at the same time, when mailed out, emailed and by visit in person.

5.2.2 Results of Keeper Consultation

42 no. responses were received by 13th May 2011 when collection of responses for this report ceased. 40 responses are orchard owners, and 2 are non-owners CVOG members. Non-owners were sent a modified form that omitted questions that relate solely to ownership. Data has been transcribed to a database. The database is described in the Appendix, Section 16.6.

Not all questions were answered by all respondents. Conversely in some cases, a respondent could select more than one answer. Therefore, in the data presented below, it is quite correct that for some questions, the total number of respondents does not add up to 42.

The results are presented question by question. Where comments are given, they are mostly verbatim, except where too lengthy.

KC 1: Your relationship to your Orchard - what best describes how you see yourself?

Although the question asked respondents to fill in the one relationship that best describes them, several filled in more than one. All relationships have been included.

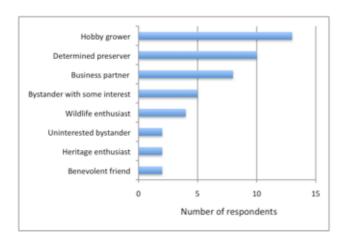


Figure 1: Keepers Relationship with Their Orchard

Most keepers see their relationship as a Hobby Grower or a Determined Preserver. A significant number see their orchards as a Business Partner. Very few consider themselves as Uninterested Bystanders.

KC 2: How do you see yourself?

This question combines a measure of proximity of keepers to their orchards, together with an indirect indication of their status.

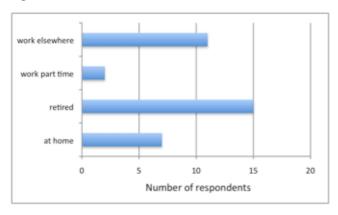


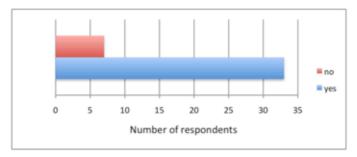
Figure 2: How Do You See Yourself?

The responses show that most respondents are either at home or retired, and are therefore likely to be near their orchards for much of the time. A significant minority work elsewhere, and are therefore likely to be away from their orchards for much of the time.

In terms of capacity, it shows that there is likely to be limitations for most orchard keepers, being retired or working elsewhere.

KC 3: Do you think your orchard contributes to the heritage or scenic value of the Valley?

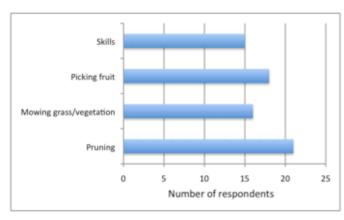
Figure 3: Do You Think Your Orchard Has Heritage Value?



The overwhelming majority of respondents consider that their orchard contributes to the heritage or scenic value of the Clyde Valley.

KC 4: Maintaining your Orchard. What sort of help would be useful to you?

Figure 4: Areas of Assistance Requested by Keepers



The results show that there is a diversity of wants in terms of assistance from the majority of respondents. A further opportunity to specify 'Other' requests resulted in the following comments, which have been loosely categorised by the author:

Fence/Hedge Erecting of fences or tree guards, hedging, hedge laying, information Re organic

and low carbon maintenance of orchards

Fencing, Hedging
Hedging and fencing

Cutting hedges

Vegetation Pruning not too much a problem. Mowing/ vegetation the big issue

Protection of young trees e.g. deer and rabbit guards

Re mowing - The use of sheep (with protection for young trees) can be used more

Strimming

Other Drains

total re-plant

Coping Fine as we are

At the moment we are coping.

Can handle it

any help and advice would be good

No - already equipped for it. Economic viability is main issue.

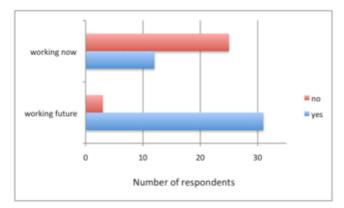
The overwhelming message is that help would be welcomed in most orchards.

KC 4: Working the Orchards.

Would you consider that yours is currently a working orchard?

Working the Orchards in the future. We are proposing that orchards are more secure if they are worked. We mean worked gently, not intensively. Would you consider agreeing to your orchard being more actively worked if there were benefits for wildlife, economically or other reasons?

Figure 5: Orchards Working Now and Willingness To Be Worked in Future



Most respondents do not consider their orchards to be working, though there is a significant minority who consider they are currently working. In terms of agreeing to their orchards being working appropriately in the future, there is overwhelming agreement from respondents.

Comments on working the orchards in the future are given below. They have been loosely categorised by the author:

Generally positive Absolutely

I find it slightly sad that such a lot of fruit goes unused every year.

Need to think about it

Yes, very much in favour. Recently joined CVOG and find their help and advice invaluable.

But is it justified, Commercially oriented.

I agree that orchards are likely to continue as orchards if lightly managed by their owners but this will only happen if the benefits are increased and/or their current problems are reduced.

We are currently working to achieve basic maintenance organically and by

manual means i.e. no petrol driven or electric equipment.

We have few trees but all are ancient

There does not seem to have been any intensive approaches in the orchard/fruit

production previously and this is one of the main attractions.

Wildlife My orchard is already actively worked with a sympathetic view to the habitat and

wildlife but I would like access to owl boxes and bird boxes. These are currently too expensive for me to install as I have better use for any investment cash I have.

We are "principally" wildlife enthusiasts (rare breeds)

Particularly interested in benefits for wildlife

Wildlife already benefit and (other than rabbits) we are happy with this. Hard to

see a financial return for any investment

Concerns over Privacy

access and privacy Possibly, depends on WHO

Would like it to be under my supervision

This would be entirely at our determination in terms of access

The comments are generally positive, with several relating directly to wildlife. Legitimate concerns are also raised which need to be considered in future plans.

KC 5: Creating an Economic Basis

Have you ever had financial support for your orchard, such as SRDP, Stewardship payments, or other scheme ? (if you don't know what all this is, then answer no)

Please state if you land is IACS registered (if you don't know, then answer no)

Would you be interested in receiving payments for orchard maintenance as part of the proposed new Stewardship Scheme run locally by the Landscape Partnership?

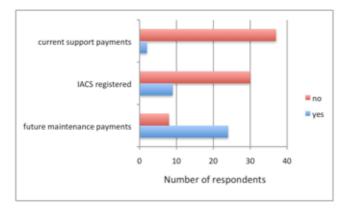


Figure 6: Support Payments: Current Situation and Future Wishes

The results show that the overwhelming majority of respondents are not receiving any financial support payments. Two comments were made on this question:

Orchard Group tree buying grant SNH Grant to plant.

Most respondents are not registered with the Integrated Administration and Control System (IACS), which is part of the Scottish Government's mechanism for making land-based rural

payments. However, a minority are. IACS registration is a prerequisite for receiving land-based payments from the Scottish Rural Development Programme.

Most respondents are interested in receiving maintenance support payments in the future. This demonstrates that the proposed new support scheme is welcomed as a positive change for most respondents.

Comments are given below. They have been loosely categorised by the author:

Positive Payments would be used to pay someone to improve the ground.

Very interested in but need to manage ground vegetation around trees. This needs to be considered very carefully. Grass cutting regime could coincide poorly with plum crop.

Would be very helpful

Would need more details before commenting. Would it be possible to train some

local young people or provide an apprenticeship in orchard maintenance?

Yes, but depending on the terms and conditions of that award

yes, for replanting

If 'payments' mean grants for stewardship this would have to work alongside workable initiatives for harvesting and marketing (and these are more difficult to address). There would also need to be clear guidelines on environmentally sensitive management as well as compliance. Stewardship could work well if approached in the right way – but it will be crucial that sufficient attention is given to measures that sustain this

management in the longer term when grants are not available.

Cautious Perhaps. Would need to see arrangements & details of scheme

Will depend

We do not know the details of this scheme, although financial assistance in developing

our orchard would of course be welcome in whichever form it may arise.

Possibly. Would need further information

Not sure - as it would depend on how this is handled.

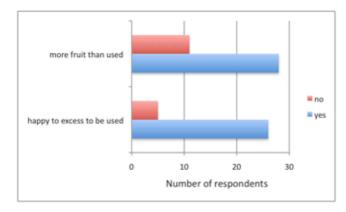
Not intending to increase number of trees

Comments are generally positive, and concerns relate to uncertainty over the as-yet undeveloped support mechanism.

KC 6: Use of Fruit

Do you have more fruit than you currently have use for? Would you be happy for excess fruit to be juiced or otherwise used, if it was picked & paid for?

Figure 7: Use of Fruit; Current Situation & Future Wishes



The results show that most respondents have an excess of fruit, though a significant minority state that they do not. In terms of future use, most respondents are happy for their excess fruit to be productively used.

Comments on the future use of excess fruit are given below. They have been loosely categorised by the author:

Cautious Needs clarification – would it be a small factory unit pulping and producing juice

positive where growers brought their fruit for processing?

Would think about it

Possibly

Yes, but again depending on the criteria

Depends on WHO

We don't mind selling the fruit but would be reluctant to allow strangers access to our

property.

We would want to know who would have access to pick the fruit.

Own use I would like to produce my own fruit juice or cider juice to sell and market

Provided we were still able to retain enough for our own use

No Excess Don't have any

Not enough fruit trees

There is not so much produce that we cannot pick ourselves, however, it would be a

bonus to be able to sell excess in a good year.

Other We do not pick any fruit - leave for nature

Would save slipping on rotten apples throughout the winter

I suspect that many people will 'like this approach' but not have the time to commit

(until they see others doing it and benefiting from it).

When you say 'approach' you are really stating the Vision but not saying how this will happen, which is the difficult bit. I think that many people, me included, have been trying for some time to find ways of achieving this, but finding a workable system that is 'cost-effective' is a big problem, e.g. difficulties finding (trained / insured / reliable / fit) labour for harvesting, low payment rates for bulk supplies of fruit by cider makers etc.

As quality/quantity top fruit is notoriously unreliable, and CV orchards at present are not geared to production for markets, it will be important that arrangements with local businesses are not over-committed and if possible have a degree of flexibility. Best to start reasonably small and build up a good client base rather than have a large number of unsatisfied customers.

A CV apple juice would great and is overdue! The question in my mind is would this be a private commercial enterprise or a community activities. It would seem best to ensure that there is scope for both under one brand (below) – if possible? The best people to do this may be the CVOG but start small and do it well (they will need to address things like hygiene standards of equipment and branding to start up but that's about all) and they will not have a problem with sales. They could launch this sort of thing at a Fruit Day etc. I think that there are also one or two private owners thinking about / working towards this at present.

The comments indicate that most contributors are cautiously positive, with valid concerns over how the scheme could work, who has control and ensuring that they still have sufficient for themselves.

KC 7: New Brand and Business

A Brand for Clyde Valley orchard produce: do you like this idea?

Creating a Community Business: do you think creating a local business is a good idea?

community business

0 10 20 30 40

Number of respondents

Figure 8: Support for a Brand and a Community Business

The results show that there is overwhelming support for both a Clyde Valley brand and for creating a community business based on orchards and their produce.

Comments on the idea of a new Brand are given below. They have been loosely categorised by the author:

Positive As long as there is quality control on its use

I think the Clyde Valley food production reputation endures and can see a Clyde

Valley brand doing well.

It would make any marketing of produce easier

The Clyde Valley used to have a great fruit reputation and it must be possible to make

this a Brand.

Very much in favour of this approach

We have wanted this for years & are sure that it would sell worldwide

Who wouldn't?

Would be beneficial for the orchards.

Would want use of a brand name to be controlled & name not abused by imported

goods

Ambivalent Currently we are neutral on this and need to know further strengths and weaknesses

(yes/no answer not selected) not sure what could do with

Quality is more important. Not sure about worth of brand.

Although I can't envisage it affecting us.

Hard to do a communal brand

But don't think it will work because short season. Manufactured product may work.

Comments are mainly positive; ambivalent contributions again relate to the as-yet undeveloped nature of the proposal. Comments relating to it being hard to do a communal brand perhaps relate to previous experience in the Valley with a communal brand to market

tomatoes to the supermarkets. Anecdotally, this appears to have been success for a period, but ultimately failed probably because of the nature of doing business with supermarkets rather than the brand itself.

Comments on the creation of a Community Business are given below. They have been loosely categorised by the author:

Positive Business needs a kingpin. Difficult to get co-operation

But like a professional person to do marketing, Not interested in maintenance.

Depends on structure and commitment (no yes/no answer given)

We would be happy to buy a share in any business.

Would appear to be the best way forward for all small growers in the area.

Subject to seeing and agreeing the constitution

It could be. It would depend on attitude of other growers

It could provide jobs for local people and enhance community links

During fruit picking season last year we were drowning in apples, and my son's school was providing apples for the kids from New Zealand via Tesco. That can't be right!

Ambivalent Not sure (no yes/no answer)

Possibly for some people.(no yes/no answer)

Not sure - Experience with Scottish tomato co-op (supermarket sales) - do better job

ourselves. (no yes/no answer given)

I'm not sure how this would work but would consider all pros and cons before I got

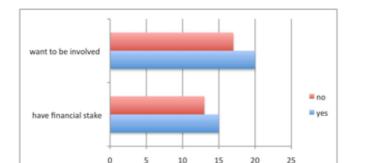
involved in anything like this.

The comments are generally positive albeit with justified concerns expressed as to how the business would work. Those comments that are ambivalent do not to indentify any significantly negative issues.

KC 8: Involvement

Would you see yourself as being involved in the business in some way?

As an orchard owner, would it be more attractive to have a financial stake in the new business, and potentially earn profit ?



Number of respondents

Figure 9: Desired Involvement and Financial Stake in Community Business

Just over half of respondents indicate that they would like to be involved in a new community business, while just under half preferred not to be involved. Regarding taking a financial stake, 15 respondents (a little over a half of a slightly smaller number of respondents) said that they would like a financial stake, and a little less than half said that they would not like to be financially involved. This is perhaps a surprisingly positive commitment for a new community business.

Comments on their involvement are given below. They have been loosely categorised by the author:

Positive Advisory capacity in using livestock to maintain grass

But would sell local produce

I have experience in sales and marketing, this may be of some use I might be. I am not sure how I would contribute at this stage

Possibly. I certainly wouldn't say 'no' at this point, Am interested at many levels, from

pruning to branding, design and promotion. Time however, is an issue.

Supply various types of fruit, as well as my time

Horticultural training. Member of CTS (former director)

Willing to help in any way.

Would like to be actively involved but would need to know structure being proposed

before commenting on level of involvement

Only through finance

Cautious Only to a limited degree (no yes/no answer given)

Would need further information though Perhaps will have to think about this

To be agreed Time limitations

Not sure

Not sure at this time

Not sure, although I currently run a large successful business so have some skills in this

area.

We are probably too small to contribute meaningfully (no yes/no answer) .

Depends on how it is organised

Don't know,

My only concern is that the few do the work for the many. I wouldn't want to get involved if I end up doing exactly what I would do on my own selling my own produce. I would need to think carefully before getting involved and ask what's in it

for me.

Negative Not really - for obvious reasons. But I'm open to suggestions

No longer working/near retirement age Not at my age (on board of CTS)

Clearly, several respondents are cautious or feel unable to offer anything at this stage, but many can already envisage what they can offer the project.

Comments on taking a financial stake are given below. They have been loosely categorised by the author:

Positive Obviously the general principle is more attractive but would need to know more

before commenting fully.

Possibly

Mixed feelings about being financially involved. If moderate sums of money were required to get going then I would be supportive. (no yes/no answer given)

Subject to risk assessment and liability/indemnity insurances

The orchard owner could benefit financially either from rental of their orchard to the

business or from being an employee of the community business.

Unless it was a co-operative enterprise when it would be more attractive. Sometimes start-up funding is required to get going and if it was a small sum with a modest

return this could push things forward.

Very happy to have a stake in any business and would be delighted and surprised if

this produced a profit.

Ambivalent or cautious

Obviously it would be nice to make money from our orchard but equally, just to have the orchards restored and maintained would be a start.

Perhaps – it would depend on how the business functions

Don't know (no yes/no answer given)
Maybe! (no yes/no answer given)
Might be (no yes/no answer given)
Not sure (no yes/no answer given)

Not sure, would have to think about this.(no yes/no answer given)

I do not know. It depends on a number of factors from the nature of the business to

who else was involved (Yes and no selected) Finance not an issue (no yes/no answer given)

Negative Can of worms

Would not wish any financial risk (no yes/no answer given)

Concern of freeloaders

I have enough work to do looking after my own orchard. I'm not a charity and would expect payment of some kind if I ended up working on behalf of other orchards.

Respondents bring up some interesting and relevant points about how a financial stake could work. Clearly, a financial stake is only one option for a community business, but it does represent the community taking on risk in a new business and therefore is likely to engender greater ownership of 'the project' and potentially better sustainability. Grassroots action like this has a precedent in the various forms of Community Supported Agriculture scheme – which are essentially about sharing risk and reward.

KC 9: Any other comments about the sort of business you would like to see being created?

Other comments about the sort of business are given below:

Generally supportive but too much to do with existing business

High quality, local produce being sold locally.

I believe the easiest type of business would be some sort of clyde valley fruit juice. With orchard owners delivering apples for pressing pasteurising and bottling. This seems the most marketable at the moment from my basic market research to date. This could be built on and then fruit both apple and plum being sold in a similar manner if a market was available

Possibility of a cooperative?

Better to have comments here from local people

Possibly along the cooperative route where members share any profits left at end of year's trading. Quality of input of fruit for community business is important and difficult

Utilising the land, not just the fruit trees

Wastage is big problem. Needs to be taken into account.

Would like to see some small profit and maximum wildlife benefit

Many diverse but important and relevant issues brought up in these comments; lack of capacity, how to ensure quality, how to make the business viable. It is healthy that these questions are being asked at this stage, because they will need to be addressed in due course.

KC 10: Would you be interested in Non-Fruit Orchard Products; like honey, livestock or edible fungi?

The graphs shows that majority of respondents, representing a significant number of owners (24no.) are interested in diversification into non-fruit orchard products.

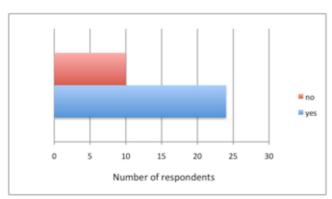


Figure 10: Interested in Non-Fruit Orchard Products

This is highly encouraging, and while non-fruit products may not form the main volume of business from the orchard, it is likely to form an important additional and potentially value-added stream of revenue.

Comments on non-fruit orchard products are given below. They have been loosely categorised by the author:

Current uses and positive ideas

Honey: a possibility; poultry need to be careful with foxes.

Poultry in orchards already; bees as well; good idea Have hens, ducks and geese; interested in honey

If the honey and mushrooms were produced in the Valley it would be of value. Not

so keen on livestock idea.

Could possibly be interested depending on effort required.(no yes/no answer given) I have had bees but at the moment I am not interested in producing honey but may be again if there was available help with the orchard (Yes and no selected)

As profit is not central to the orchard then we are keen to experiment with different complimentary uses of the orchard environment.

Gooseberries. Bees are good - used to be 100s of hives in the valley

Have in the past made it known that a person sitting hives on the ground would be acceptable. Mistletoe has been tried by previous owner. Sheep.

Honey

I am interested in bee keeping, have been researching a little and debating whether to take the plunge!

Livestock

N/A Except to say that this is the subject of my next bit of research (5 sites around the country as research/demonstration orchards to set up and monitor a number of different complimentary orchard crops

Pigs ,sheep, geese, turkeys. I would consider any complimentary business to the orchard. There is not enough profit in fruit alone.

Subject to risk assessment and liability/indemnity insurances

Used to have bees (there is a local bee group)
Would like to expand and renew existing orchard

Yes, have several unused acres of land

Cautious Again would depend on the product and the level of work involved in maintaining.

Maybe (no yes/no answer given)
Possibly (no yes/no answer given)

We have no skills in or knowledge of these activities. For livestock, fencing would be required.

Would have to get advice about this (no yes/no answer given)

Not at the moment, I only have 1 acre of trees this would limit livestock.

The comments indicate that there are already a lot of ideas and a willingness to diversify amongst the respondents. They appear to embrace non-fruit orchard products.

5.2.3 Summary of Responses from Keeper Consultation

A summary of the responses from approximately half of the recorded orchard owners (42no.) is given below. This summary relates only to those keepers that have responded.

- Most respondents do not currently see their orchards as business partners, though a minority do. However a clear majority are enthusiastic about the continued survival of the orchards.
- Half of respondents consider themselves either 'retired' or 'at home'. A third 'work elsewhere' or 'work part-time'.
- Most keepers think their orchard contributes to the heritage or scenic value of the Valley.
- Most keepers would like help in various aspects of maintaining their orchard or picking fruit.
- Two thirds of respondents do not consider their orchards to be working now, but an overwhelming majority would be happy to see them worked in the future.
- Only a very few orchards have received support payments, and only a few are IACS registered. Most keepers would welcome future maintenance payments but are concerned about conditions that may be imposed.

- The large majority of respondents are happy for their excess fruit to be used productively. There are concerns about retaining control of their orchard.
- An overwhelming majority were positive about creating a brand and a community business.
- Around half of respondents said they would be happy to be involved and contribute to a new community business, and around half were willing to consider a financial stake.
- Finally, two thirds of respondents were interested in diversifying into non-fruit orchard products (such as honey), and also had numerous ideas.

5.2.4 Conclusions from Orchard Keeper Consultation

This consultation has received responses from nearly half of the community of orchard owners and supporters. This should be considered quite satisfactory given the time and budget constraints.

The consultation has collected a wide range of opinions regarding the proposed strategy, the majority of which are supportive.

The following conclusion are drawn:

Support of Revival: The overarching conclusion is that respondents value the orchards and are willing to work towards ensuring their survival, and endorse the proposed strategy.

Capacity: Limitations of capacity are clearly voiced, and in part these may be because orchard owners are no longer active horticultural businesses. But while skills and capacity for physical activity may have diminished, skills and capacity for the development of new ideas and new organisational ventures is in good health.

Support for New Business: There is very clear support for creating a business mechanism for selling fruit profitably and thus ensuring the survival of the Clyde Valley orchards.

Willingness to Engage: There is a willingness to engage, both in receiving assistance in managing the orchards but also giving time and being involved in creating and running a new community business.

The consultation has demonstrated clear and positive support for the proposed strategy.

Survey

6.1 Scope and Remit

Previous orchard surveys⁶⁷ cover the area from Lanark to Overtown, and to a distance of approximately 1 mile from River Clyde. Orchards may exist outwith this area but within the CAVLP boundary: further up the valley sides, between Overtown and Hamilton, and probably in the Avon Valley to a certain extent. However, the Lanark to Overtown stretch of the Valley is the key area for orchards. The forthcoming Phase 1 Biodiversity Survey will cover this area. Additional survey work outwith the scope of this report will be required to identify the outliers. The geographical scope of this survey is taken as the same Lanark to Overtown section of the Valley.

The remit of this survey is to 'review and update the information on orchards ownership, and status of the recorded orchard'.

Updating the Record of Orchard Owners

The list of names and contact details for 71no. owners from the Ironside Farrar 2001 survey formed the basis of an updated record. The list is incomplete in some detail, and now of course, out of date. Other more up-to-date contact lists have been provided by CVOG and by the former Project Officer⁶⁸. These lists have been assembled into one list and a process of updating undertaken. Updating has been on the basis of local knowledge and published data such as the electoral register. The updated list has been used to circulate both the Keeper Consultation and the Orchard Survey, though the former also included non-owner consultees.

In a further iteration of improvement to the owner list, those owners who did not respond to the Orchard Survey (which is described in the next section), were contacted by telephone where possible, in order to offer help in returning the survey forms. As part of the telephone contact process, the recorded owner names were confirmed. It has not proved feasible to contact all non-responding owners, because it has not been possible to determine a current contact phone number for them. A number of presumed owners are ex-directory and not known to the local orchard community.

The updated list of orchard owners is given in the Confidential Appendix 18.1

⁶⁷ as discussed in Chapter 2

⁶⁸ Rose Clarkson from 2007 - 2010

6.3 Updating Survey of Clyde Valley Orchards

All recorded orchard owners in the Clyde Valley have been surveyed to update information and to seek specific new information about their orchards.

6.3.1 Methodology

The survey took the form of a short questionnaire (shown in Appendix 16.4) asking about the content, condition, management techniques, fruit use and experience of keeping an orchard.

The consultation was sent out to CVOG members (27no; 18 orchard owners, 9 non-orchard owners) mainly by email.

All recorded orchard owners were included in the survey (71no.) A further approximately 20no. contacts were made by various means including word of mouth. Those owners that were members of CVOG were emailed the survey form, while the rest were mailed a paper copy of the form. A few orchards were visited in person (6no. owners, 8no. orchards) and the form filled in during the visit. The latter group were selected for visit because they have existing horticultural businesses and/or important large orchards.

Initial mail out and email send took place on 22nd March 2011, with some follow up to individuals as requested. Site visits took place on 17th March 2011. Follow up telephone calls were made to all non-CVOG owners who had not returned form. Non-responding CVOG members were contacted by their secretary to remind them.

Keeper Consultation forms (as described in Chapter 5.2 above) were applied at the same time, when mailed out, emailed and by visit in person.

6.3.2 Results of Updating Orchard Survey

A total of 43 no. responses were received by 13th May 2011 when collection of responses for this report ceased. From the remaining 50no. orchard keeper contacts, no response was received. In a few cases this was due to refusal, but most cases the contact was non obtainable, or agreed to return the form but did not.

Data has been transcribed to a database that is described in the Appendix, Section 0.

Not all questions were answered by all respondents. Conversely in some cases, a respondent could select more than one answer. Therefore, in the data presented below, it is quite correct that for some questions, the total number of respondents does not add up to 43.

The results are presented question by question. Where comments are given, they are mostly verbatim, except where too lengthy.

OS 1: Approximately How Many Trees are in Your Orchard?

1.5 6-12 91 13-50 100-250 0 5 10 15 20 25 30 Number of orchards of that size

Figure 11: Orchard Size; Number of Trees in Orchard

Most orchards (24no.) are reported to be between 13 to 50 trees in number. A further significant minority (9no.) are 51 to 100 trees in size. Four orchards are reported as between 100 and 250 trees, while just 2 are larger than this. There are few small orchards reported.

The largest orchards still contain over 400 trees, most of which are plum.

For those orchards keepers that responded (around half), the total number of trees reported is approximately 2800.

OS 2: How Long Have You Had The Orchard?

The respondents were asked in what year they took the orchard on. The dates given have been grouped into decades, and in the graph the final year of the decade represents all ten years of that decade. So for example, the point for 1999 represents the whole 1990s.

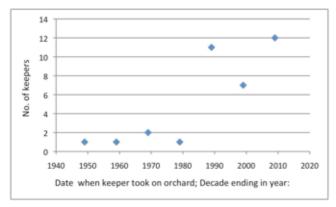


Figure 12: Length of Time Orchard Held: Decade when Orchard Taken On

The earliest response was 1949 (grouped as the decade 1940 to 1949 in the chart). This, together the following three decades shows that there are still a small minority of orchards kept by those who took them on in the post war era.

In the three decades since 1980, there has been a much more significant turnover of orchard ownership.

OS 3: What is the Age of Trees in the Orchards?

The form asked respondents to state the approximate age of trees in their orchard by putting them into an age category. They were also asked to state known ages.

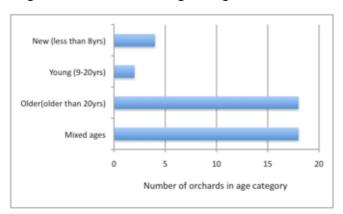


Figure 13: Predominant Age Range of Trees in Orchard

The data shows that most orchards are mature, or contain a mixed age of trees that includes mature trees. There are also some orchards that are predominantly young trees.

Further data from respondents shows that there are six orchards where the oldest trees are over 100 years in age.

OS 4: What Kind of Fruit Trees are in the Orchards?

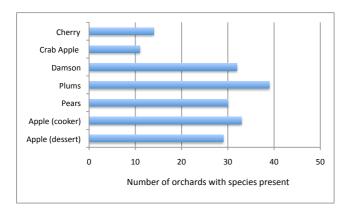


Figure 14: Main Tree Species Found in Orchard

The graph shows that most respondent's orchards commonly have the four main species, including both cooking and dessert apples. A significant minority have cherry and crab apple as well. In the 'Other' species comments, the following were received:

redcurrants
quince
Hazle
Cob
Walnut
Green Gage
flowering cherry 1
blackcurrants-15
raspberries -20+ canes
strawberries various 20+ plants approx

2 x medlar 10 x cobnut 1 x heart nut 1 x walnut 1 x sweet chestnut 1 greengage

Data on numbers of each species in an orchard was patchy, though the question was asked. Where it has been reported, it shows plum are still the most numerous tree, as shown in the adjacent table (row in bold). While 1380 plum trees were reported, other species numbered the low hundreds. Plums constitute 64% of the trees reported.

Table 4: Number of Trees Reported for Each Species (from a subset of respondents)

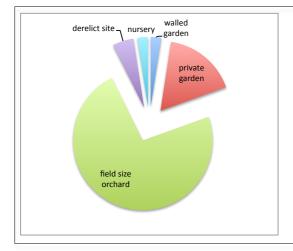
Species	Apple	Apple	Pears	Plums	Damson	Crab	Cherry
	(dessert)	(cooker)				Apple	
Total trees reported	197	114	186	1380	270	5	19
Quantities in Top 3	100	25	60	400	60	4	5
orchards	40	15	12	200	50	1	3
	27	10	10	120	40	-	3

NB. These figures summarise merely those minority of orchards that have reported numbers of each species, and therefore these figures do not necessarily represent all those orchards that are included in the 43no. survey responses received.

Also shown in the table are the quantities in each of the Top 3 orchards for that species. This gives an indication of the concentration of particular species in a particular orchard. So we can see that the Top 3 orchards for plums have more than half of the plum trees reported; while the Top 3 orchards for dessert apples have 85% of those reported.

OS 5: What Type of Orchard?

Figure 15: Type of Orchard



Туре	No. of orchards			
walled garden	1			
private garden	7			
field size orchard	30			
derelict site	2			
nursery	1			

The pie chart shows that around ¾ of the orchards reported (30no.) are field sized, and there are also a significant minority that are considered as private gardens. One walled garden was reported.

OS 6: Management State of Orchards

A broad categorisation of management state of the orchard was given by respondents.

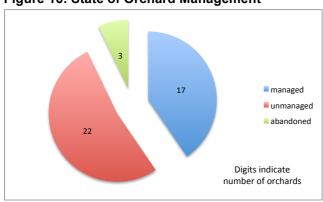


Figure 16: State of Orchard Management

The majority of respondent's orchards are unmanaged and a further three orchards are considered by their keepers as abandoned. However some 40% of orchards are still managed.

OS 7: Biodiversity Indicators

Are these features present in the orchard?

Some basic orchard-specific biodiversity indicators was included to gauge what biodiversity may be present on or in the trees.

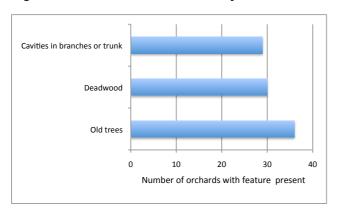


Figure 17: Presence of Biodiversity Indicators

The graph shows the most respondent's orchards have all three biodiversity indicators present. This indicates significant potential for high biodiversity.

OS 8: How Do You Manage the Orchard Floor?

How the orchard floor is managed also has a significant role in biodiversity.

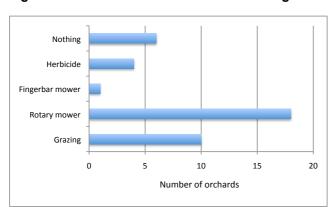


Figure 18: Methods of Orchard Floor Management

The most popular method of managing the orchard floor was by rotary mower. A distinction has been made between rotary and fingerbar mowers because the latter is understood to have a significantly lower impact on invertebrates that may be resident in the orchard floor vegetation. Only one orchard was maintained with a fingerbar mower, the keeper being in the horticulture business.

Grazing was reported as the second most popular method of managing the understorey.

A few respondents reported doing 'Nothing' and a few using Herbicide.

Comments on orchard floor management are given below. They have been loosely categorised by the author:

Mechanical Strimmer (11)

strimmer, but not near trees

strimmer, hired rotovator, chain saw, manual digging tractor topper (rotary) if too many weeds eg thistles

scythe

Animal Poultry (2)

I am a pedigree sheep and cattle farmer.

Light grazing only

Other part of area and paths only. Herbicide around tree base only

Note: Brackets indicate number of duplicates of that comment

OS 9: Chemical Sprays

Do you use any?

The use of chemicals is generally seen as negative to biodiversity. The respondents were asked about herbicides, pesticide, and other sprays that they use.

None
Pesticides
Herbicide
0 5 10 15 20 25 30 35
Number of orchards

Figure 19: Prevalence of Use of Chemical Sprays in Orchard

The chart shows that while a minority of orchards have herbicide used, by the far the majority of respondents use no chemical sprays.

One orchard used pesticides.

Comments on 'Other' chemical sprays are given below.

none (SAC site therefore not allowed) none being used in last 15 years have used nothing in the last 5 years

herbicide for brambles only Herbicide at tree bases some years herbicide around tree base, as little as possible

seaweed extracts

OS 10: How is Fruit Used?

Categories of fruit use were given and multiple choices were acceptable. The results are shown below.

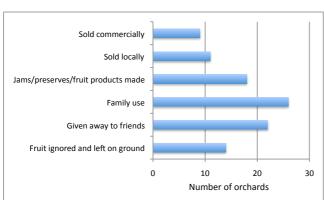


Figure 20: How Fruit is Currently Used

The graph shows that there is a wide range of end users for the fruit from the orchards. The majority of respondents use the fruit for their family and friends. Around a third of respondents make jam and other products. Around a quarter of respondents sell fruit locally or commercially.

Conversely, nearly a third of respondents ignore the fruit and leave it on the ground.

OS 11: How Much Fruit?

Do you know how much fruit is produced in your orchard?

The following responses were made. They have been loosely categorised by the author:

Quantified 1 tonne of plums, 1/2 tonne of rough stuff for windfalls

Plums average 7 tonnes (20 at their best). Gooseberries about 1 tonne (formerly 15

tonnes)

No idea. Apples are around 300 – 400 kg I think

100lb plums

APPLE 500lbs picked, PLUM 500lbs picked 250kg cooking apples, 50-100kg plums

150kg plums and 50kg apples 100kg damson,s 450kg apples

Approx 500lb plums. Probably similar amounts of apples, pears and damson. I only pick the best plums. Quantity varies from year to year. Last year if I had

picked everything – 6 tonnes

200lb

about 10 punnets

Unquantified too much to quantify

Loads. More than all our friends and family can process.

Little New trees are too young, old trees-fruit not used

Very little - late frosts have hit years of nice blossom. Also site is fairly flat, can be a

problem.

This is a newly planted orchard, not yet fruiting.

Not much at moment of any quality orchard still young being developed

unknown (many)

The responses show that many people use quantities of fruit that are significant in terms of personal use. In terms of commercial quantities only a few orchards are still producing significant quantities.

How much is left on the ground?

The following responses were made. They have been loosely categorised by the author:

Quantified All

Well over 50%

85% 80% 4.5 tonnes 3/4 of area 180lb

Plums around 60%. All the apples get used, Damson 50% Pears are not fruiting at

the moment

Plums 100lbs, Damsons 60lbs, Cooking apples 150lbs All plum and 1 old tree of apples. Possibly 200KG

fruit eaten by wasps - about 3lb worth

approx 10% for wildlife

none

Unquantified Fruit not harvested

majority (for wildlife)

Most of it (4)

Only fruit which is used is plums, which are sold.

more than half

alot (especially damsons)

a lot (3)

loads (sorry cant be more accurate)

significant amount

some

Very little in the way of plums, apples are never fully harvested, the greengrocer we supply has no market for apples locally produced or otherwise as there is no demand

for the fruit. unknown (3)

The responses indicate that there are large quantities of fruit that is unused.

OS 12: What are the burdens of owning an orchard for you?

The following responses were made. They have been loosely categorised by the author:

Burdens

Money Cost and time to manage it.

Insurance, maintenance, cost not an issue. Can find pickers at Netherburn.

Finance, time, potential low profits

Some jobs require two people. Can't afford to employ anyone.

some re-establishment costs

Time Time and costs

Time and hard work to maintain an orchard, where the main aim is fruit production

on a commercial basis. Lack of knowledge & time Maintenance Keeping on top of maintainance whilst working full time. Rabbits are destroying

new trees despite protection. Maintaining grass, tree pruning

Maintaining it properly is impossible. Very time consuming & working on steep slopes is very hard work. Labour intensive - hedge cutting, strimming, pruning, protecting trees from rabbits & deer and replanting all have a cost in terms of time

and money. Maintenance Maintenance

Maintenance and protecting young trees from deer and rabbits.

Maintenance at my age

Size and time to maintain and collect fruit. Uneven ground and height of trees

proves very time consuming. Heavy maintenance work

Cutting grass and hedges, drains, keeping things neat and tidy. The worst problems are drainage and digging and rabbit damage.

Some maintenance work

Other work picking

Weather can be against you eg frost

Small plums in some years

Feelings The lack of knowledge and time to stop its further decline. Feel slightly shamefaced.

The problem of seeing what should be a lovely orchard actually being a wasteground.

Unable to work the orchard due to age Feeling guilty that I don't look after it

Waste of fruit

Little burden Nothing because don't manage it

None (9)

The comments show that most respondents consider that there are many burdens of owning an orchard; and in particular the time, effort and cost of maintenance, with little financial return. Several respondents are burdened by feelings of shame and regret at the poor condition that their orchards have got into and the waste of fruit.

A significant minority (10no.) report that there is little or no burden.

OS 13: What are the benefits of owning an orchard for you?

The following responses were made. They have been loosely categorised by the author:

Benefits

Environment & Environment to live in, fruit it produces, future possibilities

Heritage Benefit to wildlife

Wildlife, appearance (Blossom & Fruit), fruit

Heritage and eco benefits

Heritage; attractive environment; productive

Its preserving old skills and varieties, and looks great on my property. Landscape enhancement and the possibility of having homegrown fruit.

Letting wildlife use it, making money from some fruit

Like the orchard's history and would like to retain it as a going concern.

Beauty of environment. Wildlife. Pleasure in growing edible crops. Some income

derived which supports charities

Fruit & business Fresh fruit

Fruit when we get it Get some fruit

Supply of quality fruit, heritage kept alive

use of produce

business, seeing the beauty

Deriving pleasure from growing your own fruit, and in selling it and making

produce.

Aesthetic & pleasure

Satisfaction value, bio-diversity enhancement, some fruit, aesthetic and landscape

values

The beauty and the bounty.

The joy of having a lot of space in a great setting.

Blossom, fruit

Blossom source for bees, saves using shop source, visual pleasure of trees

Improving the scenic value

Just having it. Grown up with it all my years

lifestyle

Lovely place to live

Amenity space Enjoy the privacy, great place for family picnics and barbeques.

Used to practice police dogs on site

Open space, fresh air and abundance of fruit.

Privacy

Work Working outside when fine

Other Wanting to know more and have satisfaction of bringing orchard back to life

Educational purposes

Little benefit It's not really an orchard now - just a wood with some fruit trees

None (2)

Orchard keepers clearly find that there are many and diverse benefits to having an orchard. The benefits loosely congregate around the following themes: environment, wildlife and heritage; the fruit and its benefits; the aesthetic value and pleasure derived from that; the orchard space for various private uses. Some respondents also enjoy working in the orchard.

Only two respondents stated that there were no benefits.

OS 14: Owning an Orchard: What costs are there, and what incomes are there?

The following responses were made. They have been loosely categorised by the author:

Costs/Income

Specific Cost - odd tree from restocking

Income - nothing

Cost of time, Materials for fencing. No income

Cost-Time and tools. No income

Costs - tree renewing, pruning. Income - nil

Costs approx. £5000 a year. This includes investment of machinery, tractor, mower etc., sales approx. £500 a year

Costs are difficult – we invest some £300 pa on tress and stakes etc, we have a small tractor which has maintenance of some £300 a year plus purchase cost of some £1500 and we need a more substantial tractor that could cost £5000 upto £15000.

Costs-tool purchase and time involved in carrying out maintenance. Income - none at present.

Costs: Maintenance (fuel, equipment servicing, equipment purchase and replacement), raw materials purchase (jam sugar, labels, ink).

Income: Fruit sales, Jam sales

Costs: replanting, machinery repair and maintenance, labour, packaging, transport,

fertiliser, herbicide, drains, rabbit fencing Incomes: from selling plums and damsons

We spent £450 last year on strimming and never have had an income.

Containers for selling fruit are expensive

Used to have 14 pickers 7 days a week - family now do picking

Cutting grass and hedges

Maintaining an orchard at even the minimum level costs more than the income it brings in Tree guards & wire netting to protect trees from rabbits & deer .Hedging & fencing replacement round the orchard, Pruning saw, knifes, loppers petrol strimmer & hedge cutting equipment costs are high & power driven tools need regular servicing .If new trees are purchased £15 per tree is a minimum for nursery grown stock

Last year we donated £200 to Chest Heart & Stroke Scotland We gave a lot of fruit away. We have made more in the past.

I would like to make more to enable us to offset costs of running the orchard. But it is difficult to supply plums on a regular basis over the 3 weeks of harvest There are usually not enough at the beginning & then a glut & too much to supply one trader. Famers markets are ok but dates need to coincide with when you have enough to make journey worthwhile. Boxes to pack them in are too dear. I recycle boxes & sell a lot through non food outlets like hairdressers. Selling apples loose are easier.

Maintenance machinery and fuel costs. Income from plums (approx £500 at best).

fruit picking=income at the moment

Other Personal time, fuel and machinery costs.

Ground maintenance

Non specific Don't wish to divulge.

Dont know

Little cost or income

low cost after planting Little cost, no income

cost-minimal, income-negligible

Don't have costs or incomes at the moment

No costs as Talamh look after orchard under a paperless contract

No income, costs are for new trees, planting, tool purchase and maintenance, time

No income, minimal cost (fruit press, jam jars, bottles, sugar)

Neither are very significant time cost, very minimal income

None (7)

The responses clearly show that for many orchards, considerable cost outlays are made. These mainly relate to the machinery and contractors for maintenance. Smaller but significant sums are spent of replanting trees. No respondent reports that their sales of fruit are sufficient to offset these costs. Many report that there is no income.

OS 15: Other Comments

Respondents were invited to make any other comments that they wished to. The following responses were made. They have been loosely categorised by the author:

Pests Deer and rabbits a bit of a problem

Flatworms are here for about 10yrs. No moles. Restricted birds that eat worms.

Rabbits are a big problem

Deterioration Unfortunately our trees are unmanaged / their condition is deteriorating

The orchard is now almost defunct. Is this derelict?

Sad to see old trees coming down

Other In the past have offered walled garden to any person(s) interested, no response.

Could sell much more but picking, packing & travelling to sites like farmers markets make the volumes ripe/ready at any one day difficult to be an economically viable

option.

We press a lot of apples for juice. 30/40 litres

Several themes emerge from these other comments that have not been picked up elsewhere.

6.4 Survey Summary

A summary of the responses from approximately half recorded orchard owners (43no.) is given below. This summary relates only to those orchards whose keepers have responded.

- Orchards have an average of approximately 50 trees. The largest still contain over 400 trees.
- The turnover of owners has been 25% per decade over the last 30 years. There are still owners from the post war era.
- Most orchards contain mature trees, though there have been new plantings in many orchards
- Plums are the most abundant trees in the respondent's orchards. There are a significant number of apples (dessert & cooker), pears and damson.
- Most orchards are field scale.
- Most orchards are not managed
- Biodiversity indicators for the trees show that the majority of orchards have high biodiversity potential.

- The management of the orchard floor is mainly by rotary mower or grazing. A minority
 of respondents use herbicide. Both rotary mowing and herbicide tend to reduce
 biodiversity.
- Many respondents use the fruit from their orchards but none use it all. There is significant under-utilisation.
- Maintenance, time, and costs are reported as the main burdens of owning an orchard; while wildlife, aesthetic and amenity are the common benefits. There can be significant costs that are not balanced by any income received.

6.5 Conclusions from Updating Orchard Survey

This survey has been an essential update to the previous survey in 2001.

Given the time and remit constraints, the reach of the survey has been acceptable, with nearly half of recorded owners responding.

Though this has not been a full survey, in the sense that it has relied on a questionnaire rather than individual site visits, it has enabled an up-to-date snapshot of around half the orchards to be made. A wide range of useful data have been collected, about the trees and their condition, the fruit and its use, and the management of the orchards.

The following broad conclusions are made:

Orchard Resource: The size of the orchard resource appears to have contracted. In the 2001 survey, a total of 7200 trees were recorded in 62 orchards. For this survey, an estimate of 2800 trees in 43 orchards is made. Over the last decade, it appears anecdotally that many plum trees have died, while most replanting has been apple trees. This is borne out by the data; 82% of trees were plum in 2001, while data for this survey indicates only 64% of trees are plum.

Capacity: There is substantial under-capacity especially in terms of maintenance requirements, and fruit picking & use. The lack of capacity has implications for how the fruit is utilised, its quality and quantity.

Fruit Production Potential: There still remains a sizeable fruit resource that is significantly under-utilised. There is also potential increase production from the orchards of the Clyde Valley by restocking and more proactive management.

Economic Balance: Income from the current outputs of the orchards, sold in their current form and via the current routes, does not balance the costs of inputs.

Biodiversity: There is significant potential for biodiversity but management methods need to be amended if the full potential is to be realised.

Part 3 Strategy

7 Strategic Vision

The research laid out above informs the strategic vision for the revival of the Clyde Valley orchards. The orchards form a very significant part of the character of the local landscape, and their continued decline to an eventual loss would be highly undesirable for the area.

The revival of the orchards is essential to safeguarding the character of the Clyde Valley in the long term. In many ways the orchard are also the custodians of cultural heritage for the area.

The vision for the Clyde Valley is working traditional orchards that provide fruit and valueadded products in a way that ensures economic sustainability, but that are managed extensively for biodiversity, heritage and aesthetic benefits.

At its core the strategy for the revival of the orchards is concise and simple:

- Working the orchards creates the most secure future
- New products and new markets are identified & exploited in order to make economic use of the fruit.
- Maintenance of the mature orchards is recognised as a costly but uneconomic activity, and a grant system is created to bring the orchards back into order.
- Balanced & careful management of orchards is incentivised so that the interests of production and biodiversity can both be met. A greater understanding of the biodiversity of Scottish orchards is required to inform this.
- Rural businesses that work directly and indirectly with the orchards are created and fostered, and bolster the local economy and employment.
- Cultural activities around the orchards, together with awareness-raising, education & training are given a high priority.

This vision is developed in the following sections which form the rest of this Part 3 of the report.

8 Economic Rationale

At the core of this strategy is making the economic case. It is proposed here that the surest way to ensure survival of healthy traditional orchards, is to create and facilitate conditions that mean the orchards are worked, and the orchard produce is appreciated widely.

It is important to be specific about the term working; working in the extensive sense, not intensively. But working nevertheless - rather than being museum pieces. This means that after an initial development period, the orchards needs form the basis of businesses that economically sustainable and do not rely on grants to survive.

8.1 What Orchard Outputs to Focus on?

The economic rationale depends of economic use of the orchards. In defining what possible outputs there are, let us consider the following types of outputs are possible from orchards:

Orchard Fruit Products

Fresh and stored; eating apple, cooking apple, cider apple, table pear, preserving pear, plum, damson, bullace, quince, other fruits, hazel nuts, other nuts.

Value-added Orchard Fruit Products

Fruit juices, cider, perry (pear cider), fruit wines, cider vinegars, jams, jelly, chutney, pickles, fruit cordials, fruit spirits (e.g. damson gin, calvados), dried fruit (e.g. apple rings), damson cheese, cakes, puddings & sweets containing fruits.

Pears form a significant part of the fruit juice in some areas of Germany⁶⁹ and quince juice is sometimes included for colour.

Non-fruit Orchard Products

Honey, undercrops (e.g. soft fruit such as gooseberry, strawberry), grazing (cattle, sheep, pigs, llamas, chicken, duck, turkey and the speciality products thereof), forage (hay or silage), craft wood for carving & instruments, smoking wood, firewood, wild fungi, cultivated mushrooms, wood smoked foods (e.g. apple wood smoked cheese). Scion wood & saplings of local or heritage varieties. Mistletoe.

Throughout Europe, orchards still have a close relationship with other aspects of agriculture. Some have arable crops, but mainly they are used as grazing various livestock including fowl. In Italy, finishing pigs on the windfall of orchards is a method of creating particular pork delicacies. Indeed in Britain, the Gloucester Old Spot has been traditionally reared outdoors in orchards. To a certain extent, disease in the trees is said to be minimised by having pigs clear up windfall fruit.

Other Orchard Revenues Sources

Orchards have and are being used for all sorts of other revenue generating activities: Wedding venue, seasonal camping ground (for the flatter areas), blossom walks, wildlife walks, workshop venue. Film companies location. Outdoor theatre venue. Tree sponsorship. Artwork from identified orchards.

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⁶⁹ Keech (2002) p11

These lists are not exhaustive. There are more opportunities than those identified here. What is clear from knowledge of the market is that fresh fruit should only be a minority element of the business solution. Other types of orchard output are more easily distinguished & branded, in the main have longer shelf life, and have greater potential of a good margin.

Fruit juice in particular is a proven product that has been shown elsewhere to be a sustainable business. Juice from dessert apples in particular is in demand. Dessert apples have not been grown in the Valley in recent history in part because of the incidence of cosmetic skin blemish, as a result of the climate. However, if dessert apples are being grown for juicing, skin blemish is not a key factor. The quality of the juice is the key factor.

8.2 Ethical eating: How environmental management could define a target market

What market segment to address is outside the scope of this report. Thorough analysis in a separate piece of work needs to be carried out. However, two aspects are clear; firstly selling through supermarkets in not viable, secondly the review of market conditions has shown that there is an uncrowded market for premium local produce. It is proposed that this is the market that the Clyde Valley orchards aim for.

Within the local independent produce market there are also significant differentiators, such as organic, and various shades of environment production. These could define one of the target markets. By bringing together higher environmental management with a local product, a win-win is established where biodiversity and other environmental benefits reinforce the product's image within a niche market.

Organic

While the perception for some is that 'organic is not for me', it is more accepted than widely perceived. 88% of households bought some organic food in 2009⁷⁰. And behind dairy, fresh produce (including fruit) has the second biggest share, with 26% of the whole market being organic.

Market research⁷¹ shows that 'naturalness/unprocessed' nature of organic products is the most important reason for choosing organic; this dovetails well with fruit and value added products that are relatively unprocessed. Many Clyde Valley orchards are likely to be eligible for organic status with little or no change.

⁷⁰ Soil Association (2010), Organic Market Report 2010, p4

⁷¹ Soil Association (2010) p8

Figures published in 2008⁷² show that only 12% of organic top fruit (i.e. apples, pears, plums) is home grown. Other recent data shows only 2000ha of fruit and nuts was registered as organic land in the UK. Both these figures show that there significant opportunity for growth in producing organic orchard fruit and it's related products.

However the organic market place for *fresh fruit* needs to be entered carefully, and a strong local customer base created rather than relying on larger retailers. The 2010 Organic Marketplace report states the following in terms of fresh fruit:

"Top fruit yields were mostly average in 2009, although the skin finish of some fruits was often below par. There was a bumper plum crop but sales did not match yields – primarily because supermarkets chose not to stock the produce. From producers supplying the supermarkets (and supplying some of the biggest box schemes) the Soil Association hears persistent reports of specifications being tightened and cheaper imports from mainland Europe being favoured. There will need to be a stronger commitment to UK growers for more to have the confidence to supply these larger markets" ⁷³

This suggests that while organic is a great opportunity, it is probably value-added organic products that will provide the best and most stable opportunities, together with a modest local market for fresh fruit. Organic box schemes and farm shops could provide a ready outlet at a premium price.

The Soil Association operates its own web-based 'organic marketplace' for producers and buyers to meet up.

The costs of organic certification are over £500/yr, but collective certification should be explored.

Other Environmental Standards

Conservation Grade⁷⁴ is now a trademarked autonomous 'standard' that indicates voluntary compliance. Key issues are banning a small number of pesticides and the creation of wildlife refuges on the farm – but it is still very much an intensive production system. The mark is marketed to producers as a product differentiator.

Autonomous Local Voluntary Environment Scheme.

Perhaps more useful for the Clyde Valley orchards, is to consider a voluntary local scheme, along the lines of that introduced in the *Streuobst* programme. This could involve voluntary total ban on all pesticide spraying in orchards. No stringent certification is required but random sampling is carried out to confirm adherence. As the Soil Association and other

⁷² Raskin quoted in: Fabrizio, Ida et al (2008), Protecting Our Orchard Heritage. A good practice guide for managing our orchard heritage, (London: Sustain). p55

⁷³ Soil Association (2010) p22

⁷⁴ www.conservationgrade.org

data shows, the public is becoming much more interested in the ethical status of their food, and therefore this market is growing.

8.3 Creating a Brand

Creating a brand is an important part of establishing a presence in the market place. Part of the purpose is to discriminate between the niche high-value product from the Clyde Valley, and a mass-produced generic product, for example apple juice. Apple juice is an internationally traded commodity; traditional orchards in a relatively high wage economy are never going to produce this sort of product at an economically feasible cost. However the local niche product can do. What is being sold is as much the Clyde Valley landscape and heritage, as it is the product in the package. The brand needs to capture the essence of this intangible element.

Creating a brand name requires a careful process of advise and consultation, which are outwith the scope of this study. Some options that exist are an explicitly descriptive name such as *Clyde Valley Orchard Produce*, or alternatively a more opaque name that conjures the imagery in a stronger way, such as *Fruit from the Falls of Clyde*⁷⁵.

Trademark of the brand name and it's devices (i.e. logo) is relatively straight forward if the name is not contentious. The UK Government's Intellectual Property Office operates the registration process. The fees depend how many classes of product the Trademark is being registered for, but in this case fees are likely to be £200 - £400.

Launch of the brand is a separate issue, and the launch process must be carefully managed to ensure a suitable quantity and quality of product is available.

8.4 Protected Geographical Status

The stated advantage of Protected Food Names is that it protects the product – and brand – from imitation from outwith the area. Further advantages are that it reinforces the quality of the product, and helps build and strengthen the brand.

In the EU there are 3 designations available: Protected Designation of Origin, Protected Geographical Indication and Traditional Speciality Guaranteed. The latter relates to the character of the product not to a place of production. As such it is not likely to be relevant to this discussion. The criteria for the former two designations are:

⁷⁵ A little artistic licence is being used here – but the Falls are in the Landscape Partnership area.

Protected Designation of Origin (PDO)

Product **must be** produced **and** processed **and** prepared in geographical area.

Quality or characteristics essentially due to the area.

Protected Geographical Indication (PGI)

Product **must be** produced **or** processed **or** prepared in geographical area.

Specific quality, reputation or other characteristics attributable to that area.

While the PDO clearly gives a more precise designation, PGI provides a more flexible approach, still retaining a strong link to the location. So for example, in the production of juice from Clyde Valley orchard fruit, under PDO, pasteurisation and bottling would have to take place in the designated area, whereas under PGI those tasks may be carried out more economically in premises elsewhere, such as Glasgow.

There are several examples of protected designation for orchard produce, though not in Scotland; notably Gloucestershire, Worcestershire and Herefordshire each have PGI designation for cider and for perry. In terms of fruit and vegetables, Jersey Royal Potatoes and Yorkshire Forced Rhubarb both have PDO designation, and while hops, celery and watercress are currently in application. PGI designation has been applied for Armagh Bramley Apples⁷⁶.

Under the rules for Protected Food Names, a name, for example 'Clyde Valley Fruit' could be registered for the designation, but the name of the designation cannot be trademarked. Any producer in the designated area can use the name.

The whole registration process takes approximately 2 years, has negligible costs and in Scotland is managed by the Scotlish Government⁷⁷

8.5 Transnational Collaboration

In the less developed parts of Europe, particularly to the east, orchards are still very much part of the working countryside. There is significant potential for a collaborative project that could help recreate the culture of orchards in the Clyde Valley, and also facilitate knowledge transfer to our orchard areas. A transnational project between the Clyde Valley and an orchard area in eastern Europe could also be useful in the process of raising awareness and status of the orchards, by engaging with local actors and those not normally seen as orchard stakeholders.

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⁷⁶ http://ec.europa.eu/agriculture/quality/door/list.html?&filterReset=true

 $^{^{77}\} http://www.scotland.gov.uk/Topics/Business-Industry/Food-Industry/national-strategy/rep/PFNs$

9 Indirect Economic Benefits

9.1 Tourism

The upper stretches of the Clyde, notably the Falls of Clyde and New Lanark are well known for tourism. However, it is understood that tourism has not benefitted the Lanark to Overtown stretch of the Valley significantly, even though it is widely recognised as an area of natural beauty. With the exception of the garden centres, there appear to be few businesses at which a tourist visitor could spend money to benefit the local economy.

Orchards in blossom, and orchards in fruit have a significant role to play in anchoring some indirect economic benefits from tourism for the Valley; orchard B&B, an orchard trail, safe stopping places and viewpoints with interpretation, for example about the riparian landscape and its iconic local species such as otters.

The positive aspects for tourism include vistas of orchards rising up slopes, and beautiful river and wooded banks. Potentially in the future, a return of local fruit and produce is a further benefit. However, there are other aspects that detract; such as some settlements appear tatty, lack of obvious reasons or places to stop, a busy road makes stopping difficult, a significant amount of HGV traffic including tippers make the road less pleasant, and the scenery less tranquil. In addition there is a scarcity of tourist resources, such as refreshment venues that relate to the orchards.

So there are also opportunities in these deficits. Rural businesses, particularly those involving women stand to gain from enabling more tourism. The experience of organisation such as Women Entrepreneurs in Rural Tourism⁷⁸, and in a more general sense Women in Rural Enterprise⁷⁹ shows that women have an important role to play in developing local business.

A further opportunity is make fuller use of the location of the Clyde Valley on a wider tourist agenda, as a place to stay or stop off at. It is minor deviation from M74 if going north to Edinburgh, Glasgow or the Highlands. The 'fruitful valley' could also be marketed as a convenient place to stay if using the nearby⁸⁰ Glasgow airport. As local champion of landscape character, the Landscape Partnership could consider facilitating the development of tourism in the LP area, as an indirect method of achieving its aims.

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⁷⁸ http://europe.nortcoll.ac.uk/wert

⁷⁹ http://www.wireuk.org

^{80 42} minutes/ 32miles Crossford to Glasgow Airport

9.2 The Economic Value of Social and Environmental Benefits

A study to determine the social and environmental importance of orchards was carried out in 2008. In the study⁸¹, author James Taplin used a triple bottom line approach to consider the economic, social and environmental value of orchards in order to determine their Total Economic Value. Types of value were assessed: Direct Use Value such as the fruit produced; Indirect Use Value which is often unrealised – primarily ecosystems services; Option Value, the value that comes from having the resource available for use even if it is not currently used; Bequest Value, knowing that the orchards will exist for future generations; and Existence Value, the value that an individual has just by knowing that the species or resource exists.

The researchers then approached six orchard communities to assess and score various scenarios to determine the weightings of the values as described above.

To summarise a complex piece of work, most of the orchard communities rated 'profitability' as contributing less than 30% of the value of orchards to them. Therefore beauty, the view, peace, biodiversity, wildlife, eco system services, tourism, benefits to the local economy and so on, formed the majority of the value they attributed to the orchards.

10 Orchard Management Aspects

10.1 Managing an Orchard Today

The physical work of managing an orchard can be considerable: winter pruning, summer pruning, managing orchard floor vegetation, picking fruit, transporting and/ or storing fruit are the minimum tasks that are required, if the orchard is to be worked. In addition many of the orchards are on significant slopes, and much of the soil is clay, making working the orchards a not inconsiderable task. There is also a clear managerial input to organise the resources for these activities, and the sale of fruit or the processing to create value added products. This further emphasises that the orchards were commercial rather than just for home or hobby.

The pattern of ownership has changed significantly, and today most orchard owners are not growers or farmers. Many are professional or retired people, who have chosen to live in a beautiful area. For some owners, the orchards may be an unintended adjunct to living in the Valley, and there will be little motivation to work their orchard. For other owners, working the

⁸¹ Taplin, James (2008), Windfall. Putting a value on the social and environmental importance of orchards, (Forum for the Future & the Bulmer Foundation).

orchard is feasible, but the economic return with the current mix of product and outlet is insufficient to make it worthwhile. This strategy needs to address the impediments to managing orchards for both these types of owner, as characterised above. The strategy needs to identify solutions for them, and incentives for implementation.

Previous experience in the Clyde Valley Orchard Project shows that there is a demand for maintenance equipment. The CVOG has a small pool of hand tools. Other parties have some mowing equipment that is shared. It is understood that there is an unmet demand for mowing equipment that can cope safely with steep slopes. Providing appropriate equipment or services for management of orchards would be an important role for an organisation supporting the orchards.

10.2 Orchard Management for Biodiversity

Providing orchard management services or advising on orchard management, is a great opportunity to influence practices and equipment selection in order to benefit biodiversity.

Often methods of orchard management that help to maximise benefits can be accomplished at little or no extra cost. For example, in Germany cutting the grass with a reciprocating knife mower (like an Allen Scythe) is encouraged because rotary mowers may kill the majority of invertebrate life on the grass. Timing the cut later in the summer, after the grasses are in seed also has benefit. Simple measures like this could increase to biodiversity value, and could adopted as standard management practices in the Clyde Valley orchards.

Pruning is also an opportunity to intervene in order to protect biodiversity interests. While conventional advise is to remove deadwood from trees, removing all deadwood will almost certainly reduce biodiversity – and on some older trees it may even be unrealistic if the deadwood is part of the structure. Therefore a balanced approach is required; an approach that considers the longterm health of the tree, best horticultural practice, fruit yield and biodiversity. The desired outcome is a long lived tree that produces significant quantities of fruit, but is still a great source of biodiversity because it still has some standing deadwood, holes, waterpools and so on.



Modern finger bar mower with high output.

Working on slopes.

Small round baler.

In order for this balanced approach to be realised, further foundation research work on the biodiversity of orchards is necessary to determine the key species, and a series of biodiversity indicators. From this foundation, a generic management plan for the Clyde Valley orchards can be created. The generic management plan would identify key management practices to be encouraged based on a balance between biodiversity needs and those of modest fruit production.

10.3 Individual Orchard Management Plans

In the longer term, and as a result of closer engagement with orchard owners, individual management plans should be created. These will tailor a scheme of management so that it fits both the individual orchard and the owner's capacities, and addresses the balance of biodiversity, appearance, ease of management and fruit production. The individual management plans should be based on a template that in turn is based on the generic management plan.

10.4 Filling in the Gaps; Old Orchards, New Plantings

The orchard can be considered as a kind of macro-organism. The total orchard is greater than the sum of the individual trees. But individual trees have a finite life, and unless new planting take place, the orchard becomes depleted and eventually ceases to exist. Therefore new plantings in old orchards are essential.

Survey data from 2001 and 2011 indicates that apples in general and dessert apples in particular are not well represented in the orchards of the Clyde Valley. Prior to 1850, apples constituted the majority of the top fruit here, whereas since the late Victorian era, plums came to the fore. Today, the market of plums and its products are less substantial than the market of apple products. Therefore, planting old orchards with new dessert apples makes sense.

10.5 Options for Picking

The orchards are not are in general not suited to mechanised harvesting (e.g. tree shaker & collection), though there may be some small machines that can assist, such as a pedestrian apple & pear pickup machines. Plums must be picked by hand in any case.

So it is likely that the bulk of the work will be accomplished

Pedestrian pickup machine fills crates



manually. Storage containers and trailers are required also in order to do the job efficiently.

Fruit picking has traditionally been carried out migrant workers either from the towns or travelling people. In the Clyde Valley, it is understood that miners and their families took a

fortnight above ground to carry out the work. Finding a solution to the 'picking problem' today is essential to the success of this strategy.

Can soft fruit growers show the way?

In Scotland, most of our current fruit production is soft fruit, and most of that is grown on the Carse of Gowrie and in Strathmore, and to a certain extent north-east of Fife. Manual picking is the norm, and teams of seasonal migrant labour carry out that work, almost exclusively from outside the UK. The source of migrant labour depends on the prevailing economic and political situation of both countries. In recent years, many of the migrants have come from eastern Europe. The migrants are typically housed in farm-sited static caravans. Some farms have many dozen caravans for these workers. So soft fruit growers have solved the problem of manual picking, and this together with growing techniques and management practice, has led them to thrive and be competitive businesses. The raspberries alone are worth £52 million annually, and blackcurrants £8m and the latter in its value-added form is worth £200m annually.

Of course there are key differences between traditional orchards and modern soft fruit; not least that with the former, extensive forms of production are desirable, and with the latter intensive production is the norm. While it is not suggested that traditional orchards could follow directly in the footsteps of soft fruit growers, there are clearly lessons to be learned. The practical solution to manual picking and efficiently handling the fruit is one lesson; some

orchards already have picker contacts in neighbouring villages such as Netherburn. A network of local pickers should be developed in order to service the requirements of orchards as well as rebuilding local employment and experience in orchard work.

A further lesson from the soft fruit business is defining and knowing your market. The benefits of value-adding are also clear. A careful assessment of the market is necessary in order to identify a feasible and durable opportunity. All this indicates a significant organisational capacity is necessary in order to accomplish a revival of the Clyde Valley orchards.



⁸² SCRI's Role in supporting the soft fruit industry. http://www.fruitgateway.co.uk/our role.asp

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11 How to Delivery the Strategy

11.1 An Orchard Community Business

In order to undertake the activities proposed in this report, a strong and dynamic organisation will be required. That organisation needs to be business orientated, but also operate for the benefit of the community. It needs to be structured and resourced to overcome the capacity limitations that are so common in voluntary organisations. The organisation should also be a suitable candidate for receiving grants.

In advocating a new social enterprise, it is worth noting that existing organisations including the client group have done a great deal for the orchards over the last decade. However, there are good reasons why each of these, at least in their current form, is less than ideal to host the proposed new fruit business.

There are various organisational forms that are commonly understood to be social enterprises in the context of the sort of business that we are considering: various types of Co-operative⁸³, various types of Community Interest Company⁸⁴, various forms of Industrial and Provident Societies, and various Development Trusts⁸⁵. It is the author's opinion⁸⁶ that charitable status is an unnecessary burden and constraint for the proposed new business.

The Scottish Council for Voluntary Organisations provides a briefing⁸⁷ on choosing a legal structure. Choosing the right legal structure can be an arcane process but is nonetheless a vital step. It is suggested that one key criterion for the legal structure of the proposed organisation is that it should be eligible for grant funding. A statement in the organisation's constitution that its purpose is not-for-profit is significant step to eligibility for many funders.

The purpose of the new community enterprise will be to take forward the business aspects of this strategy, notably creating a juice and orchard products business and marketing it on behalf of orchard keepers. It may also undertake or manage orchard services such as orchard maintenance along with contractors from the private sector. Facilitating picking of fruit will be a key task.

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⁸³ See http://cooperatives-uk.coop/economy/start-a-co-operative for information on the various forms

⁸⁴ See www.cicregulator.gov.uk for information on the various forms

⁸⁵ See http://www.dtascot.org.uk/ for information on the various forms

⁸⁶ It must be noted clearly that though the author has experience of setting up and sitting as Director of a number of social enterprises, this is no substitute for proper independent professional and legal advice.

⁸⁷ http://www.scvo.org.uk/information/organisational-structures/choosing-a-legal-structure/

11.2 Orchard Financial Support Mechanism

We have established that orchards need financial support, just as other forms of rural land use do, arable or livestock agriculture being key examples. Government's policy including financial support has been reviewed in Part 1. It is clear to those involved with traditional orchards in Scotland, that the support is not sufficiently coherent and joined up to be working effectively. The evidence is on the ground; traditional orchards are still in decline at a UK level⁸⁸ and locally.

The approach of this report is that there are two elements to creating a holistic economic case for working traditional orchards, firstly an economic rationale of working the orchards as a business, which is explored in other above. Secondly, an adequate support mechanism that provides financial recognition that traditional orchards offer a lot more than just orchard produce.

In horticultural terms, traditional orchards operate at sub-optimal level because they are contain aged trees, are extensive in nature, and the use of agrochemicals is not encouraged. But the benefits are well known and widely appreciated: high biodiversity potential, a noted landscape character, culture and heritage. Support payments are financial recognition of these market externalities. The externalities in this context are 'goods' such as enjoying a healthy environment, or that landscape character. These 'goods' are enjoyed by many but not paid for directly.

There are two possible approaches to the issue of financial support:

- Make the established system work better
- Create an autonomous support mechanism

Accessing Existing Sources of Support Payment

Making the established system work better is essential to the long-term survival of the orchards. Engagement at all levels is required; local authority, national bodies in Scotland and England, Scottish & UK Government, and the EU. Evidence needs to be collected in a coordinated manner to build a strong case. The orchard community across Scotland needs to stand together to put that case. Ensuring that the next programme period of the SRDP beginning in 2014 favours traditional orchards is the key target. Making the existing programme of SRDP works better is an interim target.

⁸⁸ Joint Nature Conservation Committee http://www.jncc.gov.uk

An Autonomous 5yr Orchard Support Scheme in the CAVLP

The work proposed above is going to be a piece of collective work that could take a few years to see results. There is precedence for an alternative: an autonomous local support scheme, such as the Somerset Landscape Scheme⁸⁹. In their Traditional Orchard HAP, there is a target of 50 orchards a year to receive grants from this source to encourage restoration of orchards.

In the Clyde Valley, the data in 2002⁹⁰ indicates that there were just 7500 trees in a total orchard area of 64ha. The relatively small areas and moderate numbers of trees means that within the budgets being considered under your forthcoming Heritage Lottery Funding bid, an orchard support scheme could be readily funded for the 5 yr period.

For example:

- If 100 % of orchards received £500/ ha/ yr in return for various management activities, the total grant cost would be just £32k per year or £160k over 5 years.
- If 25% of trees had restorative pruning each year, at a cost averaging £20 per tree, the annual cost would be £30k. During a 5 year period all trees in the Clyde Valley orchards would be well attended to, making ongoing management much more straight forward.

These cost seem very affordable, and very good value for money in the context of the wider CAVLP project.

12 Outreach to the Wider Community

Reaching out to the wider community and engaging thoroughly is an important element of this strategy. It is recognised in Chapter 2 that a lot of work has already been carried out in this respect. This has been most recently reported in late 2010⁹¹. The report demonstrates that the client group collectively has significant experience of this sort of activity. The engagement and awareness raising work should continue.

The established elements are

- Education & liaison with young people
- Training & advice for enthusiasts

⁸⁹ As detailed in the Somerset Traditional Orchard HAP. www.somerset.gov.uk/.../Somerset%20Traditional%20Orchard%20HAP.pdf

⁹⁰ Ironside Farrar (2002)

⁹¹ Clarkson, R. (2010) The Clyde Valley Orchards Project. Phase II Final Report. Report to the South Lanarkshire Rural Partnership Leader Programme.

- Support to local groups
- Publicity to raise awareness
- Fruit days and other events
- Website

Further new activities can act in different ways and reach out to folk that yet to be engaged. The following can be considered:

- Plum fayres, and plum related activities
- Blossom walks
- Better but balanced access, recognising the potential privacy and biodiversity disbenefits of excessive access.
- Engaging with young & underemployed people through formal and informal programmes of training and work experience.
- International cultural exchange
- More active e-communications that addresses a wider group of stakeholders, including young people: website, e-bulletin, social media
- Engaging with senior citizens and orchard owners, and recording the cultural history of the orchards.

Part 4 Recommendations & Action Plan

13 Recommendations

13.1 Overview

The research reported above builds a strategy that firmly proposes that working the orchards will ensure their survival. Of course, existing outreach, education and awareness-raising must continue, but the facilitation of a return to a working mode of being, is the key outcome of the case that has been formed.

It is recommended that a new dynamic core of activity be created, built around a new social enterprise based on juice from orchard fruit. The enterprise will need to begin at small scale and grow organically as fruit availability, development of products and market experience all develop.

The purpose of the new social enterprise is to act as a vehicle for implementing on the ground the vision of a working future for the Clyde Valley orchards. It is proposed that the business should focus primarily on collectively producing and marketing juice from the orchards, and to a secondary extent some fruit products and non-fruit orchard products.

The new body should coordinate the picking of fruit, and in this respect it should engage collaboratively with an existing soft fruit producer to facilitate seasonal labour.

Coming together in common marketing of juice and other fruit products builds resilience and strength. Creating branding, trademark, and Protected Geographical Name will build a strong and secure image for the products.

All this requires engagement and buy-in from orchard owners. They need to be genuine stakeholders in the new business.

A business case needs to be constructed as to how the enterprise could operate successfully - for example a mobile juicing facility like those seen on the Continent.

The following specific recommendations broadly endorse the discussion and proposals in the Strategy. The recommendations are presented as 15 discrete projects and organised under the same headings as the Action Plan, as follows:

- Research to Develop the Knowledgebase
- Enterprise Development
- Engaging and serving the Needs of Orchards
- Outreach for Engagement with Wider Community
- Project Delivery

13.2 Research to Develop the Knowledgebase

The following projects are recommended:

K1: Survey of Orchard Resource, Historical mapping, and GIS Project

The project contains the following elements:

K1a: Determining the Orchard Resource sub-project.

The orchard resource should be thoroughly determined by a full baseline survey of orchards. This should include their condition, presence of biodiversity indicators, expected yield, pruning requirements, and other management requirements. It should be carried out in Autumn 2011. This information is crucial to an efficient implementation of the main aspects of this strategy. The survey should also be used as a basis to establish a coherent and justified Heritage Orchards Register.

K1b: Historic Mapping of Orchards sub-project.

Part of determining the resource is determining the history of the each individual orchard. This can be achieved satisfactorily by the use of historic maps. The sub-project will document each orchard, its changes in land use from 1850 to the present day, and will form part of the deskstudy for the survey above.

K1c: Orchard Geographical Information sub-project.

A concerted effort is required to update the geographical extents of orchards since 2001. The preliminary survey carried out as part of this strategy development, has shown that sites have been split and others have been reassigned. Up to date geographical information is one foundation needed for the project to build on. This project takes data collected in 2001 and brings it up to date, thus creating a platform on which to record a variety of new data.

The resulting dataset should be shared with project partners, and efforts should be made to have the most valuable sites, as defined by the nascent Heritage Orchards Register, incorporated into the Council's *Historic Environment Record*.

K2: Deepening Biodiversity & Management Plan Project

K2a: Biodiversity Action and Generic Management Plan sub-project

Biodiversity survey work has been carried out, and further work is in progress. This foundation needs to be built on to determine the key species in terms of biodiversity. A set of biodiversity indicators should be developed that can be applied to all the Clyde Valley orchards in the Determining the Resource project above, and as required elsewhere.

As part of this development work a Clyde Valley Orchards Habitat Action Plan should be produced. The biodiversity knowledgebase should then be used to develop a Generic

Management Plan that balances the needs of biodiversity and production, and that will form the basis for the Individual Orchard Management Plans Project.

K2b: Volunteer Biodiversity Survey sub-project

Local volunteer biodiversity recorders should be recruited, given basic training, and a recording procedure established in order to monitor biodiversity aspects. This is likely to be particularly useful for birds and mammals.

K2c: Management Techniques Trial sub-project.

The first part of this will propose various management activities that may be considered new to the Valley. The purpose of this sub-project is to trial and to demonstrate novel management techniques, in order to assess their efficacy, and also to recruit orchard keepers to the new practice. An example of the type of project that may be a candidate is orchard floor management by late-scheduled reciprocating mower compared to routine use of rotary mower. Biodiversity is the primary metric that will determine efficacy, while orchard production, ease of application, energy use and aesthetic qualities are secondary issues.

The project should carry out 2 trial over 6 orchards. The fieldwork should be carried out by the new social enterprise with monitoring & evaluation by independent specialists.

The results of these trials should feedback into the generic management plan.

K2d: Individual Orchard Management Plans sub-project

The creation of individual orchard management plans should be on the basis of the generic management plan together with specific issues such as new plantings, pruning requirements, and the direction and capacities of the orchard keeper. A plan of engagement with orchard owners regarding maintenance activities needs to be created that identifies and prioritises those activities for which the grant will be paid. Individual orchard management plans should be part of the process.

K3: Fruit Variety Collaboration Project

The determination of top fruit varieties is an inexact art, and has to date been carried out by informal methods with varying degrees of reliability. It's development as a science is in its early stages, with trials using DNA samples. Without scientific methods and without a live reference collection, it is particularly difficult to determine obscure or unknown varieties. DNA techniques should resolve this issue. Therefore, this project is a separate and longer term project than the Orchard Survey in K1 above.

It is recommended this project work collaboratively with others in the field to determine the variety of trees that are of interest in a sample of orchards in the Valley. In this way, the more interesting trees can be identified, and novel, unusual or lost varieties can be found.

Individual unique marking using a numbered metal tag will be required for all trees involved in this project.

13.3 Economic Development

The following projects are recommended:

D1:Clyde Valley as a Brand & Orchard Products Market Project

The project comprises two elements.

D1a:Orchard Products Market Study sub-project

A full feasibility study of covering both products and markets should be carried out in order to assess where effort should be directed. A focus on value-added products is desirable, together novel fruits and combinations – for example apple & mulberry juice. A solution for lower grade plum fruit and its products would also be desirable. A strategy for marketing should be developed as part of this project, together with the business plan.

D1b:Clyde Valley as a Brand sub-project

Create brand ideas and consult with stakeholders. Register the brand name. Define and apply for Protected Geographical Indication. Develop brand image and values, including graphical representation. Ensure that brand is linked with environmental standards, which are created in separate Supporting Local Environmental Standards Project.

D2:Community Business & Orchard Products Project

The project comprises two elements.

D2a: Community Business for Orchards sub-project

The sub-project facilitates the creation of a community business in the form of a dynamic social enterprise, which is not run on a voluntary basis. The business should undertake all production related activities. It should also facilitate maintenance activities, which it may carry out itself or arrange other parties to undertake. This should be the 'doing' organisation in regard to the orchards.

D2b: Clyde Orchard Products sub-project

The orchard products project will be a major output, and key element of, the revival programme. Run by the nascent social business, and building on the Orchard Products Market Study, and the Clyde Valley as a Brand, it will implement activity on the ground. Without pre-judging the Market study, it is suggested that the project focus on value-added orchard products both fruit and non-fruit; their production and marketing. The project is likely to require capital equipment and premises.

D3: Supporting Local Environmental Standards Project

Environmental quality assurance is part of the offer that products from the orchards should be making. Existing standards such as organic may be appropriate for some orchards and their keepers. However, a locally defined environmental Standard is desirable for all participating orchards selling the Brand. The Standard should be based on a pragmatic interpretation of the generic management plan that has been developed as part of the Deepening Biodiversity & Management Plan Project.

The Standard needs to be simple, transparent and verifiable. It is likely to include a blanket ban on spraying agrochemicals. Joining the Standard should be incentivised by availability of enhanced grant payments and premium prices for produce. Random sampling and analysis should verify adherence to the Standard.

D4: Woman Rural Enterprise Project

Recognising women as a priority group, this project is designed to focus on women and rural enterprise. Taking a lead from existing initiatives such as Women in Rural Enterprise⁹² and Women Entrepreneurs in Rural Tourism⁹³, the project seeks to empower and facilitate the creation by women of new businesses that have direct or indirect links to the Clyde Valley orchards.

A study should be carried out as part of this project to support the creation of new tourist businesses. The study will identify the key issues that need to be addressed in order that orchard-related tourism can flourish in the Clyde Valley. Existing tourism strategies have not focussed on the Clyde Valley or the intangible resource of the orchards. The new study should address these points, and do so in a more ambitious manner than existing strategies.

Taking the outcomes of the study, the Women Rural Entrepreneur project will run events and seminars in collaboration with other parties, and provide business mentoring to 15 female candidates. The target outcome is the creation of 3 new local businesses by women.

⁹² http://www.wireuk.org

⁹³ http://europe.nortcoll.ac.uk/wert

13.4 Engaging and serving the Needs of Orchards

The following projects are recommended:

E1: LP Orchard Grant Scheme Project

A financial support mechanism is a necessary adjunct to the economic activity. In the short term, an autonomous financial support mechanism should be created to run for 3-5 years. An assessment of realistic costs of maintenance activities needs to carried out in order that appropriate & effective levels of grant can be calculated. A business plan needs to be made and costed.

The project would create and manage an autonomous orchard grant scheme for the Landscape Partnership area. Structure the scheme so that desirable behaviour is incentivised, and environmental standards met. The grant scheme should provide a full grant for the cost of activities such as restorative pruning and replanting with elected species/varieties. It may provide a lower rate of grant for activities such as orchard floor management & mowing. The scheme should be simple & accessible, and presented to encourage uptake rather than appear as a barrier.

E2: Old Orchard, New Revival Project

The project comprises two elements.

E2a: New Plantings sub-project

Replanting the orchards is an essential aspect of their long term survival. Most orchards require a considerable amount of gap filling. The project should address the issue of what species & varieties to elect for new planting, and act as an advisory capacity in this respect. The determination of the elected species & varieties should be carried on the basis of horticultural knowledge – for example which varieties do well in the conditions - and also market demands, as described in the Orchard Products Market Study.

The project should facilitate the supply and planting of elected species & varieties, an activity that may be carried out by the new social enterprise or other parties.

Planting itself and stock should be funded through the grant scheme, while determination of elected species & varieties, together with awareness-raising, organisation and outreach will require project funding.

E2b: Restorative Pruning sub-project

Orchard keepers will need to be recruited to the project. The Determining the Resource Project will assess pruning state for an orchard generally. However specific pruning will need to be planned for the individual trees within an orchard.

The project should facilitate restorative pruning an activity that may be carried out by the new social enterprise or other parties.

Restorative pruning should be funded through the grant scheme, while the creation of a pruning plan for an orchard, together with awareness-raising, organisation and outreach will require project funding.

E3: Certification Assistance Project

This project is an outreach to orchard keepers and land owners, and recognises that the most certification and grant schemes are too complex and result in inadequate net yields to make them worthwhile applying for. The project acts as a facilitating agent for the participants and guides them through the paperwork and qualifying requirements of schemes such as IACS registration, SRDP payments, and organic certification, together with adhering to the local environmental Standard and LP Grant application.

13.5 Outreach for Engagement with Wider Community

The following projects are recommended:

C1: Young People Education programme

The project is an outreach programme for young people, from school children to young adults. It should include formal and informal activities, including visits to orchards, and in time orchard product production, such as fruit juice. A programme of events and engagement should keep orchards in the minds of young people in a fun and desirable way.

C1b: Memories of a Fruitful Valley sub-project

This element of the Young People education programme will provide a real topic to engage with, and create a tangible output. The sub-project recognises that there is a wealth of collective knowledge and cultural capital regarding orchards and their produce. This repository is particularly rich amongst those people who worked the orchards commercially. Many of this group are now octogenarians, and there is a real danger that this cultural capital will be lost to a great extent in the near future.

This project seeks to honour and record the decades of work and centuries of collective history held by the orchards. In order to appeal to a wide audience, outputs from the project should be both formal (i.e. a written record) as well as informal and accessible (i.e. multimedia, film, audio). It is intended that the outcomes will re-inspire a fruit culture in the Valley.

C2: iOrchards Project

While the existing website serves its purpose, a fuller web presence could do much to engage parts of the community that are currently not in touch with the project. The creation of a more active and diverse website that appeals to different groups and ages should be carried out. The use of social media should be trialled.

e-Bulletin is a small sub-project; this would keep people up to date with by e-bulletins of activities and news – and should include business related issues for owners such as prices & demand for fruit.

C3: Advantage Volunteer & Training programme

Engaging with young and underemployed people in a way that inspires them is the aim of this project. It works by bartering training for work. The project provides quality training that this peer group might desire – such as landscape & arboricultural skills or construction & agricultural machinery – in return for volunteer time on useful activities, such as supervised orchard maintenance or local path building. The volunteer time helps 'pay' for the training and also acts as a formal job record. Successful volunteers can make good use of the training, work record and the resultant reference to assist them successfully finding work. In this way advantage can be brought to those usually considered dis-advantaged.

Experience in this sort of project elsewhere shows that the sense of ownership from projects like this means that local vandalism problems are significantly reduced.

C4: Fruitful Fairs Project

This project consists of the three closely related sub-projects.

C4a: Plum Fairs sub-project

Good quality plums in season are highly popular – as growers in the Valley recall. While there are local sales of plums, they are greatly diminished from both their former volume and what is currently possible. By holding a number of small informal plum fairs at various villages in the Valley during the peak season, the revival programme can benefit from good awareness raising and the growers from local sales. It is proposed at the early stages that produce is pooled and sold for a fixed price, growers receiving a proportion of that price depending whether they have picked the fruit or it has been picked on their behalf. This project should be run by the new community business together with CVOG.

Plum fairs have been used to good effect at the fruit town of Newburgh in Fife, in raising awareness of orchards and their produce. Newburgh's plum fairs are held on 3 consecutive Saturdays in the season and after nearly 10 years continue to grow in size and popularity.

C4b: Annual Event; Apple & Pear Fair sub-project

An annual apple and pear fair, later in the year, should be the main cultural as well as fruit event. It is the main chance to celebrate orchards. Sales of fruit and orchard products should be important parts of the fair, but there is an opportunity to include wider cultural events such as music, theatre and evening activities that have an orchard connection.

The inclusion of wider cultural events should broaden the appeal, thus raising awareness to a wider audience. It also represents an opening for orchards to be linked with other established cultural activities.

C4c: Blossom walks sub-project

This small sub-project engages with orchard owners to create guided walk events during the blossom season. The walks engage local people and raise awareness. If part of a calendar of events, and with appropriate publicity, they can also serve bring in others from further afield and boost the tourist image of the Valley.

A further consequence of the project is that a conversation about access is begun, and trust is built with orchard keepers.

C5: International Connections Project

An international cultural exchange programme should be started; focussed around orchards. Suitable candidates for exchange need to be identified, and eastern Europe is likely to be able to provide many such candidates. It is proposed that exchange visits by adults occur during the first two years of the project, before supervised exchanges of minors also occur. The project has the ability to raise awareness to a much wider audience and a wider group of supporters than is currently the case.

Apart from broadening cultural horizons, it is anticipated that project will help revitalise the culture of orchards in the Valley.

13.6 Project Delivery

Continuity and perseverance are key factors that are required for this project to be delivered. The task is considerable and the community must be engaged fully in order to ensure that they join the journey to revive the orchards.

Project Management

The project management is proposed to mainly rest with RDT, because it has the capacity, skills and experience to undertake this work now; it is also an autonomous legal body. It

should manage on behalf of the whole client group and the wider community. Projects involving orchard work should be managed by the new social enterprise, indeed the organisation's start up should be based on these. The new social enterprise should in time build capacity to be able to take on more of the wider project management, but this is by no means assured at this stage. Transferring the wider project management to this new community business as it develops, is part of the strategy for sustainability of the wider revival project, post 2015.

CVOG has an important role to play as an interface with the community for all projects. Indeed, it has an important role to play as a key partner in the whole revival. However its limited capacity as a voluntary organisation is recognised. Developing the capacity of the organisation is a task that needs to be undertaken if it is to play its role to the fullest extent. A discussion also needs to take place amongst the client group and other stakeholders as to what relationship CVOG and the new community enterprise should have. This will be one element of the Project D2.

It is recommended that an agile and lightweight approach to project management is adopted, an approach that is flexible and responsive to the unforeseen challenges that will inevitably emerge.

Development of Projects

An initial period of development is required for the fifteen projects that have been recommended. This development will specify each of the individual projects in order that they can be implemented. It is recommended that the client group undertake this process collectively.

Project Delivery Framework

A steering group for orchard projects should be formed. This should include the client group together with other parties that can have beneficial input.

The procurement, control & management, and the monitoring & evaluation of projects should be carried out in accordance with procedures already established by RDT and CAVLP, and comply with the requirements of the funding body. RDT and CAVLP are already experienced in project delivery.

A project officer should be appointed to a dedicated post in order to provide continuity as a point of reference to the many stakeholders. The project officer should coordinate and manage the diverse projects that are recommended. Though managing the projects, it is absolutely crucial that sufficient autonomy is given to projects themselves, for the community and stakeholders to take ownership of the activities and the wider revival as a whole.

Nothing will kill community engagement better than top down & bureaucratic management. Therefore, the project officer must tread a delicate path of guidance, advice and participatory management.

Fostering the creation of a social business is a key early step. Its creation may not be spontaneous, and careful facilitation by an independent party may be necessary. The role that CVOG takes in forming the new organisation is an issue that its members should consider carefully.

Transparency and Longterm Security of Records

All reports and outputs should be made available on the Web in the interests of transparency. Privacy issues may require omission of various parts or redaction.

Hardcopy of all reports and outputs should be lodged with the County Archive in the interests of longterm secure storage & future availability. Confidential material should be included, but with an agreement to embargo that material for a generation.

14 Action Plan

Projec	t Project Name	Type of	Description	Target	Landscape	Partnership	Timescales	
ID		project		Scale of	Dev. Phase	ev. Phase Implementation		
				Activity	Yr 1	Yr 2	Yr 3	Yr 4
Resea	arch to Develop the Knowledgebase							
K1	Survey of Orchard Resource, Historical mapping, and GIS Project	survey	A full baseline survey of orchards including their condition, expected yield, pruning requirements, and other management requirements. Used as a basis for a Heritage Orchards Register. The survey will also use historical mapping & the literature to trace the history of individual orchards to create a cultural roadmap from 1850 to the present day. The survey will update the GIS records for the geographical extents of the orchards.	All orchards in area (~80)	~			
K2	Deepening Biodiversity & Management Plan Project	survey & development	Building on existing biodiversity research, continue strategy of deepening knowledge in order that key species can be determined, and appropriate indicators defined. Develop generic management plan for orchards on the basis of developing knowledgebase. Train and facilitate volunteer biodiversity recorders, including focus on birds. Management Techniques Trial subproject to study, develop & trial of techniques to assess their efficacy in terms of management and biodiversity. Candidate trial: Mowing regimes. 2 trials over 6 orchards Trial 1 & 2 Individual Orchard Management Plans: Create a customised management plan for each orchard.	40 orchards	Develop	20 orchard	20 orchard	S
K3	Fruit Variety Collaboration Project	survey	Collaborate with other bodies to develop DNA analysis in order to positively identify heritage & historic varieties of apple, pear and plum.	10 orchards, prioritised trees only	Sampling	Analysis & reporting		
Enter	prise Development							
D1	Clyde Valley as a Brand & Orchard Products Market Project	study & development	Create Brand for Clyde Valley. Register Brand. Apply for PGI status. Develop brand values & image. Link brand with environmental standards. Study to identify specific potential markets & products for a Clyde Valley brand, and develop a marketing strategy and business plan.		Establish brand. Market feasibility	Trial marketing		
D2	Community Business & Orchard Products Project	development	Create community business, and facilitate its development. To undertake all production related activities. Community business creates capacity & expertise to produce and market orchard products.	one active organisation	Establish	Develop	•	•
D3	Supporting Local Environmental Standards Project	development		40 orchards	20 orchard	s 10 orchard	10 orchard	S
D4	Woman Rural Entrepreneur Project	development & study	<u> </u>	15 persons, 3 new businesses	15 persons, 3 new businesses			

Proje	ct Project	Type of	Description	Target	Landscape	Partnership	Timescales	
ID		project		Scale of	Dev. Phase Implementation Phase			
				Activity	Yr 1	Yr 2	Yr 3	Yr 4
Enga	ging and serving the Needs of Orchards							
E1	LP Orchard Grant Scheme Project	development	Autonomous local grant scheme prioritising desirable activity that has been determined by management plan and planting requirements.		Feasibility	Active	Active	Active
E2	Old Orchards, New Revival Project	development	Project to supply, and facilitate planting of appropriate varieties, mainly desert apples, under LP Orchard Grant Scheme. Facilitate restorative pruning under LP Grant Orchard Grant Scheme.	40 orchards	20 orchard	s 10 orchard	10 orchard	S
E3	Certification Assistance Project	development	Assist, advising and act as an agent for orchard keepers to help environmental & organic certifications, grant applications, IACS registration, SRDP applications	40 orchards	Develop	20 orchard	20 orchard	5
Outr	each for Engagement with Wider Comm	unity						
C1	Young People Education programme	awareness & education	Engaging with schools & youth group in formal and informal activities, including visits to orchards. Memories of a Fruitful Valley Cultural Subproject. Recording the oral history of growers and orchard keepers in the Clyde Valley, and by encapsulating the vibrancy of the former fruit culture, help to inspire a re-established orchard culture.	240 person	80	80	80	
C2	iOrchard Project	awareness & education	Active website, with more of interest for different interest groups, eg. young people and retired people. e-bulletin keeping folk informed about what is happening	200% increase traffic	~	~	•	V
C3	Advantage Volunteer & Training programme	awareness & education	Engage young people and underemployed people with orchard activities and skills training leading to recognised standard or qualification. Training provided in exchange for voluntary work.	105 person. courses	35	35	35	
C4	Fruitful Fairs Project	culture & development	Blossom walks: Negotiate access for river & blossom guided walk Plum Fairs: Small plum sales at each of 3 villages over 3 Saturdays Apple & Pear Fair: Large annual celebratory event	300 people	300	300	300	300
C5	International Connections Project	culture & development	Cultural links & exchange to orchard area that still has a vibrant culture. Twinning.	3 exchange visits	Adult outward	Adult inward	Young people exchange	
Proje	ect Delivery							
	Project oversight				'	~	'	'
	Project management capacity principally from RDT & CAVLP				~	~	~	~
	Dedicated project officer				~	~	V	~

Appendices

15 Appendix to Part 1 Review

15.1 Review of Local Plans in Context of Clyde Valley

This section acts as an appendix to Section 2.1 in the main body of the report.

Glasgow & Clyde Valley Joint Structural Plan (2006)

Essentially this is a strategy for developing the Glasgow and Clyde Valley area over the next twenty years and is based on three concepts - community regeneration, a development corridor running east - west, and a Green Network of interlocking economic, social and environmental objectives. Orchards are recognised within the Plan as one of the key features of the AGLV.

South Lanarkshire Community Plan "Stronger Together"

This focuses on the delivery of programmes, projects and the services of the public sector, community and voluntary groups. Orchard restoration and development is not specifically noted in the Plan but is particularly relevant to actions under *Objective 2.3: Creating an attractive, accessible and sustainable environment.* The Plan is implemented through theme groups - one being the South Lanarkshire Rural Partnership, which has developed the South Lanarkshire Rural strategy "*Working Towards Sustainable Rural Communities*" 2007-13. The latter strategy focuses on 5 themes of: enhancing environmental assets, developing local communities, improving local transport, growing our rural economy, and promoting the rural area.

Central Scotland Green Network

This initiative is recognised as of national importance by the Scottish Government and contained within the National Planning Framework Action 22 (requiring planning authorities to deliver a network of green open spaces across and throughout the Central Belt). The South Lanarkshire Green Network programme is helping to improve the quality of green space within the conurbation and help integrate town and countryside. At a local level the outcomes of the GCV Green Network programme will help local authorities meet their Single Outcome Agreements (SOA's).

There is mention of orchards within the Draft Glasgow & Clyde Valley Green Network Planning Guidance Part 2: Discussion Draft – Under Green Network Priorities "Development of an environmentally led tourism and recreation plan, reflecting the valley's cultural and economic legacy of

orchards and market gardens, the rich natural heritage of its woodlands, and the series of designed landscapes – linking to New Lanark and the Falls of Clyde".

The GCV Green Network Partnership Integrated Habitat Network Project (IHN) led by Forestry Research at Roslin, created a detailed habitat map of the Glasgow & Clyde Valley (GCV) region from which habitat networks for woodland, grassland and wetland can be modelled. The Partnership is prompting the model's use to planners and land managers with the aim of mainstreaming it in the planning process. The IHN Final Report states "The orchards, wood pasture and their often high biodiversity value trees are under recorded across GCV, modelling of these unrecognised and undervalued habitats could investigate the Inadequate/discontinuous supply of deadwood for hole-nesters and saprophytes and the continuity of veteran and orchard trees."

South Lanarkshire Greenspace Strategy (2009)

This contributes to the delivery of the Local Plan and the Community Plan – there is no specific reference to orchards but it is highly relevant.

Glasgow & Clyde Valley Forestry and Woodland Framework

These are indicative Forest & Woodland Strategies 2005 for the Structure Plan area. There appears to be much of direct relevance to orchard restoration within these strategies, e.g. Forest Habitat network, designed landscapes, wildlife corridors, enhanced biodiversity and so on. There is no specific mention of the orchards in these documents but good potential for future recognition and inclusion in revised strategies.

The Lanarkshire Tourism Action Plan to 2015

This Plan recognises the importance of the rural landscape and the distinct character of the Clyde valley as key strengths of the area. The national Clyde Valley Tourist Route runs through the heart of the valley and the plan includes measures to ensure that the impact of increased visitors is managed appropriately. The plan has specific objectives to develop and promote niche products in the rural area that are of particular relevance to orchard product development, but again, there is no mention of orchards. Indeed the Clyde Valley itself receives little coverage though the 'Scenic Clyde Valley and garden centre attractions' are a stated strength.

South Lanarkshire Food and Drink Action Plan

This Plan was developed in response to a commissioned report produced by SAC on current local food providers and processors in the area to investigate what action can be taken to ensure more local food is consumed by residents and purchased by local businesses and

visitors. One output of this work was the production of the promotional directory, published as a booklet entitled EAT. Regrettably orchard produce is not a significant feature of EAT, a reflection of the fact there are currently no orchard-based businesses in the area.

15.2 Policy Support for Orchards

This section acts as an appendix to Section 4 in the main body of the report.

15.2.1 Biodiversity Policy for Traditional Orchards

Traditional Orchards were designated a 'priority habitat' under the UK Biodiversity Action Plan⁹⁴ (UK BAP) in 2007 as a result of the significant efforts of a partnership of organisations formed to establish and deliver a Habitat Action Plan (HAP) for Traditional Orchards. This steering group is jointly led by the National Trust and Natural England and has now been established as the Orchard Network.⁹⁵ The main Scottish representative on the Working Group during the delivery phase was a Scottish Natural Heritage officer, and a range of other organisations and individuals were also consulted.

The UK partnership working on delivery of the Traditional Orchard HAP has produced a definition and set of targets for traditional orchard conservation. The work is ongoing⁹⁶.

South Lanarkshire Local Biodiversity Action Plan (LBAP)

The new South Lanarkshire LBAP sets out the priorities for short, medium biodiversity conservation in South Lanarkshire – taking a new approach through a three tiered structure – via 4 ecosystems (Uplands; Fresh Water & Wetlands; Woodlands; Lowlands) and 4 crosscutting themes (Climate Change; Invasive species; Biodiversity assets; People and Communications). There is a Plan for each theme setting out aims, measures and targets. The LBAP has been produced by the South Lanarkshire Biodiversity Partnership, a group of organisations – who also have main responsibility for delivery of actions.

There is limited reference in the LBAP to local orchards. They are included as a component of the Lowland Ecosystems: Lowland Long Term Aim 1 (LTA1). They appear in the Justification but not the Measures / Actions.

The orchards have particular relevance to a number of the Themes: Climate change (Integrated Habitat Networks and fragmentation of habitats etc); Biodiversity Assets; and People & Communication. Although they are not mentioned specifically under Measures /

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⁹⁴ Mattock, A (ed.) (2008), UK Biodiversity Action Plan. Priority Habitat Descriptions.

⁹⁵ www.orchardnetwork.org.uk

⁹⁶ See for latest http://www.orchardnetwork.org.uk/content/traditional-orchard-hap

Actions there are various activities currently underway relating to the orchards that fit within these Plans.

Despite the efforts of various local champions to highlight the importance of the orchards and the need for specific terms of reference for their conservation within the new LBAP, this has not happened. This issue needs to be addressed in the long term.

There are a number of Actions with relevance to the orchards:

- "Do not approve planning applications which will have a significant negative impact on extent or quality of priority habitat" (Under Lowland LTA1) It would be considered by many as significant if this was implemented in relation to orchards.
- "Promote and monitor uptake of relevant SRDP funding packages" (Under Lowland LTA1).
- Actions relating to measuring extent & quality are relevant, e.g. "Develop
 a methodology to assess the quality of non-designated sites". This is
 currently underway for Clyde Valley orchards.
- Also, actions under the various themes notably under Biodiversity (LTA1) e.g. "Collect, Collate and map distribution of UK BAP Priority Habitats in South Lanarkshire".

Despite increasing understanding that the Clyde valley orchards are an important natural, cultural, and potentially important local economic resource, this is not explicit in South Lanarkshire Action Plans. Although these traditional orchards are properly recognised as part of the landscape character, there is currently very little scientific evidence to demonstrates their value.

Assessing the extent and quality of these orchards is a key 'first step' to gaining recognition within the LBAP and other local Plans.⁹⁷ It is important that, first and foremost, the habitat of these orchards is better understood. This would also clarify their wider environmental role within the landscape and help to define their distinct character. It would help to characterise appropriate measures for conservation, management, and enterprise development.

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⁹⁷ It is recognised that the orchard surveys commissioned by English Nature were key to Traditional Orchards being included within the UK BAP.

Johnson's 2008 Draft South Lanarkshire Habitat Action Plan for Traditional Orchards

Helen Johnson created draft orchard HAPs for both the Clyde Valley and the Carse of Gowrie as part of her MSc thesis⁹⁸ that the author was supervising at the University of Strathclyde. The Carse of Gowrie orchard HAP has been developed further and is expected to be published this year. However to our knowledge, a Clyde Valley orchards HAP has not been further developed. Elsewhere in the UK, a traditional orchard HAP exists for Somerset and for Worcestershire.

While it is clear that biodiversity is a high priority for many governmental organisations with a remit for the natural environment, the linking biodiversity to sustainable land use practices has been inadequate.

It is acknowledged by other researchers⁹⁹ that policy support for biodiverse agriculture has been much weaker in the UK than in many other EU member states, where rural regeneration is closely associated with extensive food production.

15.2.2 Planning and Formal Recognition of Orchard Sites

This section acts as an appendix to Section 4 in the main body of the report.

Loss of traditional orchards to house building is seen as a significant issue in the Clyde Valley and elsewhere in Scotland¹⁰⁰. It appears that there is currently no presumption against development on a heritage orchard site for other uses such as housing. However, there is legislation that could be brought to bear to provide some protection.

A key planning policy document in this context is SPP23 Planning and the Historic Environment¹⁰¹. The document needs to be considered along with the current Scottish Historic Environment Policy (SHEP)¹⁰². Within the documents, there are various elements that pertain to orchards and a cultural landscape: Conservation Areas (statutory designation), Gardens and Designed Landscapes (non-statutory) and Other Historic Environment Interests (non-statutory).

⁹⁸ Johnson, Helen (2008), 'A Case Study of the Clyde Valley Orchards and Orchard Community: A study of the relationship between people and place', (MSc thesis, Dept of Geog & Sociology, University of Strathclyde).

⁹⁹ Buller, Henry (2008), Eating Biodiversity: an Investigation of the Links Between Quality Food Production and Biodiversity Protection. Policy and Practice Note 3. May 2008, (Rural Economy and Land Use Programme. Newcastle University)

¹⁰⁰ Also identified as key issue on the Carse of Gowrie; Hayes, CW (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).

¹⁰¹ Scottish Government (2008) Scottish Planning Policy SPP23: Planning and the Historic Environment.

¹⁰² Historic Scotland (2009), Scottish Historic Environment Policy.

Conservation areas are often designated because of their built environment, but there appears to be no significant reason why the cultural landscape of orchards could not lead to this status. Indeed the SHEP is guite inclusive in stating:

'the conservation of any part of Scotland's historic environment should . . . be based upon sound knowledge and understanding of the particular site, building, monument or landscape, and of its wider context . .'

Also the SHEP defines Conservation Areas as

'areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance'.

However, the local authority would need to be convinced as they provide the Conservation Area designation.

Gardens and Designed Landscapes that are on the Historic Scotland register are recognised as a landscapes where there is a presumption against development. Scottish Ministers must be consulted via Historic Scotland. Neighbouring Lee Castle has 366ha on the register 103, the further extents of which are of arguable heritage value. There may be some orchards or a block of orchards for which a case could be made to Historic Scotland for inclusion on the register – for example satisfying the criteria 'as an important place in the history of horticulture or arboriculture' 104

Finally, Other Historic Environment Interests. The stated policy is:

'Government policy is to protect and preserve non-designated, other historic environment interest, in situ wherever feasible and, as such, they are material considerations in the planning process.'

This designation appears to be fairly weak, and is not mentioned in the SHEP; but it may well be worth considering a stepping stone to gaining a stronger designation.

Local Authorities normally maintain a *Sites and Monuments Record* or a *Historic Environment Record*. The orchards should be recorded in one of these. The significance is that these Records will usually be consulted as part of the planning process. Elsewhere in Scotland, this method has been used to help raise the status of ancient orchards¹⁰⁵.

Pastmap¹⁰⁶ is a government agencies web service that displays layers of geographical information that relate to the historic environment of Scotland. It contains the data as

¹⁰³ http://www.historic-scotland.gov.uk/index/heritage/gardens/gardenssearchsummary.htm?s=lee&r=&bool=0&PageID=2386

¹⁰⁴ Annex 4: Criteria for Determining Whether a Garden or Designed Landscape is of National Importance for Inclusion in the Register in Historic Scotland (2009), *Scottish Historic Environment Policy*

¹⁰⁵ As part of the author's work with Perth and Kinross Countryside Trust in 2008, historic orchard sites were added to the Historic Environment Record held by Perth and Kinross Heritage Trust on behalf of the local authority. The Record is consulted as a matter of routine in the planning process.

¹⁰⁶ www.pastmap.org.uk

described above, but can also have data from 'sites, buildings, places and findspots recorded by local government historic environment services' 107. Engaging with the local authority to put orchards on Pastmap would be a further step to legitimating them.

Recognition and raising the status of the orchards can also be carried out autonomously, without input from government. To that end, declaring them as 'Heritage Assets' is a useful act. Accordingly, in the Appendices of this report, a draft Heritage Asset Register of the Clyde Valley Orchards has been created. This is a formal register of orchards that are considered of heritage value, whether through history, culture or horticulture.

15.2.3 Political Support

Traditional orchards have enjoyed wide spread but low level support. At a UK level, Westminster has an All-Party Parliamentary Cider Group consisting of 20 MPs, 10 Tory and 10 Labour. Conservative Ian Liddell-Grainger chairs it 108.

15.2.4 German Experiences of EU Support for Traditional Orchards

This section acts as an appendix to Section 4.2 in the main body of the report.

Three further examples of active and effective policy support utilising EU funding streams in Germany are given below. They have been communicated to the author by Dan Keech¹⁰⁹, to whom grateful thanks is given.

Thuringia and Bavaria

The KULAP Programme is for the promotion of environmental agriculture, cultural landscapes, nature and landscape conservation, and is delegated by the Federal Ministry of Food Agriculture and Forestry. It is thus a co-funded programme from the EU, the Federal Government and the Provinces under EU1698/2005 amongst others.

In Thuringia the State makes very detailed reference to EU agri-environment funds that it directs into local work under KULAP measure N4. There is a special, though very short, subsection relating traditional orchards. €310/ha are available annually to landholders who carry out specified management tasks and register their work and land with the relevant state

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¹⁰⁷ Historic Scotland (2009), Scottish Historic Environment Policy

¹⁰⁸ http://www.publications.parliament.uk/pa/cm/cmallparty/register/cider.htm

 $^{^{\}rm 109}$ University of Southampton, formerly Orchards Officer at Common Ground.

conservation bodies. Failure to carry out the agreed measures will render the recipient liable for repayment of the support.

In Bavaria landholders may benefit from a 'per tree' annual payment for traditional orchard conservation. In this case though the KULAP provisions are subject to revision because many landholders have joined higher paying schemes for the conservation of greenspace (with orchards). Under the orchards scheme, landholders can receive €5 per tree for trees planted up to a maximum of 100 trees per hectare.

An alternative to KULAP is a Bavarian programme of contracted nature conservation that includes orchards. Depending on the agreement reached between the State and the landholder (for example no chemical inputs permitted), payments of on average €400/ha may be made. Contracts are agreed with the nature conservation department of the relevant local authority, and farmers as well as non-farmers are able to apply (KULAP is for farmers only). This programme is delegated to provinces by the Bavarian Ministry of Environment and Health.

North-Rhine Westphalia

There are around 18,000 ha of traditional orchard in North-Rhine Westphalia. This is quite comparable in size to the whole of England with around 16,000ha.

Data published in 2009 by the Provincial Ministry of Environment, Nature Conservation, Landscape and Consumer Protection and co-financed by the EU, indicates that this State does not offer province-wide programmes such as MEKA and KULAP that specifically detail support for traditional orchards in agri-environment programmes. However, a number of city and district authorities do provide the contracted conservation agreements outlined above.

Rheinland Pfalz

Measures exist to support orchards under the EU ELER programme (European Agricultural and Rural Development Fund). From this the Provincial Ministry of Environment, Forestry and Consumer Protection have developed its PAUL programme (agri-economy, environmental measures and rural development). Applicants to the programme can be land holders and other land users and are subject to over-riding agri-environmental commitments such as cross-compliance. Support is available for new planting of traditional orchards and management of existing ones, with strict guidelines as to spacing, trunk height, plant management and ongoing tree care. Varieties of apple, cherry, pear etc are recommended.

16 Appendix to Part 2 Consultation & Survey

16.1 Report on Visioning Event 17th February 2011

Clyde Valley Orchards Visioning Meeting

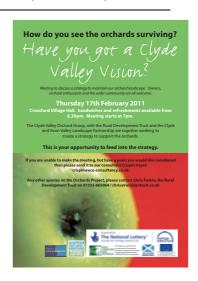
Public Consultation Meeting Held at Crossford Village Hall on 17th February 2011

Report on Meeting Outcomes

Report prepared by CW Hayes Associates 11th April 2011 on behalf of Clyde Valley Orchard Group, Rural Development Trust, and Clyde and Avon Valley Landscape Partnership

1 Introduction

A preliminary event was organised at the start of the strategy building process in order that the community could be involved right from the start. The event was organised by the Clyde Valley Orchard Group together with Crispin Hayes as Orchard Specialist. The event was held of 17th February 2011 at Crossford Village Hall. The visioning event was an open public meeting. The publicity poster is shown right.



2 Methodology

The event was run on a Participatory Appraisal basis, and was facilitated by Crispin Hayes. Participatory Appraisal is a set of facilitation techniques that are designed to give all participants an equal chance to contribute and be heard. The process involved ideas and opinions being recorded by participants on coloured post-it notes. The completed notes were then grouped into themes on flipchart papers. Photographs of all the output are available.

Comments reported below are verbatim, with just a few exceptions as some comments have been shortened.

3 Aspects We Like

Participants were invited to share the issues and ideas that they liked about the orchards and the Valley.

Fruit (8 comments)	Fresh produce			
Fruit (2)	Good apple chutney & plum chutney			
Fruit production and turning it into	Fresh, local, tasty produce			
food.	Different fruits than in shops (apple			
Fruit to eat	types and damson)			

Wildlife (3 comments)

Helps wildlife, bats, insects, birds, etc

Living among wildlife

Different each day, different birds, different smells

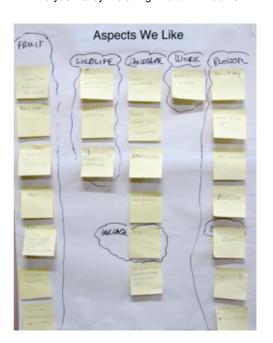
Landscape (4 comments)

Nice landscape

Natural cycle of sustainability

Landscape

Good for environment and our survival



Blossom (6 comments)

Bloom in the spring

Watch things grow

The space

Blossom (2)

Springtime blossom

Blossom, fruit, visual variety

Heritage (1 comments)

Local heritage

Work (2 comments)

The planting and taking care of plants and trees

Hard work

4 Aspects Not so Good

Participants were invited to share the issues and ideas that were not so good about the orchards and the Valley.

Waste (5 comments)

Wasted fruit

Rotting fruit

Waste of fruit excess at harvest

The dying back for winter after harvest

When fruit goes to waste

Management (10 comments)

Financial cost of maintenance

Management

Horses in orchards Maintenance

Too much like hard work

Lack of time & expertise to manage

the orchard properly

Volume of work

Keeping soil in good condition

Not knowing how to look after it

Neglect

Drainage

Weather (4 comments)

Extreme weather

Coping with the weather

Frosty side of valley (west)

Working in the rain

Animal/Vermin (4 comments)

Rabbits!

Vermin

Wasps

Business environment

(4 comments)

Restrictions of commercial

developments

Prices don't make it worth picking

Business viability in the current climate

Visible of the decline of the industry because of the change in current

markets.

Other (3 comments)

Age of current orchard stock

Their lessening number

Lack of time to develop ideas

What We Would Like to Happen

Participants were invited to share the issues and ideas that they would like to happen in relation to the orchards and the Valley.

Regeneration (14 comments)

Remove all rubbish, old glass houses,

sheds etc.

Removal of all dead and fallen trees

Orchards to be managed properly

Shoot rabbits

People caring for the place they live in

Extend and improve grass cutting

Old orchards replanted

Scottish varieties disappearing

Rejuvenation

Buy more fruit trees

Local people eating fruit, getting sense

of seasons.

The orchards & traditions disappearing

with local varieties

Community involvement, including with those without orchards, eg. thru' community orchards

Flowering trees for spring, cherries etc.

Heritage (5 comments)

That they become part of local identity again

More historic planting of older species of fruit and more in vogue plants eg. asparagus

Advertising as a tourist destination

A Calendar of events

Cultural/historical celebration of famous fruit growing area

Strategy (12 comments)

As a consumer, not a grower, easier access to buy the produce

More integration of fruit growing into 21st century

A landscape strategy

Would like help to find out more

Ecological improvement

Need more help with all heavy work but want skilled affordable help

Revitalising & a Clyde Valley

named/bred apple

Careful management

Encourage small growers to sell fruit at

farmers markets

Diversify, new and old varieties

Skills base

Planning consent for houses with conditions on new planting of orchards

Orchard work (11 comments)

An expert to organise a labour force and advise on pruning, grafting and cider making.

Like to see a group of experts who could come to my orchard and do hard graft that I can't manage

Run down orchards to be restored to former glory

Get young people to help

Young involved

Community volunteers to help picking fruit

Harvesting assistance

Younger fitter people to help with maintenance.

Access to specialist knowledge on orchard management

Maintenance cost and time

Training, pruning, managing

Economics (11 comments)

Happy healthy orchard giving maximum support for wildlife and fruit for me

An anchor or hub activity

An economic raison d'etre

Cohesive plan which will lead to some

sort of cooperative

Targeted planning for eco-housing

Wholesalers varieties suitability

Explore co-operative business models

to maximise benefits (2012 is the

International Year of Co-operatives)

Clarification from local authority on

health, safety and food safety issues

An organisation like Newburgh where

you can sell your fruit and produce

easily

More houses

Use of renewable energy

power/heat glasshouses

Products (13 comments)

Locally-owned business selling/making

fruit and fruit products

Calvados

Clyde Valley cider or wine

Creation of a Clyde Valley brand

Pressed apples for home cider making

Volunteers to make jam and chutney

More damsons.

Seasonal eating

An outlet for fruit sales and juicing

Jam making

Promote and protect the bees.

A co-op to sell my local fruit

Incentives for retailers to sell Clyde

Valley fruit

6 What We would Not Like to See Happen

Participants were invited to share the issues and ideas that they would not like to happen in relation to the orchards and the Valley.

to

Neglect & Lack of Activity

(11 comments)

Enthusiasm to diminish

Loss of unique character eg. through

excessive housing or insensitive

tourist developments

Loss of Heritage

Production of lots of hot air, then

reports, then nothing!

Total demise of orchards

Orchard neglect

To be neglected

Orchards disappear

Continued deterioration of orchards

Fruit- incinerator- reputation spoiled -

contaminated

Landscape & ecological intrusions

Clyde Valley Visioning Event 17th Feb 2011

Excess Admin (7 comments)

We create a red tape nightmare

Public money wasted by unsustainable

investment

Endless form filling and criteria to be

met to access 50p!

That everything has to go through

committee

Not to become too commercial and not

to fill the Valley full of chemicals

Lack of support for alternative

communities

Build an incinerator upwind

No Orchards Left (6 comments)

Blossom to disappear, surely No. 1

Valley attraction

Continue to decline and disappear

No orchards left

Extinction

Not to decline any further

Loss of variety

Change of Use (10 comments)

Change of Use other than agriculture

Lots more houses instead of orchards

No housing schemes. Create holdings

as in Stonebyres.

Green field development

Build more houses

More houses on ground

Orchards turned into building plot

Poor quality domestic housing

Exploiting of high land values for

property development

More housing, windmills, industrial

developments

7 How?

Participants were invited to share their ideas on how their vision could be achieved.

Produce & Product Development (10 comments)

More local consumption of local

produce

Mobile Calvados still (high value

added product)

Buy a mobile apple press

Have a production site for jams,

chutneys, etc

Sloe, damson gin

Create a Clyde Valley brand ID

Sales outlets and production schemes

Storage of fruit

Incentives to plant and maintain trees

Make sure right cross pollinators are

around.

Sourcing funding, not just for 1yr

Organisation (13 comments)

Qualtiy, up thru' training etc.

Raising profile of fruit and valley

Advice and training

Growers association

Organisation and agreement

Nothing starts before self help

Mechanism for small producers to come together to sell (or people sell

again from roadside)

Get community involved including

schools

Listen to the variety of voices and be optimistic

optimistic

Appeal for people to help for 1 or 2

days a year

Will need ongoing financial and physical investment, until sustainable which I doubt it will be)

Act as focus for the Clyde Valley brand.

Formation of some sort of co-operative

Funding (4 comments)

Clear info given re funding and funding criteria

Sourcing funding

Scottish government funding and incentives

Statutory Issues (9 comments)

Planning regulations

Promote the Valley

Review 'horse' policies

Protect green space

Protect orchard land

Orchards need special status, no current gov. protection or

encouragement

Sustainability driving planning

consents

A Voice (council make it difficult)

Common land, and initial support for

community orchards

Collaboration (8 comments)

Some activists to promote and inspire beyond the orchard owners

A commercial centre for selling and buying orchard products, staffed by a paid person

Paid individuals to develop ideas into action

Land available for non land owners to branch out and test a new livelihood beyond their traditional jobs

Keep enthusiasm going

Outside investment, shareholders. Advertise the wider market.

Landshare principle. Non orchard

owner help unmanaged orchards and

share produce.

Community supported agriculture

Diversify (7 comments)

Value people's diversity and what

different people can bring

Use the barren land

Clyde Valley Wassail event

Commuter crofting, a concept worth

considering?

Generation of green energy solely for Herbs

horticulture

Market for orchard wood

Timeline – laying out the Vision

Participants were invited to share their ideas on when they saw various suggested activities happening within a timescale of the next 10 years, setting out a vision over the next 10 years.

Within 6 Months

Decision to be made on availability of

Starting to get orchards protected

of

local

starting

fruit press etc for communal use

Vission Now! [sic]

Vision - which we then sell

Organisation

status

Brand now

Publish poster/booklet

varieties now!

Strategic

planning

organisation

Co-operative and Brand formed

Apple press for 2011 season

Agree sustainability practices

Revise planning policies

Develop the model of innovative

practice

Buy more trees

Awareness of/ to the public re

volunteering for orchard group

In 1 year

Develop training education

apprenticeship

Clyde Valley brand created

School orchard

Integrated calendar of events
Clyde Valley Wassail this year
Spatial plan, visual plan agreed
Clyde Valley road show and tombola
2011

Encourage more bee hives locally

Community members including young people are getting involved

Lots of new trees being planted

Learning

In 3 years

Replanting of orchards

CV brand; apple, plumb [sic], rasberry
[sic], blossom trees

100% more trees

Having a Clyde Valley brand

Clyde Valley apple/plum variety

Organised group of community growers encouraging youth
Clyde Valley marketing (based on emerging work)
Teaching
Vision and dynamism

In 5 years

Clyde

destination

People making a living off growing fruit

A recognised brand of Clyde Valley
fruit and outlets to market for both
large and small producers

A centre for production & focus in the

that

becomes

Valley

Within 5 years, more blossom, outlets for local produce, grants to replant
Workers cooperative?
Widespread small scale regenerated sustainable orchards, small holdings

with structure in which buyers and

owners share benefits and risks

In 10 years

Eight year old calvados matures & is ready to drink

The Valley filled with orchards of wide choice. Successful independent businesses. Thriving, unique, in its diversity

Orchards reinstated, a Clyde Valley brand, an alternative tech./ sustainable

agric. research/ tourist centre, production of secondary products eg. jam, honey, mead, calvados, cider. Ecologically richer landscape Clyde Valley 1st for fruit Newly planted trees & orchards are maturing and growing, and people are coming into the Valley to buy fruit.

Clyde Valley fruit has re-established a reputation, people are proud to be here.

Well established productive orchards

A lot of Clyde Valley fruit products being sold nationwide

Healthy Clyde Valley fruit growing

9 Orbits of Participation

Finally, participants were invited to volunteer how closely they would like to be

involved with the ongoing project and how much energy they could put in. Participants located their name in a series of concentric circles – the closer to the 'bullseye' the more involved.

The rings were well populated with names. The names are not individually reproduced in this report, though an image of the worksheet is shown below.

From centre outwards, the numbers of people that put themselves forward was :

Zone 1: 2 people

Zone 2: 8 people

Zone 3: 6 people



10 Who was Invited & How

The meeting was intended as a public event to which both local people who had a connection to the orchards, and also those who didn't but were interested were welcome. Some effort made to publicise the event:

A press release resulted in articles in the local press (as detailed in the Section12 below) $\,$

All Clyde Valley Orchard Group members were contacted. (28 no. contacts 38 no. adults)

All recorded owners of Clyde Valley orchards who were not CVOG members were sent an invitation by mail (61no.)

The following local groups were contacted by phone and email with information and a request that they advise their members of the meeting:

Lanark Garden Club Clydesdale Community Initaitive VIVA WRI Lanark Carluke Development Trust

Posters (as shown on the first page) were displayed at the following locations:

Clydesdale Trading Society Lanark Library Overton farm shop Lesmahagow Library Post Office Crossford Brocketsbrae village hall Village Halls Crossford Taylors bakery Strathaven Village Hall Kirkfieldbank. Kirkfieldbank village shop

Lifestyles Leisure Carluke Carluke Library

Tesco Kirkmuirhill Carluke community centre

11 Who Came

The delegate list is given below:

	Name	Postcode	Orchard	Strategy report
_	D A II	M 44 0VI	owner?	copy please?
1	Duncan Arthur	ML11 9XL	yes	yes
2	John Anning	ML11 9XL	yes	yes
3	Alexandra Stein	ML8 5RG	no	yes
4	AC Sharpe	ML11 9UP	yes	
5	J Gilchrist	ML11 9XL	yes	yes
6	Brian McCulloch	ML11 0ES	yes	yes
7	A Paterson	ML2 0RW	yes	yes
8	Jim Craig (low legibility)	ML8 5NG		
9	Elizabeth Craig	ML8 5NG		
10	Robert Bell	G72 8DG		
11	Gordon Gallacher	ML11 9UW	yes	yes
12	F Geddes	ML8 5NH	no	
13	Catherine Muir	ML11 9UL	yes	
14	Peter Booth	ML8 5PX	yes	yes
15	Andrew MacGregor	ML10 6PB	yes	yes
16	James McInnis	ML11 9UP	no	
17	Welleca Muir (low legibility)	ML8 5AA	no	yes
18	George Head	ML8 5QF	no	-
19	Robert Donaldson	ML5?	yes	
20	Lorna Davidson	ML11 9DB	no	yes
21	Wm G Young	ML8 5OF		•
22	Jim Ferguson	ML11 9AB	no	yes
23	Aileen Campbell MSP	ML12 6ES	no	yes
24	Maureen Anning	ML11 9XL	yes	yes
25	Robert French		,	,
26	Pam Hutchings	ML11 0ER		yes
27	Maggie Botham			,
28	Chris Parkin			

12 Press Coverage

The Carluke Advertiser carried a piece on the front page (10th Feb 2011) which despite the headline delivered the message of that the event was an opportunity for people to input to the strategy. (article to right)

A further piece was in the Carluke & Lanark Gazette (10th Feb 2011).

There was also post event coverage, as shown in the article below.





These attending the country way anded Hanny year. A cyler by being year, and disctoured issues around the challenges of secting the valley cockaries of crying in find a famous for them.

The control of the control of

"Disc resetures near also day used.
"Disc reseture near also day used.
"Disc reseture with the fast of more nearings which will take place," as blazzone.
"We were delighted with the name.

"We were delighted with the namest for the middle resetting and hope that it will standard space indoord in the group and Chef Valloc's orchands."



C12 of C12

16.2 Keeper Consultation Form, March 2011

Revival of the Clyde Valley Orchards Orchard Keeper & Owner Form

What part do you want to play in the revival ?				
Name of Orchard Kee	per:			Date:
Orchard Address:				
Orchard Postcode:				
Keeper since which y	ear:			
Orchard Owner (if diff	erent from keep	per):		
Orchard Owner/Keep	er address (if d	ifferent from or	chard location):	
Orchard Owner/Keep	er postcode (if	different from c	orchard location):	
Contact phone/email:				
Your relationship to (please tick one most	-	- what best de	scribes how you see	yourself?
Hobby grower	Benevo	olent friend	Business par	rtner
Bystander with some	interest	Uninte	rested bystander	Wildlife enthusiast
Determined pr	reserver	Heritage enthu	usiast	
Are you: retired w	ork elsewhere	at home	other (please state)	
Do you think your o	rchard contrib	utes to the he	ritage or scenic val	ue of the Valley ?
yes/ no comme	ents:			
Maintaining your Or	chard			
What sort of help wou	ıld be useful to	you ? (please t	tick all that are approp	priate)
Pruning	Mowing grass/	/vegetation	Picking fruit	
Skills	Other (please	state):		
Working the Orchard	ds			
Would you consider that yours is currently a working orchard? yes/ no				
We are proposing that orchards are more secure if they are worked. We mean worked gently, not				
intensively. Would you consider agreeing to your orchard being more actively worked if there were				
benefits for wildlife, economically or other reasons?				
yes/ no comme	ents:			
		prepared on behalf of (Clyde Valley Orchard Group, RDT, CA	VLP by Crispin Hayes, CW Hayes Associates. v2

Creating an Economic Basis

Have you ever had financial support for your orchard, such as SRDP, Stewardship payments, or other scheme? (if you don't know what all this is, then answer no) yes/ no comments:

Please state if you land is IACS registered: yes/ no (if you don't know, then answer no)

Would you be interested in receiving payments for orchard maintenance as part of the proposed new Stewardship Scheme run locally by the Landscape Partnership?

yes/ no comments:

Do you have more fruit than you currently have use for ? yes/ no

Would you be happy for excess fruit to be juiced or otherwise used, if it was picked & paid for ?

yes/ no comments:

A Brand for Clyde Valley orchard produce: do you like this idea ?

yes/ no comments:

Creating a Community Business: do you think creating a local business is a good idea ?

yes/ no comments:

Would you see yourself as being involved in the business in some way?

yes/ no how would you like to contribute?

As an orchard owner, would it be more attractive to have a financial stake in the new business, and potentially earn profit ?

yes/ no comments:

Any other comments about the sort of business you would like to see being created?

Would you be interested in Non-Fruit Orchard Products; like honey, livestock or edible fungi?

yes/ no comments:

Thanks for your help. Please note survey information will be shared with Landscape Partnership members. Anonymised data may be placed in the public domain, but this will not include your contact details. Survey information will be stored on computer.

prepared on behalf of Clyde Valley Orchard Group, RDT, CAVLP by Crispin Hayes, CW Hayes Associates. v2

16.3 Briefing on Interim Draft Strategy, March 2011

Briefing to Orchard Owners on Interim Strategy for

Reviving the Clyde Valley Orchards

Issued 17th March 2011



The purpose of this briefing is to inform you what the Strategy is proposing at this interim stage. The development of the Strategy will continue and your input will help to form the final edition.

What has happened so far?

The Landscape Partnership has employed an independent consultant to help develop the Strategy. The consultant is reviewing the many and various issues around the orchards in the Valley, and his report will be made public once it is finished.

A public consultation event was held at Crossford on 17th February 2011, where views and opinions on a 'Vision' for the orchards were heard. We have made a record of these views and they have helped to form this interim strategy.

We are surveying the opinions of orchard owners and other stakeholders as to their views regarding the Strategy as it stands so far.

What is being proposed?

1. Help with orchard maintenance

We recognise that managing an orchard is a big task; many people have said this a major issue. Therefore we are proposing a mechanism to help with maintenance. We will continue to train people in the skills required, but we also hear the call for a fuller service. Therefore we are proposing to create a contract management service, so that professional pruning, maintenance and even picking can be carried out for you. We'll also create a mechanism to pay for this as described below.

2. Working the Orchards

We think that to secure the future of the orchards, they need to be worked – and not be left as museum pieces. Working them in a sensitive way, will greatly prolong their life compared

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to benign neglect. So as well as maintaining the orchards, we are proposing to create ways of using the fruit more fully, and to more advantage, than is currently the case.

3. Creating an Economic Basis

We recognise that we all need to make a living and working the orchards costs money. In the current situation, it is difficult to make the orchards pay for themselves. We are proposing to change this by creating economic input is two ways:

- A stewardship scheme run by the Landscape Partnership that will pay for orchard maintenance.
- A community business to process and market orchard fruit, and valuedadded products. Once set up, the business will run commercially and will provide an income to orchard owners.

4. Building a Brand

As part of the marketing of produce from the orchards, and particularly value-added products such as apple juice and plum products, we are proposing creating a **Clyde Valley fruit brand**. A brand will help consumers differentiate from other similar products, and in time can add further value to the produce.

5. Forming a Community Business to Implement these Actions

We are proposing to form a community business to implement these actions. It is proposed that it is a **commercial business that operates not-for-profit**, but for the benefit of the orchard community in the Valley. However, we are consulting on whether orchard owners would like a financial stake in (and profit from) the business as an alternative.

How could you be involved?

Your involvement is entirely at your own discretion; no-one is being forced to be part of this initiative. At all times, if you are an orchard owner, you will remain in control of your orchard.

We would suggest that there are some significant benefits to being involved:

- · Help in getting your orchard in good shape which will secure it's future
- Better fruit; improving the quality and quantity
- Enhancing biodiversity by appropriate management measures
- · Helping the Clyde Valley retain its beauty and scenic value
- · Lots of lovely apple juice and other orchard products
- Being part of a revival of a growing business in the Clyde Valley

For more information on this Briefing contact crispin@eco-consultancy.co.uk or 0845 458 8335 or the Orchard Group via www.clydevalleyorchards.co.uk

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16.4 Orchard Survey Form, March 2011

Revival of the Clyde Valley Orchards			
Orchard Form:			
Please help us to secure our or	chard heritage		
Orchard Name + Address of Site	Date:		
Postcode or Grid ref. of Orchard location			
Are you the owner? yes no			
Approximately how many trees? 1-5	6-12 13-50 51-100 100-250 250+		
(please tick) Total number if known			
Approximate age of trees? (please tick)			
New (less than 8yrs) Young (9-20yrs)	Old(older than 20yrs) Mixed ages		
Known ages:			
What kind of fruit trees ?: (tick all that apply	, and give numbers if known)		
Apple (eating)	Apple (cooking)		
Pear	Plum		
Crab-apple	Cherry		
Damson	other (please state)		
Type of orchard ?: (tick most appropriate)			
Walled garden	Field size orchard		
Private garden	Estate orchard		
School orchard	Community orchard		
Derelict site	Other (please specify)		
Orchard lost to building development			
Orchard Management (please tick most appropriate)			
Is the orchard managed unmanaged abandoned ?			
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Biodiversity Factors (please tick all that are relevant)

Are these features present in the orchard?

Old trees Deadwood Cavities in branches or trunk

Orchard Floor: How do you manage the orchard floor? (please tick all that are relevant)

Grazing Rotary mower Fingerbar mower Herbicide Nothing Other

Please state details:

Chemical Sprays; do you use any? (please tick all that are relevant)

Herbicide Pesticide Other

Please state details:

How much fruit?

Do you know how much fruit is produced in your orchard? (rough weight or volume of different fruits if possible)

How much is left on the ground unused?

How is the fruit used ? (tick all that apply)

Family use	Given away to friends
Jams/preserves/ fruit products made	Fruit ignored and left on ground
Sold locally	Sold commercially
If sold/other please give details:	

Owning an Orchard

What are the burdens of owning an orchard for you?

What are the benefits of owning an orchard for you?

What costs are there, and what incomes are there?

Thanks for you time. Any other comments you would like to make?

Survey information will be shared with Landscape Partnership members. Anonymised data may be placed in the public domain, and this will not include your contact details. Survey information will be stored on computer.

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16.5 Draft Heritage Assets Register of the Clyde Valley Orchards

Data in this register comes from various sources:

- 1. The orchards contained in 'Ironside Farrar (2004) A Clyde Valley orchards survey. Scottish Natural Heritage Commissioned Report No.023 (ROAME No. F02LI21)', for which the original survey data was collected in 2001 and reported in 2002 in 'Smith, S.M., Bates, M.A. & Osborn, R. L. (2002), Clyde Valley Orchard Survey: A report for Ironside Farrar Ltd by Heritage Environmental Ltd'.
- 2. Informal and unreported updating of the list in the intervening years by Clyde Valley Orchards Group, and by Orchards Project Officer Rose Clarkson.
- 3. Further survey work carried out by CW Hayes Associates in 2011 to update previous records and create new records, and reported here as part of 'Hayes, C.W (2011) Reviving the Clyde Valley Orchards; the way forward. Strategy report to Rural Development Trust, Clyde Valley Orchard Group, Clyde and Avon Valley Landscape Partnership.

Further work including an orchards condition survey will identify the best remaining orchards. The following list contains all orchards that are currently recorded in the Clyde Valley. This Inventory forms the Draft Heritage Assets Register. Further detail is on the database.

Clyde Valley Orchard ID	Orchard Name	Location Postcode
CV001	Chapelknowe and Arthurs Crag	ML11 9XN
CV002	Orchardville	
CV003	Watson	ML11 9XL
CV004	Broom House	ML11 9XL
CV005	Cumming	ML11 9XL
CV006	Clydebrae	ML11 9XL
CV007	Poplar Bank	ML11 9XL
CV008	Hurleywell	ML11 9XL
CV009	Anning	ML11 9XL
CV010	Byrewood Nursery	ML11 9XL
CV011	Stonebyres	ML11 9UW
CV012	Lammas Knowe	ML8 5QQ
CV013	Poplar Park	ML11 9UP
CV014	Howitt	ML11 9XN
CV015	Riverside Cottage	ML11 9XN
CV016	Arnmore and Woodhead	ML11 9UP
CV017	Cairniepark	ML11 9UP
CV018	Upper Cairniepark	ML11 9UP
CV019	Oak Orchard	ML11 9UP
CV020	Woodyett	
CV021	Clyde Valley Kindergarten	
CV022	Underbank House	ML8 5QQ
CV023	Brodiehill	
CV024	Lye Cottage	
CV025	Flatt Farm	ML8 5RA
CV026	Hut on Clyde	
CV027	Carfin	
CV028	Braehead House	ML8 5NQ

CV029	Mashock Cottage	ML8 5NQ
CV030	Ashdean	
CV031	Quarry Park	ML8 5QH
CV032	Birkhill Farm	
CV033	Burnbank	
CV034	The Dales	ML8 5NF
CV035	Milnwood	ML8 5NF
CV036	Briarneuk	ML8 5NG
CV037	Catcraig	ML8 5NG
CV038	Cozieglen	ML8 5PY
CV039	Gowanglen	ML8 5PY
CV040	Orchard Knowe	ML8 5PX
CV041	Gillfoot Nursery	ML8 5PY
CV042	Alderbank	ML11 9XL
CV043	Newlands Nursery	ML8 5QD
CV044	The Orchard	ML8 5QD
CV045	Victoria Cottage	ML11 9XN
CV046	Overton Farm	ML8 5QF
CV047	Nethan Foot Farm	
CV048	Watchknowe	
CV049	Hill of Orchard	ML8 5PX
CV050	Ellenjack Woodland,	ML11 7LF
CV051	Overton Wood	ML9 3BS
CV052	Stewart Gill	ML9 3BH
CV052	Garrionhurst	ML2 0RR
CV054	Pathhead Orchard	ML2 0RW
CV055	Orchard Bank	ML2 0RW
CV056	Stewart bank	ML2 0RW
CV056 CV057	Hallbar Tower	IVILZ URVV
		MI 11 OLID
CV058	Stonebyres Linn Beechwood	ML11 9UP
CV059 CV060	Linneville	
		MI 11 0 IC
CV061	Ashvale	ML11 9JS
CV062	Council Orchard (linnville)	MI 44 0VI
CV063	Douglas	ML11 9XL
CV064	Springbank	ML11 9XL
CV065	Sunnyside Estate	ML11 9UG
CV066	Linnmill	ML11 9UP
CV067	St Oswalds Chapel	ML8 5NF
CV068	Vida Ventura	
CV069	Orchard Farm	ML11 0JS
CV070	Gillfoot	ML8 5PY
CV071	Waygateshaw House	
CV072	11 Holding, Stonebyres	ML11 9UW
CV073	20 Rosebank	ML8 5QB
CV074	230 Lanark Road, Hazelbank	ML11 9XN
CV075	99 Lanark Road Crossford	ML8 5RA
CV076	Beechwood, Kirkfieldbank	ML11 9JR
CV077	East Belmont, Overtown	ML2 ORU
CV078	East Lodge, Overtown	ML9 2BG
CV079	Glebe Cottage, Dalserf	ML9 3BN
CV080	Reynard Nursery,	ML8 5HW
CV081	Holm Cottage, Crossford	ML8 5RG

CV082	Sandyholm	
CV083	The Gardens, Auchenheath	ML11 9UX
CV084	Braehead Lodge, Crossford	ML8 5NQ
CV085	Howieson Hall	ML8 5NJ
CV086	Woodyett of Kirkfield	ML11 9UJ
CV087	Braidwood Primary School	ML8 5NY
CV088	Blairs Orchard	ML2 0RS
CV089	Sandyholm Garden Centre	
CV090	Falls Cottage, Stonebyres	
CV091	Oakbank, Hazelbank	ML8 5QQ
CV095	Lammas Knowe/ Oakbank	ML11 9XL

16.6 Database for Orchard Survey and Keeper Consultation

A database was used to store both the orchard survey data and the keeper consultation data. This required the transcription of data from either paper forms or e-documents.

The software used for the database is FileMaker Pro v11, which is a versatile cross-platform application¹¹⁰. It can export data in a number of formats including MS Access and XML. An anonymised example of a record for one orchard and one keeper is shown in the figures below.

Figure 21: Database Window for Orchard Survey

¹¹⁰ www.filemaker.com for Mac & PC

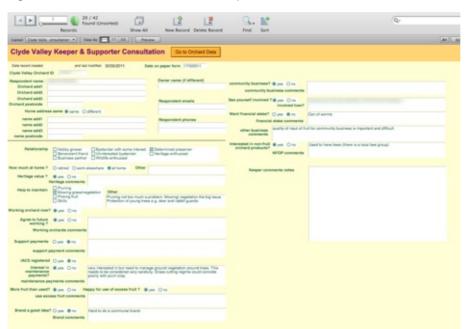


Figure 22: Database Window for Keeper Consultation

The database has been put on the datadisc that accompanies master copies of this report, in the native Filemaker format and also as dbf and xls file formats.

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 Clyde Valley Orchards.

17 Appendix to Part 3 Strategy

17.1 Form of Social Business

Following on from the discussion in Section 11, it is suggested ¹¹¹that a Community Cooperative or a Community Interest Company should be explored as likely to be the most suited form of social enterprise. A key principle of Co-operatives all members are equally represented irrespective of size of shareholding or input, so it is truly democratic. Depending on how the 'community' feels about the matter, democracy can be a valuable asset. However, if the community is fractured or lacks a coherent vision, then member democracy can lead to inaction and even paralysis. Co-operatives can make and distribute profits to members, and this issue would need to be addressed carefully in the Constitution if the organisation is to be eligible for grant funding.

The eligibility for grant funding is a key issue, and likely to be vital to the longterm success of the enterprise. Grant funding could provide important set up costs such as marketing, premises, and capital equipment.

The Community Interest Company (CIC) is a relatively new form of legal structure. In essence, it has a conventional company structure, but with the addition of built-in legal safeguards so that community assets are locked in and profits & shares are carefully restricted. There are two forms of CIC: a Company Limited by Shares, and Company Limited by Guarantee. The former could be attractive to orchard owners in that they could potentially be shareholders. However the issue of grant eligibility would need to be addressed. The latter has a membership that appoints a board of Directors. It has no shareholders and therefore does not distribute profits. If the Constitution has a not-for-profit statement, it is widely considered as eligible for grant funding.

A two tier structure could be considered consisting of a not-for-profit parent with a partially owned profit-distributing trading subsidiary. Orchard owners could be part owners of the subsidiary, but the parent could still access grant funding.

Specialist advice should be sought in making these decisions.

Orchard owners and other stakeholders need to be consulted as to their preferred relationship with a new orchard enterprise.

¹¹¹ It must be noted clearly that though the author has experience of setting up and sitting as Director of a number of social enterprises, this is no substitute for proper independent professional and legal advice.

18 Confidential Appendix: Data Not for Public Circulation

18.1 List of Orchard Owners

Not included in this public edition of the report

18.2 Names Volunteered in Orbits of Participation: Visioning Event 17th Feb 2011

Not included in this public edition of the report

18.3 Responses to Consultation March 2011

A separate pdf file of consultation responses is provided on the datadisc that accompanies the mastercopies of this report. The file comprises scanned paper forms as well as responses delivered by email. The Clyde Valley Orchard site number (CV*nnn*) is the key reference for filenames and sites.