# Orchard Management Plan

v2

| | | | |
|---|---|---|---|
| Name of Orchard | Elcho Castle | Orchard Survey ID | - |
| Location | by Rhynd | IACS Holding No | |
| Name of Keeper | Historic Scotland | IACS Field No.s | |
| Date of preparation | 24th September 2012 | Area (ha) | 0.63 ha |
| Duration of plan | 10 yrs | Last revision date | 15th Oct '12 |

Apple tree with the Castle in the background

Researched & compiled by CW Hayes Associates www.eco-consultancy.co.uk
on behalf of Tay Landscape Partnership & the Historic Orchard Forum

# 1 Introduction

This management plan has been prepared on behalf of the orchard owner and Tay Landscape Partnership. It does not constitute a formal agreement between these parties.

The plan has been produced in consultation with the orchard owner (or keeper) by CW Hayes Associates under contract to Tay Landscape Partnership as part of a wider project involving 15 historic orchards around the River Tay.

The plan is structured in the following way:

- Site Details
- Evaluation of the Orchard as it currently stands
- Vision, management objectives and strategy
- Proposed management actions
- Action plan & Timetable

# 2 Site Details

## 2.1 Location

| | |
|---|---|
| Site Name: | Elcho Castle |
| Nearest village: | Rhynd, Bridge of Earn |
| County: | Perthshire |
| Planning Authority: | Perth and Kinross Council |
| Community Council & Historical Parish: | Rhynd |
| Grid reference: | NO163210 |
| Area: | 0.63 ha |

## 2.2 Tenure

Elcho Castle is privately owned by the Wemyss-Charteris family but has been in state care under a guardianship agreement since 1930. It is managed by Historic Scotland, an executive agency of the Scottish Government.

## 2.3 Natural Environment Designations of Site

No nature conservation designation for the orchard.

The River Tay to the north of the site is a designated Special Area of Conservation.

## 2.4 Access

Footpaths: None in orchard.

Permitted Access: The orchard is part of the Castle grounds, which are open to the public upon payment of a fee to Historic Scotland.

Community Use: Some orchard events are hosted.

Physical access: Access via gate at west

## 2.5 Concise Description of Site

This orchard is a recent replanting of an historic orchard that formerly covered a more extensive area. This restored orchard occupies a site to the immediate west of the Castle. It is laid out with mown paths on a grid to make a pleasant 'formal garden' style orchard.

## 2.6 Neighbouring Sites & Landscape Context

The River Tay is 150m to the northwest across pastureland. To the east is the Castle and surrounding lawns. To the south is pasture, an access road and cottages. To the east is open arable land. By road the location is isolated, but by river it has excellent connections.

Clearly, the setting beside both Castle and River is dramatic. However the landscape context is wider than the immediate surroundings. Some 500m north, on the far banks of the Tay, is the site of the former Seggieden orchard, a collection of several large fields of fruit trees and also well known due to the eponymous pear variety. Therefore Elcho is closely connected to the orchards of the Carse of Gowrie and their pomocultural heritage.

## 2.7 Previous Survey Work

This orchard was not included in previous surveys of the orchards carried out on the adjacent Carse of Gowrie.

Historic Scotland have a Grounds Maintenance Plan in place.

# 3 Orchard Evaluation

## 3.1 Character of orchard

The orchard is young and does not yet exhibit many striking features. However, as it graduates from its juvenile state into a more mature orchard it is sure to become a characterful adjunct to the neighbouring Castle.

## 3.2 Key Features

- New orchard on site of historic orchard
- Built and natural heritage setting
- One of very few orchards that are part of a Scheduled Monument.
- Public access to orchard and connected events.

## 3.3 Historical Context and Cultural Heritage

The OS 1st edition map for the area published in the 1860s was examined.

The historic map appears to show that orchard covered the whole of the castle grounds, quite an extensive area. It included the strip of pasture to the south of the access road.

A further orchard is shown at the south of Elcho farm steading.

**Figure 1: Orchard in 1860s**


Source: OS 1st Edition. out of copyright

**Figure 2: Modern aerial image**


Source: Tay Landscape Partnership © 2012 Getmapping Plc

The modern aerial image shows the orchard occupying a smaller area to the west of the Castle. The boundary of the orchard, and the grid layout can be clearly seen.

**History of Management:**

The orchard was planted up in 1999.

Management of the orchard since then has focussed on grass maintenance.

While there has been some pruning carried out, it has not regular or consistent.

**Context in Local Community**

The public are welcomed to the orchard as visitors to Elcho Castle.

## 3.4 Built Heritage Aspects of the Orchard & Neighbouring Sites

**Scheduled Monuments:**

The Castle, grounds, and the area including the orchard is a Scheduled Monument.

**Listed Buildings:**

Elcho Castle is A listed.

The Custodians House and the Doocot are C listed.

The neighbouring farmsteading is B listed.

The farmhouse is C listed.

**National Monuments Record of Scotland:**

There are numerous entries relating to the Castle and other entirely separate artifacts.

Of pertinence to the orchard is the following entry for the Tower House of Elcho Castle (Canmore ID 28197 )

*"NO 1643 2107 During March 1999 the digging of 93 tree holes in the orchard to the W of Elcho Castle was monitored. Charcoal flecks were noted throughout the topsoil horizon, and a small assemblage of china was noted (but not retained). Below this was a light brown to light grey fine clayey silt. A small trench was also dug against the fence on the E side of the field, to allow the installation of a new gate. Only topsoil and the concrete bases of the existing fence were noted. "*

**Inventory of Gardens and Designed Landscapes:**

No entry

**Historic Environment Record:**

The Tower House of Elcho Castle is included in the record.

The area of the orchard is not included in this Record as a historic orchard.

## 3.5 Climate, Aspect and Exposure of Orchard

The site is very exposed to the west, while to the east and south, the castle, outbuildings and large trees provide a significant amount of shelter. The orchard is situated on level ground. The extremes of climate, especially temperature, are likely to be mediated by close proximity of the river, but the exposure of at least half a mile of open arable land to the west means that the climate in terms of wind is quite harsh.

## 3.6 Soil and Water

Context of comments: The fieldwork was carried out in August 2012 after one of the wettest summers on record. Comments relating to hydrologic aspects of the orchard should be considered in this context.

Geological mapping at a scale of 1:50,000 published by BGS was consulted to determine the superficial deposits for the area of the orchard. This source states that the superficial deposits are divided on the site.

The castle itself and the immediate are sits on a rocky outcrop with little or no overlying material. It is decribed as “Ochil Volcanic Formation - Pyroxene Andesite. **Igneous Bedrock** formed approximately 391 to 417 million years ago in the Devonian Period. Local environment previously dominated by eruptions of silica-poor magma.”

The area on which the orchard is located is described as “Raised Marine Deposits, Devensian - **Clay, Silt, Sand And Gravel.** Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by shallow seas.”

To the north of the orchard where the land falls away to the river are tidal deposits of a different nature.

**Hydrology**

The orchard appears to be fairly well drained. No standing water was observed. It was dry underfoot. However in the winter, the keeper reports standing water in the western end of the orchard.

## 3.7 Boundaries & Fences

Wire fences are found at the south, west and north of the orchard. To the east, the boundary is open to the lawns surrounding the castle. A few picnic tables are located along the boundary area.

## 3.8 Biodiversity

**Background:**

Traditional orchards and their associated habitats support a wide variety of wildlife including BAP priority habitats and species as well as a range nationally rare and scarce species. Their decline over the last century has led to increasing efforts to protect these important areas. In 2007, Traditional Orchards were designated a 'priority habitat' under the UK Biodiversity Action Plan (UK BAP) as a result of work carried out by a partnership of organisations and there is now a draft Habitat Action Plan for Traditional Orchards. Furthermore, The Scottish Government is currently consulting on the 2020 Challenge, Scotland’s response to the EU Biodiversity Strategy for 2020. The outcome of this consultation may well change how biodiversity is managed, and is thus relevant. At a regional level, a local Habitat Action Plan that includes orchards is in the consultative draft stage, and has been produced by Tayside Biodiversity Partnership. Though it focuses on garden and community orchards more than large field orchards, many of its features are relevant. The Species lists are not currently complete.

**Assessment:**

The main orchard area consists of around 90 young fruit trees including many Scottish and old varieties of apples, pears and plums, planted in rows. There is also a scatter of old pear and apple trees on the lawn between the orchard and the tower house. The orchard floor is part of a larger area of species-poor amenity grassland dominated by perennial rye grass. The sward is lush and includes other grass and some herb species but few tall perennial weeds. It appears to have been left uncut or is managed by occasional mowing. A ride has

been cut around the perimeter of the site although there appears to have been little maintenance of the fruit trees since planting.

Although the large number of fruit trees of different varieties will benefit wildlife, the formal arrangement of the orchard and lack of structural and species diversity means that it is currently of limited biodiversity value. However, there is good access to the site for maintenance purposes and the situation can be relatively easily remedied by implementing management actions to improve the condition of the fruit trees and the diversity of habitats. The aim would be to develop a matrix of habitats within the orchard to provide food and shelter to a wide variety of species. The connectivity of the orchard habitats with those of the immediate surroundings could also be enhanced by extending hedgerows and broadleaved woodland to provide wildlife corridors through the landscape.

Priority Habitats include Traditional orchard.

The client has not required listing of species present on the site. Some biodiversity assessment work has recently been carried out on local orchards as noted in these reports[1].

There was no evidence of UKBAP Priority Species during the site visit.

**Advice:**

Orchards are dynamic habitats that require trees of all stages of growth to function well both economically and for wildlife benefits. They will benefits from low intensity management, where there is little or no use of chemicals such as pesticides, herbicides and inorganic fertilisers. Biodiversity can be encouraged by retaining standing and fallen deadwood and pruning to rejuvenate the best of the old trees rather than grubbing up and replanting. Dead and decaying wood provides food and refuge for huge numbers of invertebrates, nesting holes for birds and bats and excellent habitat for lichen. The fruit trees form one part of a matrix of habitats for wildlife in the orchard that generally includes a grass sward and often other features such as hedges, woodland, standing and running water, bare soil, and structures such as outbuildings. The orchard floor is particularly important for biodiversity and traditionally managed by grazing or cutting. A varied grass sward will produce different floral assemblages that encourage different wildlife species, e.g. rough grass for bumblebees and tall herbs for insect food. However, in general grazing should keep the sward height between 5 and 15cm and hay should be cut after wildflowers have set seed.

## 3.9 Current orchard floor management & other undercrops

**Mowing:**

The orchard floor is currently maintained by a mowing schedule, carried out by contractors to Historic Scotland, who are at the time of writing ISS Waterers.

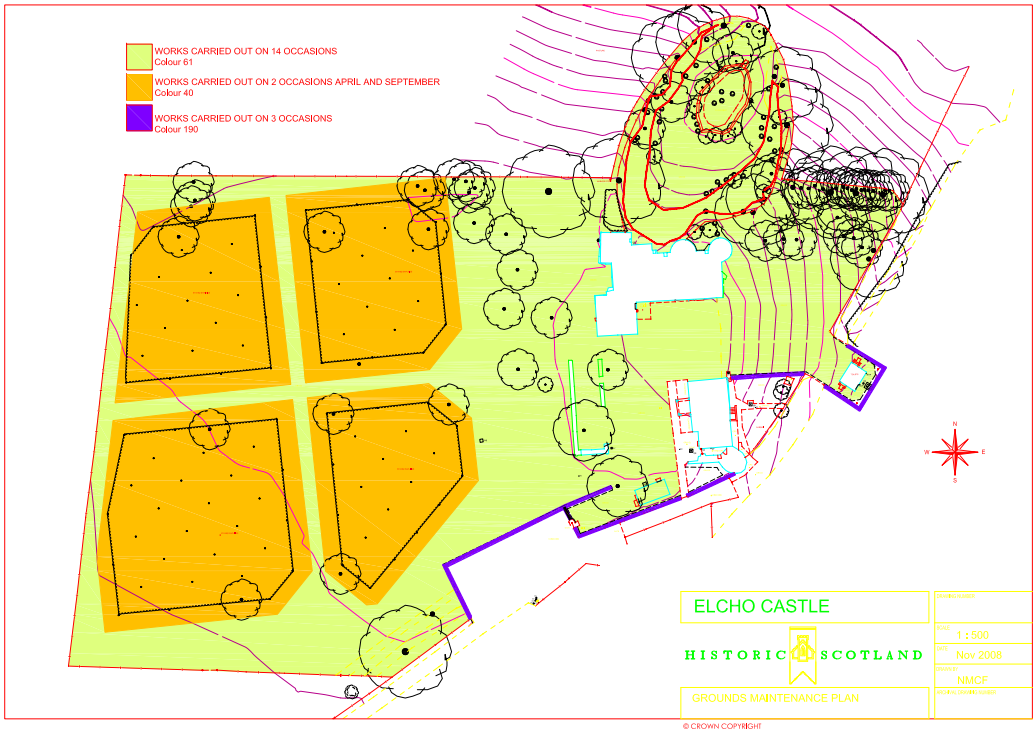
The figure below show the grounds maintenance plan. The frequency of operations is also shown.

Grass rides are cut 14 times a year. The other areas of grass are cut twice a year. Finally the hedges are cut 3 times a year.

[1] ECOS Countryside Services (2010), *Carse of Gowrie Orchards Habitat Survey and Biodiversity Audit. Report version 1 to Carse of Gowrie Historic Orchard Forum*, .

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

**Figre 3: Grounds Maintenance Plan**




**Pesticide/herbicide/fertiliser/ other agrochemical use:**
Keeper reports that none used on site in last 20 years.

## 3.10 Evaluation of Current Stock of Fruit Trees and Formerly Stocked Vacant Areas

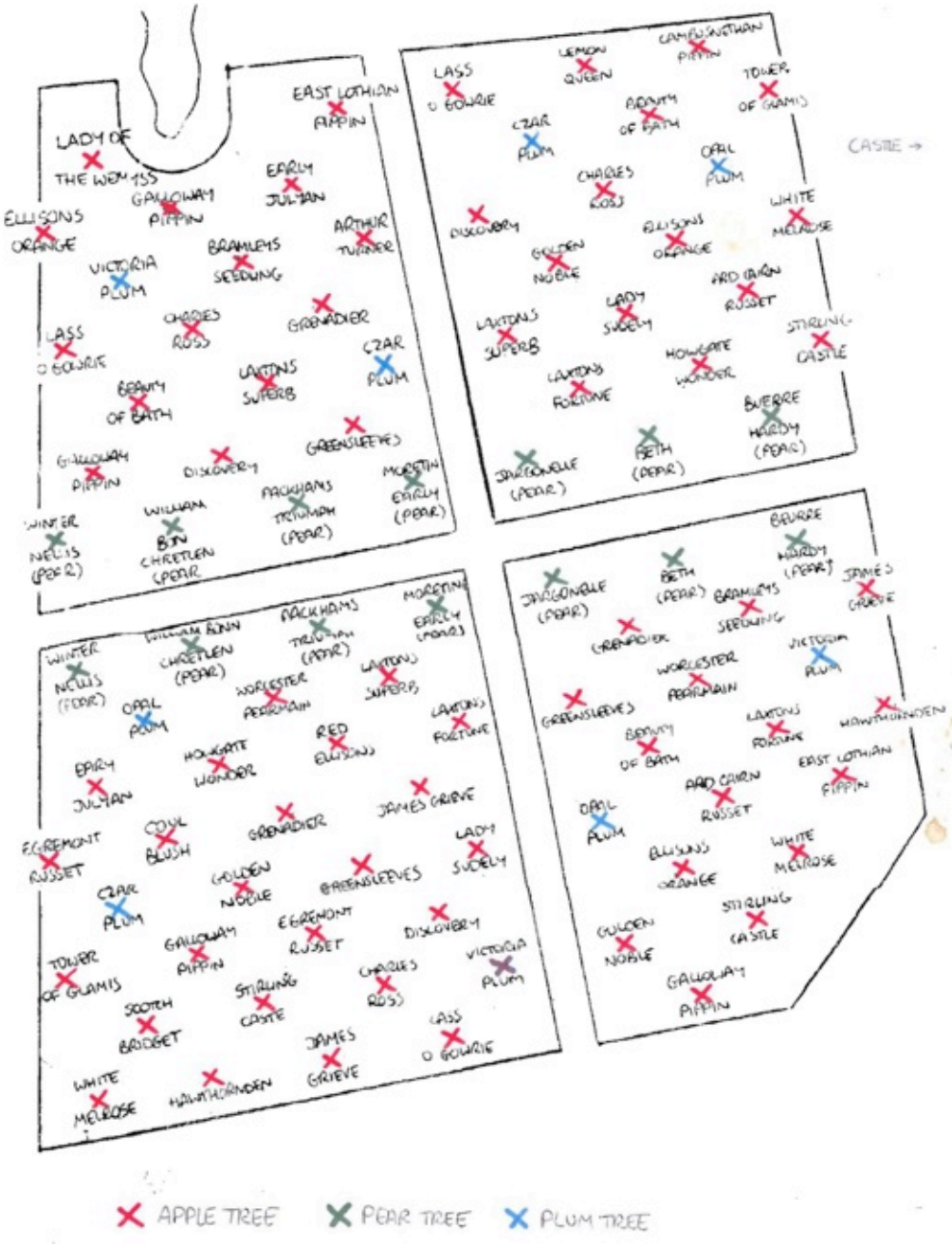
The orchard has not been included in previous surveys.
Approximately 90 fruit trees were planted in 1999. They are listed below.

**Table 1: List of Fruit Trees**

| Name | Number of trees | | Name | Number of trees | | Name | Number of trees |
|---|---|---|---|---|---|---|---|
| **APPLES** | | | Grenadier | 3 | | **PEARS** | |
| Ard Cairn Russet | 2 | | Hawthornden | 2 | | Winter Nellis | 2 |
| Arthur Turner | 1 | | Howgate Wonder | 2 | | William Bon Chretien | 2 |
| Beauty of Bath | 3 | | James Grieve | 3 | | Packham's Triumph | 2 |
| Bramley's Seedling | 2 | | Lady Sudeley | 2 | | Morettini Early | 2 |
| Cambusnethan Pippin | 1 | | Lady of the Wemyss | 1 | | Jargonelle | 2 |
| Charles Ross | | | Lass o' Gowrie | 3 | | Beurre Hardy | 2 |
| Coul Blush | | | Laxtons Fortune | 3 | | Beth | 2 |
| Discovery | 1 | | Laxton 's Superb | 3 | | **PLUMS** | |
| Early Julyan | 2 | | Lemon Queen | 1 | | Czar | 3 |
| East Lothian Pippin | 2 | | Red Ellison | 1 | | Opal | 3 |
| Egremont Russet | 2 | | Scotch Bridget | 1 | | Victoria | 3 |
| Ellisons Orange | 3 | | Stirling Castle | 3 | | | |
| Galloway Pippin | 4 | | Tower of Glamis | 2 | | | |
| Golden Noble | 3 | | White Melrose | 3 | | | |
| Greensleeves | 3 | | Worcester Pearmain | 2 | | | |

The list in Table 1 is supplied by the keeper. The keeper has also supplied the layout plan below.

**Figure 4: Layout of Orchard at Elcho Castle**




## 3.11 Current Management of Orchard Trees

**Level of management:**
The trees are relatively unmanaged at the moment.

**Pruning:**

Most are in urgent need of formative pruning, followed by annual maintenance pruning.

**Protection:**

The issues of protection have not been addressed adequately to date. Many of the young trees have severe damage to the bark on their lower trunk. This will be highly detrimental to them. An example is given in the figure below:

**Figure 5: Severe Wound from Bark Damage to Young Tree**

The cause of this sort of widespread damage is not clear. Rabbit or other rodent damage is likely to be the main culprit, but mechanical damage by strimmer could be part of the cause.

**Use of Stabilising Restraints:**

At planting, suitable restraints were installed. However, these have not been adjusted, with the result that many of the trees are being constricted by the plastic band & buckle that forms the restraint.

**Figure 6: Example of Constricting Restraint**

**Labelling of Trees:**

Most of the trees are currently labelled using a laminated plastic tag. Many are degrading, and will be lost in the next couple of years. However, a clear plan exists so variety details will not be lost.

The keeper has indicated that they will investigate a better labelling system in due course.

## 3.12 Evidence of Pests and Diseases

**Pests:**

It seems likely that rabbits are present in the orchard. Rodent holes beside trees (probably voles) were observed in the northwest of the orchard.

The presence of deer is likely.

**Soil & tree borne fruit tree diseases:**

Given the bark damage and associated wounds, it is highly likely that diseases such as canker, which one would not normally associate with such a young orchard, are present.

## 3.13 Assessment of Current Fruit & Non-Fruit Production Potential

Context of comments: The fieldwork was carried out in August 2012 after one of the poorest summers on record. Growers throughout Scotland reported a drastic reduction in fruit yield, the reduction in the order of 95%. This reduction is borne out in the fieldwork reported here. As such the evidence for production potential is best found in assessments that have been carried out in previous years.

Some of the apple trees have a moderate amount of fruit on them, which is encouraging, given the very poor year. Most mature apple trees have little and often no fruit whatsoever this year.

**Use of fruit:**

Not monitored, but fruit picked by visitors and in previous years the remaining fruit has been removed during an apple day event in October for juicing and take home by participants

## 3.14 Significant hazards, constraints and threats

Most significant issue is that the orchard is in a scheduled ancient monuments and as such formal applications need to be made before any planting or soil disturbance are undertaken. As a government body funding restrictions are also a major issue to carrying out any works.

# 4 Vision, management objectives and strategy

## 4.1 Long term vision

The vision for the orchard is that it remains as one of the notable traditional orchards on the Carselands of the Tay. It is recognised that in order for the orchard as a whole to survive, better maintenance of existing trees and the planting of new trees is necessary.

A balanced approach to management will be adopted, so that the needs of biodiversity as well as fruit production will be taken into account.

The cultural and heritage aspects of the traditional orchards are recognised, and we see involving the local community as part of the future of this orchard.

The orchard is to be managed on organic principles for the benefit of the orchard environment and to gain a premium for the fruit and other orchard products.

## 4.2 Management Objectives

| No. | Objective |
|---|---|
| 1 | Maintain the existence of the orchard, as an important element of the area's landscape character. |
| 2 | The retention and management of existing trees. Managed so as to prolong their life and improve their health. |
| 3 | The planting of new trees in recognition that renewal of individual trees is essential for survival of the orchard as a whole. |
| 4 | The choices of species and varieties of new plantings to reflect contemporary tastes and use, as well as heritage desires. |
| 5 | Management of the orchard trees for biodiversity as well as fruit production by being sensitive to the sometimes divergent needs of both aspects. |
| 6 | Maintain other features such as hedgerows. |
| 7 | Make productive non-commercial use of orchard products; by visitor use and engaging with the local community for their use. |
| 8 | Rebuild the cultural heritage associated with the orchards and their products by engaging in activities with the local community. |

## 4.3 Strategy

The overall strategy is to work with the Historic Orchard Forum and the Tay Landscape Partnership in order to invest in the longterm health of the orchard by carrying out the restorative work and replanting. It is understood that these activities will require financial support.

The orchard keeper is prepared to discuss for future management options.

# 5 Proposed Orchard Management Actions

## 5.1 Sources of Advice

Local advice has been produced as a leaflet[2] called *Traditional Orchards in Tayside. A Guide to Wildlife and Management* which is available for free download at:

http://www.taysidebiodiversity.co.uk/Projects/Orchards/PDFs/Traditional_Orchards_In_Tayside.pdf

Useful technical guidance for restoring and managing traditional orchards has been developed and is published in the form of Technical Information Notes. TIN012 is a Summary of the issues, and then TIN013 to TIN021 are detailed advice[3]. They can be downloaded for free from:

(url current at time of writing) http://publications.naturalengland.org.uk/category/23034

Though they have been published by Natural England, they also apply to our conditions in Scotland.

## 5.2 Tree Management

**Restorative Pruning:**

Recommend carry out restorative pruning to all trees in order to bring them to an appropriate shape and size. This is in place of formative pruning that could have been carried out over the last decade.

**Maintenance Pruning:**

This will be required regularly on all trees. Ideally annually, minimum 1 in 3 yrs.

**Formative pruning:**

This is required on any new plantings, annually for 1st 5 years.

**Strategy to Address Damaged Trees:**

It is recommended that young trees with severe bark damage and wounds should be removed and replaced. In the longterm this is the optimum solution. If not replaced, the trees will always be compromised.

Recommend that 20 worst trees are replaced. These should be selected by conducting an assessment this year.

Recommend that ground maintenance practice is amended to ensure that strimmers (or other damaging equipment) are not used near trees.

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[2] Tayside Biodiversity Partnership (2009), *Traditional Orchards in Tayside. A Guide to Wildlife and Management*, (Tayside Biodiversity Partnership in association with PTES).

[3] · TIN013 Traditional orchards: site and tree selection
· TIN014 Traditional orchards: planting and establishing fruit trees
· TIN015 Traditional orchards: an introduction to pruning
· TIN016 Traditional orchards: formative pruning of young trees
· TIN017 Traditional orchards: maintenance pruning
· TIN018 Traditional orchards: restoration and management of mature and neglected orchards
· TIN019 Traditional orchards: fruit tree health
· TIN020 Traditional orchards: orchards and wildlife
· TIN021 Traditional orchards: glossary

**Protection of Existing Trees:**

This issue should be addressed as soon as possible, and certainly before winter 2012.

Recommend that spiral guards are placed on all trees. Selection for replacement tree (as above) would be better carried out before or as part of this operation.

**Protection of New Plantings:**

Recommend that small circular enclosures made of post and small mesh are put around each tree. Two stakes and 1.2m high wire, creating a vertical cylinder of diameter approx. 0.6m

The keeper has agreed to this, subject to agreement to works within a scheduled monument, and of course funding.

Rabbit/ rodent guards must be installed.

Geotextile mulch mats around young trees may be installed at planting to suppress weeds, instead of strimming (likelihood of damaging young tree is high) or herbicide (ongoing costs & disbenefits to biodiversity).

**Tree Identification Tags:**

Recommend that a longer term tree tag solution is adopted. Recommend that this is carried out in discussion with the Historic Orchard Forum who already have a metal tag system in operation.

## 5.3 Planting

**Replacement Trees:**

Recommend that replacement trees are planted as discussed above.

A collection of suggested modern and heritage varieties that are known to do well in the Carse conditions has been developed as part of this project, and is recommended as the basis for selection. This pool of varieties is given in the Appendix.

The keeper has expressed a wish to plant like to like replacements in order to maintain the current planting plan.

## 5.4 Orchard Floor Management

**Mowing:**

Recommend manage the orchard floor by mowing, taking particular care to avoid damaging the fruit tree stems, and cut rides through the site for access. Timing of mowing is particularly important as all the grassland cover is removed at the same time and this has a significant impact on flora, invertebrates and small mammals. In general, cutting should be carried out after wildflowers have set seed and any late summer cutting should be undertaken as late as possible to avoid interfering with breeding birds and small mammals. Cut rides in areas of rough, long grass rather than clearing a whole area to create a diverse sward structure, provide wildlife corridors and provide a refuge for the species displaced by the cutting.

Timing is particularly important if the orchard floor is managed by mowing or cutting for hay, as all the grassland cover is removed at the same time and this has a significant impact on flora, invertebrates and small mammals. In general, cutting should be carried out after wildflowers have set seed and any late summer cutting should be undertaken as late as possible to avoid interfering with breeding birds and small mammals. Cut rides in areas of rough, long grass rather than clearing a whole area to create a diverse sward structure, provide wildlife corridors and provide a refuge for the species displaced by the cutting.

**Enhancement:**

Recommend plant native bulb species on orchard floor, if this has not already been done. The keeper has agreed to this subject to scheduled ancient monument approval and funding.

**Undercrops:**

No undercrops are envisaged at this stage.

## 5.5 Use of Fruit and Non-Fruit Orchard Products

The keeper proposes to continue with the current practice.

## 5.6 Management of Other Features

**New Hedge:**

The following recommendation is made in order to address the exposure of the orchard to the west. It has the added benefit of enhancing biodiversity by providing better habitat.

Recommend that a new hedge is planted at the south and western boundaries of the orchard. This should consist of native species.

The field margin some 15m west and outside of the orchard could also be improved by planting six broadleaf trees spread out along it.

The keeper indicates that this land is outwith their control, but is happy to engage with the landowner to try and carry this out.

**Biodiversity Advice:**

This young orchard includes very little standing and fallen deadwood and it would be beneficial to add a few large fallen broadleaved branches (disease free) from neighbouring trees, if possible. Stack small deadwood and fruit tree prunings into piles at the perimeter of the orchard to provide a home or shelter for wildlife.

Keep the use of pesticides, herbicides and inorganic fertilisers to a bare minimum and use organic products and methods where possible

Leave uncut strips or corners of rough grass to provide shelter and food for over-wintering insects, birds, small mammals

Any wood affected with an identified disease should be removed and burnt.

Do not fertilise around fruit trees as this promotes weeds and lush grass that removes nutrients from the soil - mulch maps are valuable

Help to preserve the older fruit trees at this site by taking grafting material from some of your best trees on to standard or half-standard rootstocks.

Enhance the surrounding habitat for wildlife by planting and restoring neighbouring hedgerows and native tree lines. Only trim hedges occasionally and not all in the same year to ensure a plentiful supply of fruit and blossom for birds and insects. Also, retain hedgerow trees where possible

Increase the diversity of features in the orchard such as rough edges, species-rich hedgerows and walls, and carefully manage to maximize their environmental benefits. Consider introducing a pond or wetland area adjacent to the orchard.

Where possible, provide wildlife corridors such as native woodland, hedgerows, uncut grass strips, rides and waterways that link with other wildlife habitats

Large amounts of rotting fruit underneath trees should be cleared to limit the spread of fruit tree diseases but retain some fruit as this provides an important autumn and winter food source for a wide range of birds, mammals, butterflies, moths and bees, and can help to ensure their survival over the winter months.

Plant native trees, shrubs and wildflowers that are locally appropriate. Flowering trees, shrubs and plants are important sources of nectar and pollen when insects are in their adult stage.

Secure nesting boxes for birds and bats in appropriate places. Leave old buildings secluded and provide an owl box in the roof of larger buildings.

### 5.7 Cultural & Social Initiatives

Keeper attitude to including community activities:

The keeper is proactive about including the public in orchard related events.

### 5.8 Consultation with other parties

None.

## 6 Action Plan

The following is proposed to accomplish the management objectives:

| **Traditional Orchard Management Plan** | | | Location ID | | | | | |
|---|---|---|---|---|---|---|---|---|
| Orchard Action Plan: | Elcho Castle | | n/a | | | | | |
| prepared by CW Hayes Associates on behalf of Historic Orchards Forum and Tay Landscape Partnership | | | | | | | | |
| version: | 1 | | | | | | | |
| | | | | | | | | |
| Project ID | Project Name | Description | Target Scale of Activity | Suggested Timescales | | | | |
| | | | | 2013 | 2014 | 2015 | 2016 | 2017-2022 |
| EC/1 | Protect existing trees from bark stripping | Spiral guards on all trees. | 90 trees | ✔ | | | | |
| EC/2 | Restorative pruning | Crown reduction and formative pruning on young trees. | 90 trees | ✔ | ✔ | | | |
| EC/3 | Replacement of damaged trees | Select 20 trees with worst damage for replacement | 20 trees | select 20 damaged | replace | | | |
| EC/4 | Install protection for new plantings | Post & wire enclosures, mulch mats, rodent guards as per spec in text. | 20 enclosures | | ✔ | | | |
| EC/5 | Tree tagging | Replace tags on all trees with more durable models. | 90 trees | | ✔ | | | |
| EC/6 | Mowing regime | Rides cut for access and whole orchard mown early & late in year. Amend instructions to ensure no strimming near trees. | 0.63 ha | ✔ | ✔ | ✔ | ✔ | ✔ |
| EC/7 | Plant new hedge | native species with protection | 150m | | ✔ | | | |
| EC/8 | Plant shelter trees | Interspersed along western fence line 15m away from orchard outside Scheduled Monument area | 6 specimens | | ✔ | | | |
| EC/9 | Maintenance pruning | regular pruning of all trees | 90 trees | | | ✔ | ✔ | ✔ |

## 7 Appendices

Appendices follow in full in the individually printed plans only.

### 7.1 Addressing Orchard Replant Disease

### 7.2 Recommendations for Species & Varieties