



Alderney Community Woodland Management Plan 2014 – 2018

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1. INTRODUCTION

1.1. BACKGROUND

The Alderney Community Woodland (ACW) is the result of many thousand years of human activity. Alderney's strategic position turned it into a key point in the English Channel which was disputed by the Romans, Normans, British and Germans (Gander) creating a diverse landscape where historic features and a variety of habitats for wildlife come together.

The ACW is home to a variety of habitats, broadleaved and coniferous woodlands, stunning grasslands and diverse scrub. Yet the island is perhaps the most denuded self-governing state in Europe, with only 2% woodland cover compared to an average of 44% woodland cover across European countries (Woodland Trust, 2011), highlighting even more the importance of its conservation.

1.2. SUMMARY OF MANAGEMENT TO DATE

The ACW Project was first proposed in 2009 as a response to the general assessment of habitat cover undertaken by the Alderney Wildlife Trust (AWT). The General Services Committee (GSC) agreed unanimously to support the proposal through the use of States of Alderney (The States) owned land (partly leased by two tenants), the provision of some labour support and a limited grant allocation.

Due to limited local resources management has been undertaken to date under two Phases:

Phase 1, focused on the establishment of the concept, aims and objectives. An initial public consultation was undertaken in 2010, and received wide ranging support from the general public and local organizations, along with suggestions and guidance which were incorporated into the planning process. In addition, a limited amount of tree planting was carried out in 2010.

Phase 2, concentrated on the production of the ACW Development Plan and the draft Annual Action Programme as a response to the need for a planning strategy. These documents were formally established in 2011 after a full public consultation was sought on the plans prior to their agreement by the States. The level of site clearance and subsequent planting was also increased in preparation for future work.

The Development Plan described the goals and objectives of the Woodland for the period 2011-2014. The overall aim of the ACW Development Plan was to develop a mature, wooded area, planted with native species which support high biodiversity and to create a completely new wildlife habitat and amenity space for a wide range of user groups. The Plan also considered the provision of educational facilities for schools, clubs and associations as well as the potential for timber production in a sustainable way.

The Annual Action Programme contains detailed management information and operational prescription for the period of a year. A copy of the 2014 ACW Annual Action Programme is attached in Appendix 3.

The ACW Development Plan expired in December 2013, and the main achievements to date are:

- Woodland cover on the ACW (and therefore on the island) has been doubled through the planting of over 10,000 native deciduous trees and shrubs between 2010 and 2013.
- Heritage sites have been restored and refurbished to allow safe access, and also to provide a valuable educational resource where possible.
- The network of paths has been extended, almost doubled, and a new path has been opened allowing a fuller enjoyment of the site.
- The site has been opened to a wide range of events and recreational activities and is becoming an increasingly important focal point of the island.

This document, the ACW Management Plan, represents Phase 3, and aims to continue the work undertaken to date updating the background information for the site and providing the focus and direction of management of the site for the next five year period.

The ACW is currently managed by the AWT in partnership with a number of closely involved groups, societies, schools and businesses (see Appendix 1).

According to the ACW's "community approach", community involvement is the key to the ACW's long term future and therefore the AWT has aimed to encourage local residents to get involved in all aspects of the site's development and ongoing management, through active participation as well as through consultation.

2. SITE DESCRIPTION

2.1 LOCATION

The ACW covers 42 acres (17 ha) and is situated near Les Rochers, in the middle of the current island woodland cover, allowing the connection of a wooded backbone of the island.

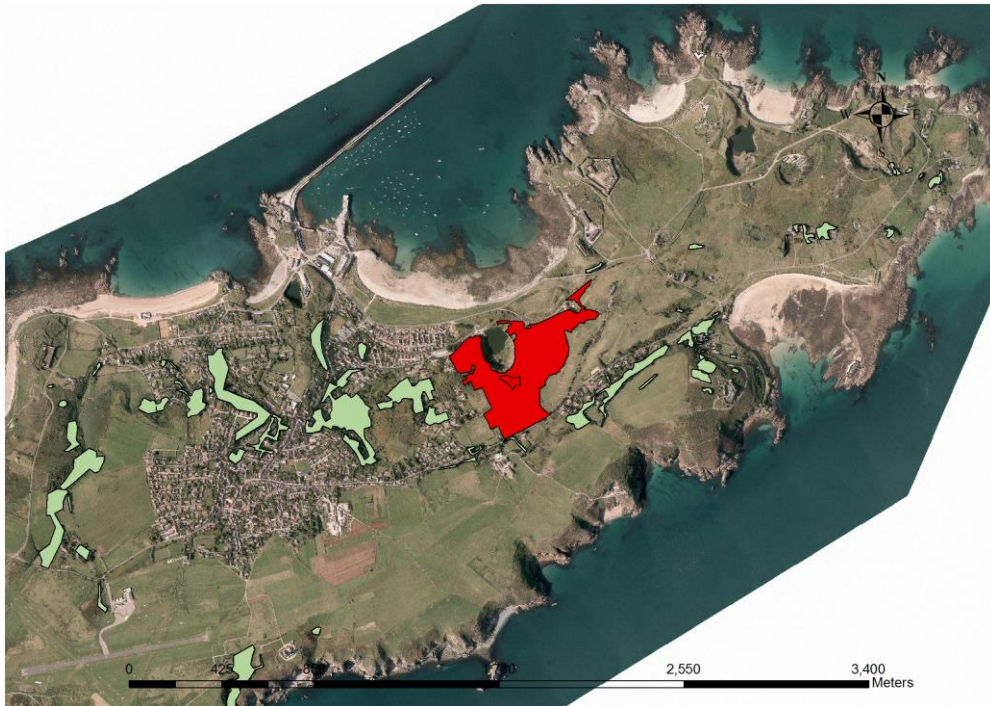


Figure 1. The ACW (red) and the existing mature woodland cover on Alderney (green)

2.2. LAND TENURE

Land is owned by the States of Alderney, with two leases: The Alderney Golf Club and telecoms company Arqiva.

3. EVALUATION OF SITE

3.1. SOILS

Soil is one of the main conditioning factors of the type of vegetation in an area and the composition of trees that will grow on a site is partially determined by the type, pH and nutrient content of the soils.

A survey of the soils was conducted and the results analysed by States of Guernsey Plant Protection Laboratories (Brokenshire, 2011), during which two issues were highlighted: high sodium levels in some sections and low phosphorus levels in others.

Sections of the site closest to the sea have very high sodium (Na) levels, which have most likely been caused by increased salt levels from sea spray. Excess sodium will limit a tree's ability to absorb water and may limit the uptake of other cations (e.g. positively charged ions such as potassium (K)); this will lead to the disruption of membrane potential, cell turgor and enzyme function. These negative effects may be negated somewhat by the presence of readily available calcium (Ca), which allows plants to better maintain potassium transport mechanisms and selectivity of K to Na uptake (Campbell and Reece, 2001).

A large proportion of the site has soils which are poor in phosphorus (P) content. P is a component of certain essential enzymes, including DNA. A deficiency of this macro nutrient will affect processes involving energy storage and transport, leading to poor root growth, bud development, seed development and fruit development. As P is more readily absorbed at an optimum pH value of 6.5-7.5, the impact of low P levels within this range should be less detrimental to growth. In soils with a pH outside of this range, the little P present will be in an insoluble form (Campbell and Reece, 2001).

On the other hand, the pH of the site was neutral and fairly constant, with the exception of one section around the Arqiva Communications tower, which contained acid soils with a pH of 5.5-6.0.

Conductivity, nitrates, potassium, calcium and magnesium were also monitors, but were found to be within normal limits across the site and no problems were highlighted.

3.2. HABITATS

The ACW contains a variety of habitat types, including mixed native and non- native woodland, scrub and glades (Figure 2).

The habitats of the site were classified using as the methodology as described in *"The Habitat Survey of Guernsey, Herm and Associated Islands"* (Phase 1 standard: JNCC, 2010), which enabled easy identification of habitats and their importance on a local, national or international scale. The information was later compared and extended with independent surveys undertaken during 2010

(Ralphs and Henney, 2010). Subsequently, the material has been annually updated through field data collected by the AWT's Staff and the use of aerial photographs.

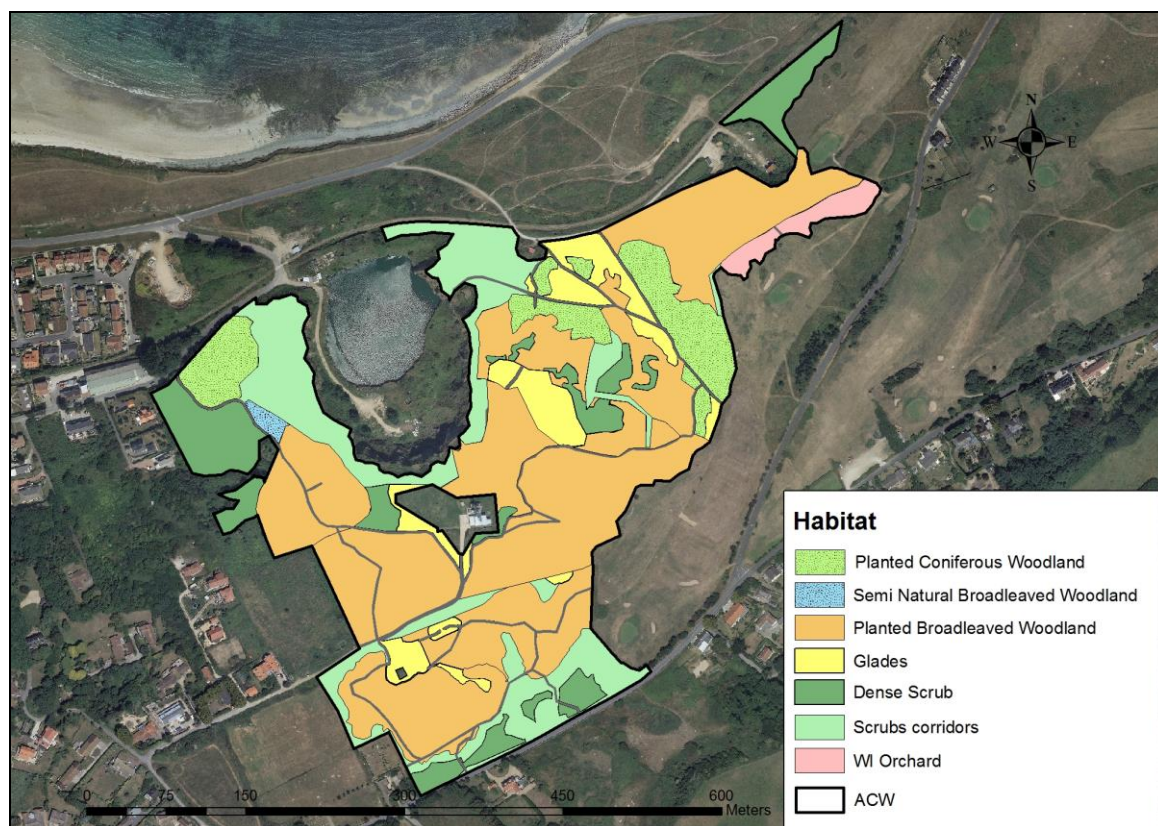


Figure 2. Habitat classification of the site (Gonzalez, 2014)

Floral data was extracted from a Bailiwick of Guernsey Biological Records Centre database, and personal records from on-island botanists (Bonnard, 2010). Already present on site are a variety of woodland understorey species; honeysuckle, three-cornered leek, harts-tongue fern, common male fern etc. In conjunction with the National Vegetation Classification system (Rodwell, 2006), the current species composition of the site can be used to help inform the species of trees which would be most likely to colonise here through natural succession, and so will be most adapted to the environmental conditions at Les Rochers.

3.2.1. WOODLAND.

A high percentage of the wooded area comprises several plantations of non-native species which were carried out by the States in the post-war years.

a. Native trees

Native woods are composed mainly of small trees of great ecological value such as hawthorn and elder scattered along the landscape, and some trees of elm and ash.

As in much of Europe, Dutch elm disease (*Ophiostoma novo-ulmi*) has seriously wiped out a high percentage of mature elms. Close to the footpath from Longis Road, we can find some samples of affected trees.

In 2014, AWT is going to take part in the “Great British Elm Experiment” (Conservation Foundation), planting an elm sapling whose parent trees have shown a resistance to the disease for over 60 years, and with the aim to restore native elms across the British Isles. This tree was planted within the Children’s area (Figure 5).

b. Planted coniferous woodland

There are two main areas of coniferous cover, containing Corsican, maritime and Monterey pines, and some single trees spread throughout the ACW.

Currently these conifers have an important role as they provide shelter for newly planted trees, make up a large proportion of the mature tree cover and also provide good nesting grounds for some bird species. However, conifer plantations have clear disadvantages in comparison with the native Woodland: they are poorer in floral and faunal biodiversity by a light and space restriction in the undergrowth and the acidic nature of the needles reduces the quality of the soil over time. They are also very shallow rooted and thus are susceptible to damage from high winds.

c. Semi natural broadleaved woodland

Alongside the conifer plantation and Rick’s Wood is a stand of sycamore that has been actively spreading. This site, known as the “Greenwood area”, has been the target for coppice management practices in the last year.

d. Native broadleaved planted woodland (AWT Planting)

Between 2010 and 2013, AWT planted approximately 10,000 native deciduous trees and shrubs to improve the quality and size of the ACW with the aim, to create a native broadleaved woodland, extending and linking the existing fragments of native woodlands and natural regeneration's habitats.

Broadleaved trees and shrubs were planted mixed, and a variety of native species were chosen such as oak, hazel, rowan, hawthorn and blackthorn among others (Appendix 2 and 3). The woodland was divided into compartments, and planted in stages over this time (Figure 3).

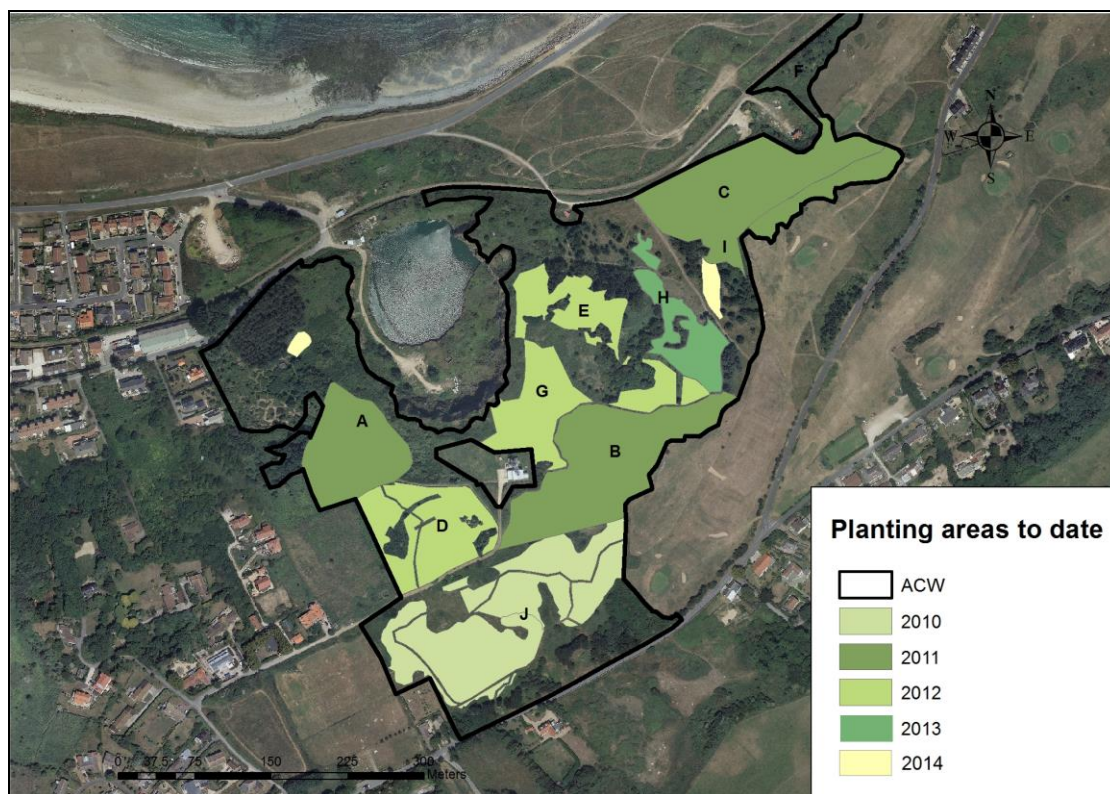


Figure 3. Planting scheme from 2010 to April 2014 (Gonzalez, 2014)

In 2012, a small orchard was planted with funding from the Women’s Institute. It contains a variety of fruiting trees and bushes such as apples, pears and plum.

e. “Rick’s Wood”

This area has been planted and managed by Rick Ball on the States land. It contains a wide variety of species, both native and exotic, and though it does not sit within the ACW site it provide valuable shelter and demonstrates the range and nature of the non-natives trees in the Alderney context.

3.2.2. SCRUB

Scrub communities are a key component of the Woodland. Dense areas and corridors made up of bramble, hawthorn, blackthorn, ivy or gorse, increase the connectivity of the site, improve the diversity of species of the Woodland and provide food and shelter for a variety wildlife. The composition and structure are significant factor influencing the diversity of wildlife.

Scrub biodiversity has been enhanced by planting species such as elder, crab apple, holly and rowan. At the same time, because of increases in some species such as bramble, it has been essential to control them to avoid encroachment in other sites.

3.2.3. HEDGES

Hedges composed predominantly of hawthorn, blackthorn and hazel were planted throughout the site. These hedges will form wind-breaks for slower-growing trees and provide valuable habitat in their own right. Two hedges have been highlighted for their specific importance:

- The hedge that skirts the lip of Battery Quarry acts as an excellent natural barrier, preventing access to the quarry.
- The hedge that borders the Sand Pit has a relevant importance for wildlife, providing a screen to reduce disturbance.

3.2.4. GLADES

There are five areas, throughout the woodland site, containing species-rich grassland which has been maintained by rabbit grazing and trampling (associated with footpaths). Good quality grasslands such as these are a nationally scarce habitat (The Grassland Trust, 2008) and provide a particularly beautiful landscape in spring. Therefore it is imperative that the AWT acknowledges the need for their long-term preservation.

Among the main threats to glades are scrub encroachment and over- shadowing by trees. The glades also require careful and considered management to conserve their floral diversity.

3.3. WILDLIFE

The Community Woodland provides a stronghold for wildlife in particular for birds and insects.

Several surveys and regular transects walks carried out since 2010 by local experts, AWT staff and volunteers have identified numerous species

The ornithological reports (Riley & Atkinson, 2010 and White, L,. 2011) highlighted numerous species of birds using the site. Some of them are known to breed there, and others species are regularly seen in and around the ACW, both hunting or passing over. The development of mature woodland should be beneficial for the majority of these species.

Many different species of moths and butterflies have been recorded as well as bugs, beetles and other insects that like a mixture of woodland and grassland. A summary of the Lepidoptera found on the woodland site (Wedd,D. 2010) highlighted the presence of several noteworthy species such as Large Tortoiseshell and Dark Green Fritillary to name a few.

The ACW also provides a habitat for many of Alderney's small mammals such as bats, mice and rabbits.

The main threats for wildlife are degradation of habitat and disturbance. It is hoped that the ACW Project will eventually provide more suitable habitats for them in medium- long term. On the other hand, potential impacts or risks which could be caused by the on-going maintenance works have been borne in mind, and they will be avoided with proper planning.

3.4. HISTORY AND ARCHAEOLOGY

The landscape of Les Rochers has been vastly influenced by human activity throughout history.

During the 1790's the area was proposed by the Victorians as the location for a large central fortification and a magazine store was built.

For the first part of the 20th century period the northern face of Les Rochers was excavated for diorite, to export from the island, creating Battery Quarry. Remains of much of the infrastructure created to enable the industry, such as the Quarry Gantry, are still present today in the landscape.

During the Second World War this site, designated by the occupying forces as Strongpoint Ho-Hohe, was the location of an anti-aircraft battery which played a key role in the German fortification of the island.

The archaeological potential of Les Rochers was surveyed in January 2011 by States of Guernsey Museum's Archaeologists (De Jersey and Walls, 2011). A copy of the report is attached in Appendix 4. They focussed predominately on the 'huge stones' illustrated in an admiralty map by Captain White in 1824 and again in the Colonel Crease survey from 1883, and which are still present in abundance throughout the site. It has been suggested that these rocks may originate from the north-west, or north of the island, and were moved to Les Rochers by pre-historic man. During the archaeological excavations five test-pits were dug at locations across the site, primarily looking to establish dating evidence in association with the identified 'huge stone' corridors. The results of this work were disappointing as very few finds were made and these associated much more with recent quarrying and World War II history rather than pre- history.

3.5. AMENITY VALUE

3.5.1. Access and footpaths

Les Rochers is situated in what is often referred to as the heart of Alderney. Only ten minutes from the centre of St. Anne, seven minutes from Braye Bay, 12 minutes from Longis Bay and with main roads running to the south and north, it is readily accessible. There are also various access points to the ACW from "Longis Road", "Newtown Road", "the Scramble Tracks" and "the Golf course".

During the last four years, the network of path has been extended almost doubled, as illustrated in figure 5. An additional pedestrian access path from Longis Road has been opened, and in 2013 the "Historic Track" (Figure 4) was uncovered. New pathways enable access to the amenity features of

the Woodland, such as the Observation Platforms, Children's area and the Orchard allowing a full enjoyment of the site.

Maintenance of the tracks and footpaths is carried out by AWT staff and volunteers.



Figure 4. ACW's footpath network (Gonzalez, 2014)

Pedestrian use is already a key feature of the site. Walkers, dog walkers, horse riders and cyclists as well as groups from St. Anne's School and the Alderney Cubs and Scouts are the main users. Vehicular access is primarily from the "Lower Road" to the north and from "Longis Road" from the south, with areas for parking established at several key points where parking space already exists. However access on to Les Rochers by vehicles is discouraged.

3.5.2. Features

The ACW provides an interesting link between our historical and cultural heritage and ecological aspects of our landscape. The site has great potential as an recreational resource but also as an outdoor classroom for history and the natural environment.

To date, the following features have been highlighted as being of particular interest to visitors; most having been refurbished or created by AWT staff and volunteers (Figure 5).

a. Woodland Bunker

A large bunker which lies just south of the Les Rochers track and is a base for events around the woodland. The site provides an area in which training sessions and public events can be held and offers educational opportunities for a wide range of people: schools and children's groups, environmental scientists and anybody who wishes to gain a greater knowledge and understanding of the ACW.

b. Observation Bunker

Its location, on the lip of Battery Quarry, allows enjoyment of a beautiful views over Braye Bay from the observation platform. Inside is a sensitively placed information display about the landscape history and wildlife of Les Rochers.

c. Kommandant's Bunker

Situated close to the Woodland Bunker, the Kommandant's Bunker was one of the control centres during the German occupation. Much of the infrastructure remains, but the site is unsafe for visitors and so access is restricted at present.

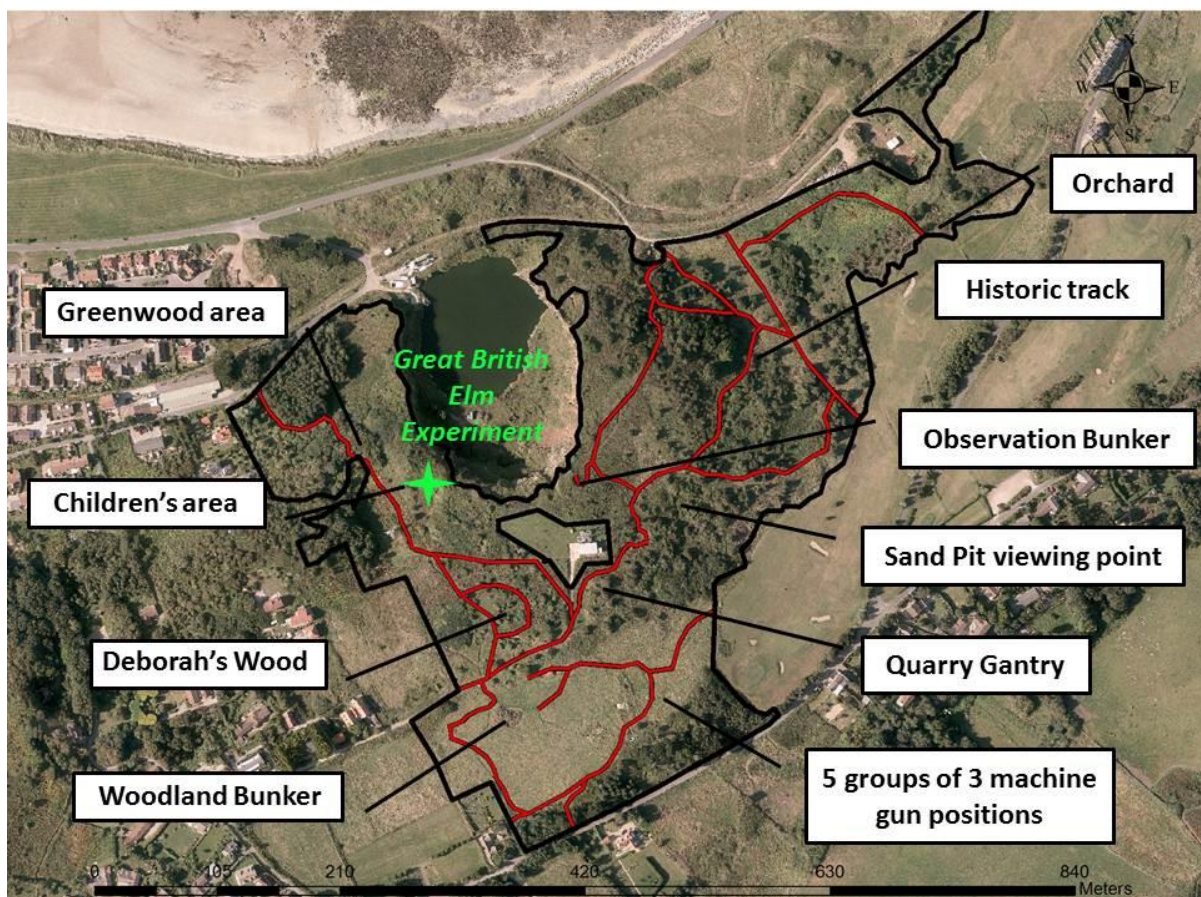


Figure 5. The location of the key features of the ACW (Gonzalez, 2014).

d. Other German fortifications

Bunkers, mortar pits, and machine gun positions furnish the woodland, and many are accessible to visitors.

e. The upper Quarry Gantry base for Battery Quarry

A relic of the industrial landscape. No work other than clearance has been undertaken here to date.

f. The Rocks

Large stones litter the landscape, giving Les Rochers its name. Several archaeological investigations have been conducted on the site as stated above.

g. The Sand Pit

The area referred to as the Sand Pit has been abandoned since long before the Second World War (The Alderney Society, 2011). Dominated by bramble, hawthorn, elder and blackthorn it is one of the best sites for wildlife, in particular birds. A viewing screen is maintained to facilitate wildlife watching and to reduce disturbance.

h. Children's Area

The Children's area is located to the west of Battery Quarry, between the ridges of two quarry spoil mounds. It is intended that this will be a site where children's groups can hold meetings and educational events, WATCH sessions and special activity days, such as during Wildlife Week, Woodland Week, and Arbor Day. Children will also take an active part in the area's management.

To date this area, has been partially develop with clearance and access improvement having taken place and some basic handmade furniture installed.

3.6. UTILITIES SERVICES

Several infrastructures are already established within the ACW. Arquiva Ltd leases an area of approximately 5 ha for telecommunication purposes. AWT needs to maintain undergrowth at a low level to the south of the main telecommunications mast in order to ensure the island's principal link to Jersey is not interrupted, but otherwise the woodland is perfectly compatible with its daily use. There is also an out of use satellite dish to the west of Battery Quarry. In case this needs to be used in the future again, the trees planted to the north of it were selected to be low growing so any signal is not obstructed.

Public utility providers were contacted to determine the locations of underground pipes, cables and equipment which may be affected by tree planting, either by physical damage from the roots, or as obstructions to access for maintenance works.

The States of Alderney Water Board's utilities through Les Rochers are illustrated in figure 6. These pipes are UPVC and as such are flexible and should not be adversely affected by the planting. From discussions with the foreman of the States Water Board it has been concluded that at this time it is not possible to design planting schemes accounting for full vehicle access to the pipes as their exact locations cannot be specified.

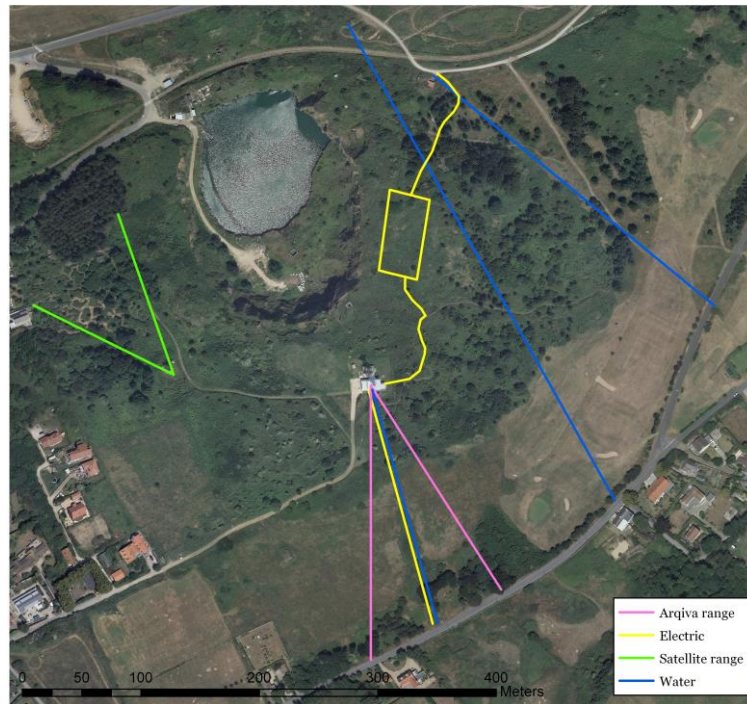


Figure 6. The utilities within the Alderney Community Woodland site (Henney, 2011).

Also illustrated in figure 6 are the locations of the Alderney Electricity cabling. These are bitumen coated electrical PILC cables and buried to a depth of 0.5-0.6 metres. Due to the hazard of digging near these cables, and the necessity of access routes for maintenance work, planting was avoided within 3 metres either side of these cable routes.

4. MANAGEMENT AIMS

The aims are defined in the following three goals, which will guide the long term management of the ACW.

- 1- To create a native broadleaved woodland of high ecological and landscape value, rich in wildlife and accessible to the Community.**
- 2- To develop the educational and recreational value of the ACW through the provision of facilities and opportunities that promote a greater understanding and enjoyment of the natural and cultural wealth of Alderney.**
- 3- To involve the island's Community in the ACW promoting woodland culture and recovering traditional skills, whilst at the same time, increasing the socio-economic value of the woodland as a source of sustainable material for the future.**

5. MANAGEMENT OBJECTIVES

The objectives are steps set up in order to achieve the Management Aims. These will work as measurable objectives by which the progression of work can be monitored.

Aim.1. To create a native broadleaved woodland of high ecological and landscape value, rich in wildlife and accessible to the Community.

- 5.1.1. To maintain and restore scrub habitats.
- 5.1.2. To manage existing non-native woodlands.
 - 5.1.2.1. Replacement over time of conifers with broadleaved native species.
 - 5.1.2.2. Coppicing of the sycamore stand.
- 5.1.3. To enhance native broadleaved woodland
 - 5.1.3.1. Aftercare of the main planted areas.
 - 5.1.3.2. Planning future planting with native species
- 5.1.4. To restore existing glades.
- 5.1.5. To control undesirable species.
- 5.1.6. To safeguard wildlife species in their natural habitat.
- 5.1.7. To collect further ecological information on the site.
- 5.1.8. To preserve notable trees

Aim 2. To develop the educational and recreational value of the ACW through the provision of facilities and opportunities, promote a greater understanding and enjoyment of the natural and cultural wealth of Alderney.

5.2.1. To maintain access and footpath network

5.2.2. To provide recreational and educational facilities and opportunities.

5.2.1.1. Management of the Children's area

5.2.1.2. Observation platforms

5.2.1.3. Viewing point over the sand pit

5.2.1.4. Woodland trails

5.2.1.5. Management of Orchard

5.2.3. To safeguard and incorporate archaeological features into the development of the ACW, conserving our cultural heritage.

Aim 3. To involve the island's community in the ACW through development of a woodland culture, restoring traditional skills and promoting the sustainable use of natural resources, thus increasing the socio-economic value of the woodland as a source of material for the future.

5.3.1. To promote traditional knowledge and skills. Greenwood Project

5.3.2. To involve the local community in the ACW management

5.3.3. To hold regular events to engender a "woodland culture"

5.2.4. To provide memorial features

6. CONSTRAINTS

6.1 Ownership

Site owned by States of Alderney, leased by Arqiva Ltd and Golf Club. Major works must be agreed with the States of Alderney and tenants. This Management Plan has been approved by all three parties and will form the basis of the on-going relationship between them.

6.2 Geography

Poor soil type, invasive species such as bracken and clematis, wind exposure, and maritime conditions are all serious issues for the woodland.

6.3 Finance

Alderney Wildlife Trust is not eligible for most UK funding, and so the woodland project is dependent on finding Channel Islands sponsorship, States of Alderney support and private donations.

6.4 Time

ACW is the third largest site for AWT after the Longis and Vau du Saou reserves and therefore development of the site is may be limited by what resources AWT's has available. This constraint will hopefully over time be negated by the involvement of the community.

7. IMPLEMENTATION

7.1. Maintenance and restoration of scrub habitats.

Scrub is an important feature of the ACW and a key point in our Woodland management. The challenge is to maintain it in a favourable condition whilst ensuring the recreational, cultural and landscape aims of the project.

- a. To control the high-density scrub, mainly bramble, blackthorn, gorse and other competitive species, to keep a balance between this and other habitats, in particular grasslands and planted areas where the height of trees is not yet enough to control the encroachment by themselves.
- b. To prevent scrub's encroachment into historical and amenity features allowing easy access to the site and its areas of natural and cultural interest.
- c. To maintain the corridor of scrub around the lip of Battery Quarry as a natural barrier to prevent access and risk of accident. The most suitable species for this shelter are compact and thorny bushes of native species such as hawthorn and blackthorn.
- d. To identify and preserve the most important key points for wildlife such as a refuges, nesting areas, corridors and food resource to assess the potential and real threats to these key points. Development of a Conservation Strategy for the hedgerows and for scrubs as an important habitat for wildlife and for connection of the different part of the Woodland.
- e. To restore and establish a diversity of scrub, in terms of its composition and structure. Taking into account that there is unlikely to be a seed bank of woodland ground flora, species such as holly, crab apple and other native shrubs will form an important part of the new plantings.

7.2. Management of non-native woodland plantations.

7.2.1. Replacement over time of conifers with broadleaved native species.

During the next few years it is intended to identify and progressively remove conifers in order to encourage the development of the native woodland.

The conifer plantation in the north-east part of the woodland is between two areas, C and I, (see figure above) which has been planted with native trees. To encourage the connectivity of the broadleaved woodland, this area will be thinned, to open up the canopy and to increase the suitable space for planting with native species afterwards.

Several pines located in the middle of glades will be cut down as part of the management undertaken to preserve this habitat.

So far, it is intended to retain the large area of mature pines situated above the woodland entrance off Newtown Road as these will provide shelter to the trees which are planted behind them.

However, due to the age of trees and the plantation's features (closely spaced trees, low diameter/height ratios, etc.) it is necessary to evaluate its long-term survival and what would be the best way to manage it. The abundance of mature trees in the site makes it very suitable for developing silvicultural techniques and woodland management sessions.

Moreover, wherever possible dead wood will be left on site to encourage the important process of wood decomposition and to enhance biodiversity which is associated with this, mainly for birds and insects. Fallen tree trunks and branches are also an excellent windscreen.

7.2.2. Coppicing of the greenwood area.

The management of the greenwood area, using coppicing, is going to continue in the future. The overall effects of coppice woodland in the short term are to improve the resprouting capacity of the trees, promote biodiversity in the understory and add greater natural value. At the same time it means a regular supply of good quality timber for the Greenwood Project (see section 7.12.1. below).

Coppicing will take place during the dormant winter period (from October to March) as new shoots are likely to grow better and to suffer less frost damage than shoots formed after summer

7.3. Enhancement of native broadleaved woodland

Before the commencement of the ACW's project, Native Woodland was composed mainly of scrubs habitats and glades.

The native broadleaved planting was planned with the aim to restore, to extend and to link existing fragments of native woodlands, allowing regeneration of this habitat.

7.3.1. Aftercare of the main planted areas

Appropriate maintenance of the woodland is vital to achieve its success in the long term. Aftercare of the planted areas should include the following tasks:

a. Planted trees monitoring.

Counting number of dead trees and assessment of any potential issues a minimum of twice per year, at the beginning of the spring (review of potential winter damage such as wind, low temperatures, frost, pouring rain, etc.) and at the beginning of autumn (review of potential summer damage such as drought, etc.).

b. Weed Control.

Throughout summer weeds will be removed from inside tree guards to prevent trees from becoming smothered. In autumn dying weeds will be cleared from around tree guards to reduce the risk of them being flattened.

c. Guard removal.

The first planting was undertaken in 2010. When the time comes, the guard should be removed so as not to limit the growth of stem and main branches.

d. Replacement of dead trees.

In areas where the percentage of dead trees is high, it will be necessary to reassess planting strategy, and possibly to replace with new saplings. However, it may be decided to leave gaps in the woodland to reduce thinning effort later in development.

e. Disease and damage.

Trees will be monitored regularly for disease and damage, in the case of specific diseases such as *Chalara fraxinea* in accordance with the agreed Annual Action Programme ((A copy of the report is attached in the Appendix 3)

7.3.2. Planning future plantings with native species

The main planting sessions were carried out between 2010 and 2013. In the upcoming years plantings are expected to be minimal, with focus on linking the different planted areas, inter-planting and replacement of dead trees.

Planting schemes will be outlined each year in the Annual Action Programme according to need and with the core aim of creating continuous woodland in the long term.

Future planting will be planned using native species (Appendix 2) which are more suitable to site and weather conditions, and in accordance with the objectives of this Management Plan. A mixture of species is recommended in order to improve the biodiversity of the Woodland.

7.4. Maintenance and restoration glades

Glades are vulnerable to constant encroachment of trees and scrub, which not only affects the biodiversity of this habitat but also compromises the protection and appreciation of the natural landscape.

Well-managed livestock could be useful in preserving glades by transporting seeds, improving the biodiversity, controlling scrub encroachment and improving the quality of grassland through managed trampling, etc. The potential use of grazing in the ACW will be evaluated as well as the most suitable ways of carrying this out (species, rotation periods, etc.). Mechanical cutting and raking regimes will also be considered.

Any trees or scrub encroaching onto the open grassland will be removed, and trees planted at the margins of these areas must be kept at a minimum distance (10 m) so that they will not shade out the grassland once fully grown.

7.5. Control of undesirable species

The threat to biodiversity caused by undesirable species should be assessed, in particular their effect on the native species. It is necessary to carry out control by digging, pulling, cutting or applying selective herbicides.

Currently, the principal undesirable species in the ACW is common ragwort (*Senecio jacobea*). It grows prolifically in certain parts of the site and is especially abundant in the newly planted areas where the ground has recently been disturbed.

Although ragwort is a native species it is deemed a “mauvaise herbe” because of its danger to livestock if eaten and there is currently an obligation for its removal (“Loi relative aux Mauvaises Herbes 1933” and “The Noxious Weeds Law (Amendment)(Alderney) Ordinance, 2003) Therefore priority action must be taken to avoid an excessive spread of the weed. In 2013 chemical treatment was carried out using an application of glyphosate solution to the plants on hot, still summer days. This was followed by hand control and disposal of dead plants off the site. The outcome was satisfactory, and so its use is recommended to continue it.

Other species are considered undesirable in certain parts of the site and require regular mechanical or manual control. One of these is wild clematis (*Clematis vitalba*) due to its habit of climbing over and eventually smothering other plants.

7.6. Safeguard wildlife species and their habitats

One of the primary threats to the survival of wildlife is habitat loss due to destruction, fragmentation or degradation of key habitats. Reduction in woodland management has resulted in a decline in woodland wildlife (The Wildlife Trusts, 2012) thus it is essential to continue an active management of our ACW to protect our precious wildlife. Management should therefore include the following:

- a. Creation of new habitats and corridors for wildlife which will act as a food resource and refuge: caring for new trees, improving the biodiversity with new mixed broadleaved planting, conserving relevant scrub areas and hedgerow, protecting glades, etc.
- b. The woodland works will be carried out outside the bird nesting season (period April to July) so as to avoid disturbance. If it is necessary to carry out work during this period measures must to be taken to avoid any potential damage.
- c. Creation of refuges through standing dead wood, making bird boxes, making log piles for the insects (Ladybird), etc.
- d. Conservation of mature tree as nesting points for birdlife.
- e. The most important key points for wildlife in the ACW will be identified and preserved such as a shelter, nesting area, wildlife corridor or food resource. The potential and real threats to these key points will be assessed and a Conservation Strategy developed.

7.7. Preservation of notable trees

Trees that are notable for their botanical rarity, sheer size, age, position in the landscape, ecological value or cultural interest will be identified and mapped, and assessment carried out as to whether their condition requires, remedial work to maintain and restore them.

7.8. Collection of further ecological information

The ACW is included in a number of different wildlife surveys which are currently carried out around the island by AWT staff and volunteers: the UK Butterfly Monitoring Scheme (UKBMS), the National Bat Monitoring Programme (BCT) and the Breeding Bird survey (BTO). Data is collected annually to monitor changes in the abundance of species, using well-established data collection and analysis methodologies.

Moreover, the ACW was also included in the island-wide surveys of Ash trees initially undertaken by the States Agricultural team and the AWT in 2012, in order to check for signs of Ash Dieback (*Chalara fraxinea*), a fatal fungal infection of European ash.

These surveys will continue to be carried out in the coming years and may be extended to cover another taxa (e.g. flora, invertebrates) , and also ongoing assessment of the site will include and evaluation of current trends, threats and management impacts. These assessments will be undertaken through fixed repetitive survey carried out by staff and volunteers, as well as original work undertaken by staff, or where available, research students from appropriate institutions.

7.9. Maintenance of footpath network

The ACW is a public open space and thus in order to ensure it fulfils an amenity role good access is vital.

Footpaths should be maintained in order to allow access throughout the year and a full enjoyment of the Woodland and as part of the existing Island footpath network.

The ACW Annual Programme of work includes cutting scrub, to prevent its encroachment and mowing grass footpath, using a tractor or in less accessible sites by hand, to enable continued access. Most footpaths on the site are rough and with little formal construction but this is part of the Woodland's charm.

Other areas of work will include maintaining steps in good conditions actions (dealing with slumping and erosion processes etc.) and elimination of trees or stumps.

7.10. Provision of recreational and educational facilities and opportunities.

A key component of our Community Woodland is to allow an easy enjoyment of the site, and at the same time to promote a greater knowledge and understanding of the Woodland.

7.10.1. Children's area management

The Children's area has been developed to enable local and visiting families, schools and youth groups to carry out educational activities and recreational events. To date most of these activities have been undertaken in a part of the woodland known as "Deborah's Wood".

During 2014 it is planned to develop a small sheltered enclave which lies in the centre of Milly's wood, and it is located close to the area designated for green wood turning. This will provide an opportunity for children and general public to gain a better understanding of our Community Woodland and its sustainable use. Some actions that have been carried out to date, are the creation of refuges for wildlife and the erection of hand crafted furniture and materials from the green wood turning (Arbor Day 2014).

New opportunities to enhance the educational interest of the site, using feedback from the public and new resources, such as games, furniture, displays, thematic trails, will also be sought.

7.10.2. Woodland trail

Les Rochers contains an expanse of important historical and archaeological remnants of human habitation which enrich the natural landscape of the ACW. The site is, in fact, the most conspicuous example of a site in Alderney where natural environment and built heritage come together to enhance the visitor experience.

To date a number of historic features have been restored and refurbished, and where possible, sensitively placed information erected.

During 2014, a Woodland trail will be created, incorporating some of the most significant sites of historic and wildlife interest, allowing residents and visitors to learn more of the Community Woodland while enjoying the historic and natural environment. Working together with the Alderney Society, key sites will be identified and interesting facts about each one collated. So far 15 sites have been selected for inclusion:

- | | |
|-----|---|
| 1 | Woodland Bunker |
| 2 | Observation Bunker |
| 3-8 | Other German fortifications: bunkers, mortar pits, machine gun position |
| 9 | The upper quarry gantry based for Battery Quarry |
| 10 | The Sand Pit |
| 11 | Historic track |
| 12 | Greenwood area |
| 13 | Orchard |
| 14 | Children's area |
| 15 | Deborah's Wood |

Sensitively placed information signs and a large site map of the strategic points along the trail will be erected in conjunction with the Living Islands Project.

It is very important to involve to the Community in the development of the project so feedback from stakeholders and the general public will be collected and taken into account prior to any signage being erected.

7.10.3. Orchard

The state of the fruit trees will be periodically monitored to know how they are adapting to the particular environment of Alderney, and tree care will be carried out every year.

Annual tree mulching and scrub encroachment control are the most important actions within the period covered by this plan. Subsequently other work such as tree pruning, fruit thinning and eventually fruit harvesting will be necessary.

In order to enhance the amenity value of the site other actions will be considered such as the provision of greenwood benches and a circular path.

7.11. Conservation of the archaeological and historic features of our cultural heritage.

During 2013 management of some of the archaeological features and historic environment of the site was carried out. The historical key points were identified and their merit as an educational resource evaluated.

These historic features are vulnerable to constant encroachment by scrubs and weeds thus it is necessary to carry out regular maintenance work to ensure that the visitor's safe access to and enjoyment of the sites are not compromised

The primary objectives are:

- a. Maintenance work will continue to ensure the safe access and enjoyment of the sites. Bunkers will be kept clear of soil and vegetation, and steps made safe for visitors.
- b. The best use of the existing features will be assessed, giving priority to those which are included within the proposed Woodland trail. The increased use of the Alderney's historical heritage as an educational resource is a key aim.
- c. Provision of interpretation (displays, signage, etc.) will be reviewed to ensure that they are kept in good conditions and updated.
- d. The possibility to develop an Educational Resource Centre in the ACW. Woodland Bunker could be considered due to its valuable features and location.

7.12. Promotion of traditional knowledge and skills

7.12.1. Development of the Greenwood project

The Greenwood Project started during 2013, will be an important part of the Community Woodland's Development. It is located in a part of the woodland dominated by a large stand of sycamore of around 121 m².

Led by local based professional coppice worker, Paddy Campbell, the aim is to use a traditional woodland management technique, known as coppicing, to rehabilitate a neglected section of the Woodland of low ecological value whilst at the same time supporting local and traditional sustainable uses for the harvested wood.

In a first phase, coppicing has involved the thinning of sycamores in both the understory and canopy layers to let more light down to the woodland floor thus improving the production of new shoots from the coppiced trees and also biodiversity within the site. Some of the largest trees and mature coppice trees have been retained for their ecological and scenic value, whilst scrub, mainly ivy, was cleared. As well as, a copse of hazel was planted in an area adjoining to the sycamore stand (previously dominated by blackthorn), with the objective to enhance a native coppice woodland in the ACW. It was chosen hazel due to its efficient re-sprouting capacity and its valuable timber.

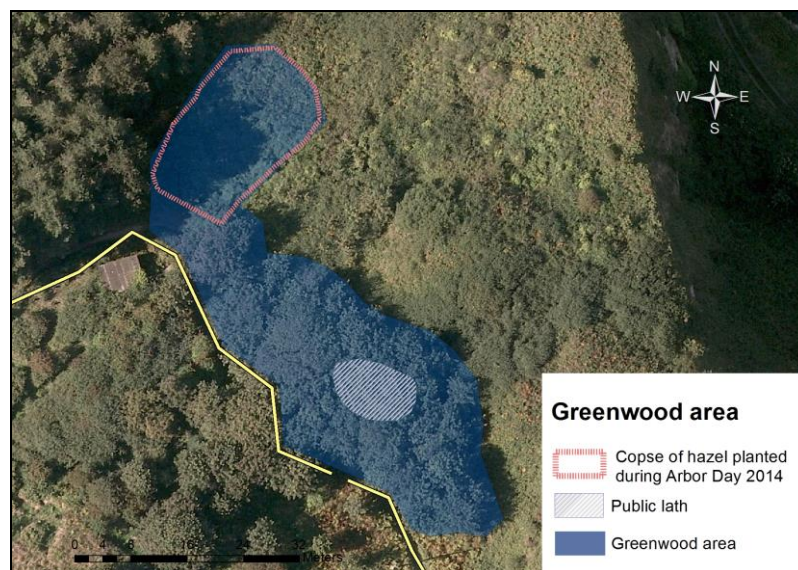


Figure 7. Greenwood area

In its second phase, the site will act as a Community focal point for skills training on traditional management techniques and greenwood craft skills.

The Greenwood project's aims include community involvement, sustainable use of the ACW, recovery of ancient knowledge and the future development of quality products. It is intended that a wide range of greenwood products will be developed from benches, chairs or screens to use within the Community Woodland, to door-knobs, dippers, etc. to be on sale through the Wildlife Shop as another source of income.

7.12.2. Promotion of other technical skills training.

The educational potential of the Community Woodland will be promoted with the encouragement of training opportunities for new skills and knowledge, such as Dry Stone Walling sessions, training for chainsaw use, machinery and craft techniques, etc.

7.13. Involvement of the local community in the ACW management

7.13.1. To enhance the “Community approach”

Our “Community approach” is firmly based on working with local people to recognize and address issues affecting the ACW and its management.

AWT offers and encourages opportunities for volunteers to get involved in practical conservation work, wildlife monitoring and in decision making.

7.13.2. Holding regular events to provide a woodland culture.

ACW has been the perfect setting for many educational and recreational events, such as Arbor Day, Woodland Week and Wildlife Week activities, and it should continue in the coming years.

7.13.3. Sharing information about the site

Information about ACW and its wildlife, history, practical work, educational activities, recreational events and ways of becoming involved will be provided by:

- Regular updates in the local press.
- Contributing articles for newsletter, website and social media updates and other local publications.
- Providing an Annual Action Programme of works, including public consultation where appropriate.
- Walks, talks, displays and events (esp. Arbor Day and Woodland Week).
- Creating leaflets, posters and notice-boards.
- Day-to-day contact with AWT staff.

7.13.4. To care for people’s health, safety and welfare.

AWT will take all measures necessary to ensure safety on the site and its facilities by:

- Regularly inspecting buildings, paths, steps, etc.
- Reporting incidents, accidents or dangerous occurrences.
- Taking action to resolve problems.
- Giving public notice and providing recommendations.

Moreover, it will implement Risk Assessments and safe systems of work for any actions or activities that are undertaken on the site and will provide suitable protective equipment to staff and volunteers.

7.14. Memorial features

The Woodland contains several memorial features: a hazel grove was planted by Alderney Horticultural Society in 2011 in memory of one of their members, Hazel Colin. Milly's Wood was established in 2012 as a memorial to Colin William's wife Milly, and on Arbor Day 2014 a hazel coppice was planted in memory of Peter Arnold. It is expected that further memorials will be created, which may be trees or other features.

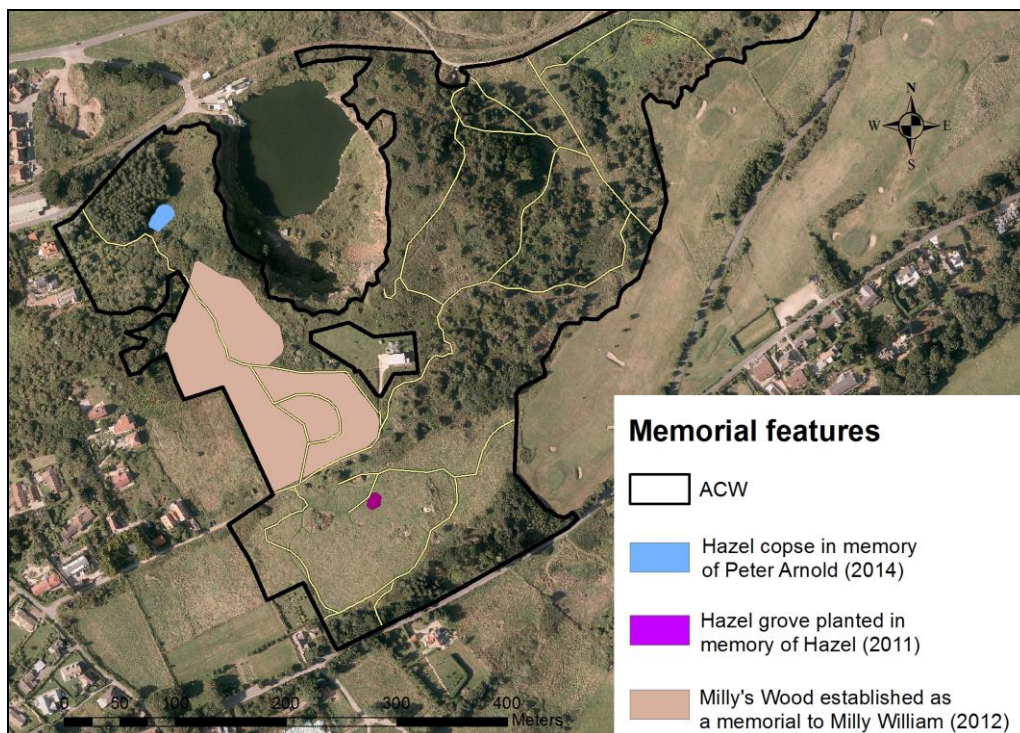


Figure 8. Memorial features (Gonzalez, 2014)

8. MONITORING THE EFFECTS OF MANAGEMENT

A key aspect of ensuring that we achieve our aims and that our plans and work activities are effective, is by following a programme of monitoring.

So far, AWT has carried out historical and ecological surveys on the site and has collected varied information including maps, photographs, and biological data. Consultants, local experts, the States, AWT's staff and volunteers have greatly contributed to this.

Over the next 5 years, a programme of monitoring will be developed which will focus on:

- Identification of features that should be monitored.
- Actions or programmes of research which should be undertaken: surveys, census, inventories.
- Defining a range of criteria and indicators of success to help assess our performance in the short- and medium term, and to achieve our aims in the long term.

9. MANAGEMENT PLAN REVIEW

This Management Plan covers the five year, period from January 2014 to December 2018.

10. REFERENCES

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Websites:

www.alderneywildlifetrust.org

11. APPENDICES

APPENDIX 1- INVOLVED PARTIES

Alderney 41 Club	Alderney Wildlife Trust
Alderney Athletics Club	Alderney Women's Institute
Alderney Beavers	Arqiva Ltd
Alderney Brownies	Doug Hamon Architects
Alderney Community Sports Centre	Featherstone Leach
Alderney Cubs	Guernsey Conservation Volunteers
Alderney Guides	Kiln Farm Dairy
Alderney Golf Club	La Société Guernesiaise
Alderney Gravel Co. t/a Blanchard Building Merchants	London House
Alderney Honey Bee Challenge	Ormer House School
Alderney Horticultural Society	St. Anne's School
Alderney Rainbows	States of Alderney
Alderney Rotary Club	States of Guernsey Museum Services
Alderney Scouts	The Alderney Society
Alderney Shipping	Ronez Ltd

APPENDIX 2 – ALDERNEY NATIVE TREE LIST

A native species refers to those species which live naturally in an area since last Ice Age, without any human intervention.

The following trees and shrub species were present on Alderney from 3780 – 1385 BP, as identified from pollen and macro fossil analysis of samples from the Longis Area (Campbell, 2000). In some cases species were just identified by genus in the pollen samples.

<i>Alnus glutinosa</i>	Common Alder
<i>Betula sp.</i>	Birch
<i>Carpinus betulus</i>	Hornbeam
<i>Corylus avellana</i>	Common Hazel
<i>Fagus sylvatica</i>	Common Beech
<i>Fraxinus excelsior</i>	Common Ash
<i>Ilex aquifolium</i>	Holly
<i>Pinus sylvestris</i>	Scots Pine
<i>Quercus sp.</i>	Oak
<i>Salix sp.</i>	Willow
<i>Sambucus nigra</i>	Elder
<i>Tilia sp.</i>	Lime
<i>Ulmus sp.</i>	Elm
<i>Cornus sanguinea</i>	Common Dogwood
<i>Frangula alnus</i>	Alder Buckthorn
<i>Viburnum sp.</i>	
<i>Sorbus sp.</i>	

APPENDIX 3- ACW PLANTED SPECIES LIST

Planting schemes were properly planned to ensure an ecological, social and economic development of the woodland resource.

Tree selection was one the most important decisions and it was undertaken taking into account the following criteria:

- Create a native woodland.
- Improve the biodiversity in the ACW, i.e. replace species of poor ecological value or non-native trees.
- Ensure species chosen are highly suited to the particular conditions of the island to allow best survival rates. Screen and match species to soils, pH and depth, and taking in account the weather conditions such as wind exposure.
- Ensure species selection does not conflict with existing habitats and wildlife, and public interests.

Ash ¹	<i>Fraxinus excelsior</i>
Downy Birch ²	<i>Betula pubescens</i>
Silver Birch ²	<i>Betula pendula</i>
Holly ¹	<i>Ilex aquifolium</i>
Hornbeam ¹	<i>Carpinus betulus</i>
Small-leaved Lime ²	<i>Tilia cordata</i>
Common Oak ²	<i>Quercus robur</i>
Evergreen Oak ²	<i>Quercus ilex</i>
Hazel ¹	<i>Corylus avellana</i>
Hawthorn ⁴	<i>Crataegus monogyna</i>
Blackthorn ⁴	<i>Prunus spinosa</i>
Rowan ²	<i>Sorbus acuparia</i>
Guelder rose ²	<i>Viburnum opalus</i>
Crab apple ³	<i>Malus pumila</i>
Field maple ³	<i>Acer campestre</i>

¹ Alderney native tree species (see Appendix 2).

² Species included in the Alderney's native species just by genus. In these cases, the species were chosen on account of them being native in the Channel Islands, the UK and parts of Europe.

³ Species included in the native trees list of the Channel Islands and therefore are adapted to the weather and soil conditions of the island.

⁴ Species that were included in the planting scheme in addition to native species, due to their high wildlife value and the fact that they are native in the UK.

APPENDIX 4- ACW CONSULTATION FEEDBACK APRIL 2014

From 7th April and 4th May the AWT has been held a public consultation so residents, organizations and anyone else who is interested in the ACW, have had the opportunity to ask questions and provide input into the development of the site.

Aims of the consultation

- To promote the "Community approach". Share information and local knowledge.
- To inform and keep updated all interested parties.
- To finalise the 2014-2018 Management Plan with the information collected taken into account.

Opportunities for consultation

- The Draft Plan was available for reference in various ways: a copy online on the AWT website www.alderneywildlife.org/reserves/alderney-community-woodland, and also a paper copy in the following places, Island Hall, the Alderney Museum, the Alderney Library, the Visitor Information Centre and the Alderney Wildlife Trust Office.
- Posters with details of method of how to give feedback and how to get in touch were placed on local notice boards, public buildings and shops.
- Social media and website.
- A Public Consultation Open Day was held on 23th April in the Alderney Museum. Here additional information, displays and members of staff were available to assist anyone wanting more information on the project or wanting to discuss the proposal face-to face with Trust staff.

Results from the ACW Management Plan Consultation

Most of the comments and questions were made during the Open Day . AWT staff is really grateful for the support provided.

Name	Comment	Response
A. Mendham G. Mendham	Enhance the Orchard planted in 2010.	The aim is to improve the quality of the Orchard to allow a full enjoyment of the area. Scrub clearances will be necessary to avoid its encroachment, further fruit tree care (e.g. mulching) should be taken place and the possibility of placing some greenwood furniture in the area will be considered.
A. Davidson	Replace the sycamore stand with native species.	The sycamore stand will be managed by coppicing. The objective is to control the sycamore's resprouting, improving the biodiversity (enhancing other native species), reviving traditional knowledge and creating greenwood products. During Arbor Day 2014, a copse of hazel was planted (a native species with a good reshooting capacity) close to the sycamore stand, , with the aim to create a native coppice woodland for the future.

D. Wedd	Stop planting trees	The planting scheme for next years is expected to be minimal with focus on linking the planted areas and inter-planting. Aftercare of planted trees will be the main priority.
	Plant flower species for insects (moths, butterflies)	Seasonal grazing, avoiding later spring and summer, is one of the most effective ways to improve wild flower biodiversity, and therefore insects and their predators, and this is also that will be considered. Another possibility would be to plant wild flowers, collecting seeds of native flowers of Alderney during spring, and planting them where necessary afterwards.
G. LeMarchant D. LeMarchant	To preserve notable trees in the Island	One objective of the Management Plan is to identify and protect those trees that have special characteristics (size, age, etc.) . To extend this monitoring to the rest of the island will be very interesting, and would need careful consideration because many notable trees are in private gardens.
J. Banister	Discrete signage (less is more)	The Woodland trail aims to encourage a greater knowledge of the ACW. The most relevant features of the woodland will be identified and information will be provided. Signs will completely blend into the surroundings, becoming another part of the landscape.
D.Hughes	More details of the memorial features located in the ACW.	The final document will include a map with the location of memorial features . All the memorial features are recorded on the Alderney Record Centre as part of the ACW as well.
Anonymous	To control motorbike traffic	Access to all vehicles is restricted by agreement with AWT, SoA and ACW tenants, unless prior permission has been given, or there is good reason (i.e. for work or emergency).
G. Hempel	Future damages on bunkers caused by the roots of planted trees.	The state of conservation of the archaeological heritage is periodically monitored. If damage related with planted trees is detected we will work to solve it, through measures such as transplanting the tree to another site, cutting the branches that are affecting the bunkers, etc.
	To carry out fungi surveys	The extension of surveys to other taxa (see chapter 7.8. <i>Collection of further ecological information on the site</i>) will be considered. It would be interesting to include Fungi in these future surveys provided there an expert capable of doing this is available.

APPENDIX 5- ANNUAL ACTION PROGRAMME 2014**ALDERNEY COMMUNITY WOODLAND****ANNUAL ACTION PROGRAMME 2014****Henderson, P. & Gonzalez, C. (2013)****Introduction**

Alderney's diverse historic uses have created a cultural landscape rich in wildlife, where woodland of all types, broadleaved, mixed and conifers, grasslands, scrub and built heritage form a part of the Community Woodland.

The AWT's Project aims to create a large, centralised woodland habitat with native broadleaved species accessible to the island community, offering a new perspective of island life through Alderney's cultural and natural environment.



Figure 1. Alderney Community Woodland (green)

Background

The Annual Action Programme has been written to respond to the continuing needs of the Community Woodland and the management requirements during the coming year.

According to the Alderney Community Woodland Development Plan 2011-2014 (see Appendix 1), the actions are focussed within three core aims: wildlife, amenity and resource.

A wooden backbone

The Woodland provides a stronghold for wildlife, bridging the gaps between existing habitats and helping to conserve our island's natural resources for future generations.

A heart for our community

It offers a focal point for the island's residents and visitors enabling their enjoyment of the natural and cultural wealth of Alderney.

The sinew that sustains our island

The woodland helps Alderney preserve and develop its natural assets in a renewable way to make our island a more sustainable place, and it offers us the opportunity to recover and sustain traditional knowledge about woodland uses.

Aim and objectives

Completion of the Development Plan 2011-2014:

- Children's Area
- Woodland Trail
- Management Plan 2014-2017

Ongoing management:

- Access and maintenance of amenity features
- Management of the main planted areas
- Aftercare of planted trees
- Footpath maintenance
- Greenwood project
- Ragwort control
- Ongoing planting & development
- Management of glades

Work programme

Children's Area

The Children's Area lies in the centre of Milly's Wood, in a small sheltered enclave which has already been partially developed. The ground surface has been levelled and a hazel hedge planted, but the path to the site and central features need to be created.

The following work is to be carried out before opening in Wildlife Week (24th-29th May) and will be the focal point of this year's Arbor Day (22nd February):

- Vegetation to be cleared from the access path and central area **Jan-April**
- Perhaps further levelling of the access path using a bulldozer **Jan-April**
- Liaise with children's groups to agree on a layout that is both practical and engaging and that links to "Deborah's Wood" and the sycamore stand **Feb-May**
- Possibly plant trees and provide a seating area **Feb-May**

Woodland Trail

The woodland site contains a wealth of historic features and varied habitat for wildlife (the most conspicuous of which are WWII Bunkers, and birds and butterflies). It is perhaps the best example of a site in Alderney where natural environment and built heritage come together to enhance the visitor experience; something which will only increase as the woodland grows.

A trail is to be determined, incorporating sites of historic and wildlife interest, and which can be walked without a leaflet. A site map should be created and information points/marker stones established along the trail, in line with *Living Islands* interpretation for other sites.

The following work is to be carried out together with *Living Islands* before opening in August (10th – 28th):

- Key sites on the trail to be identified, and interesting facts about each one collected (e.g. Woodland and Observation Bunkers, mortar pits, historic track, gantry, sand pit, trees) **Jan-Feb.**
- Information signs and a large site map of the strategic points to be erected along the trail to allow the community to enjoy the historic and natural surroundings. Before Wildlife Week **March- May.**
- Feedback to be collected and the Woodland Trail to be opened **Aug.**

Management Plan 2014-17

The initial plan for the woodland, The Development Plan, comes to the end of its tenure in 2014. A Management Plan will be written to review, update and discuss the proposed development of the woodland over the next four years.

The following work is to be carried out:

- Draft copy to be completed and presented to the General Services Committee (GSC) **Feb.**
- Review of the document by the GSC **Mar.**
- Four week Public consultation followed by re-write period **Mar- Apr.**
- Final document to be approved by GSC **May.**
- Document to be published **May-June.**

Access, Maintenance and Management of Amenity Features

The woodland contains two significant bunkers orientated towards education, events, and visitor enjoyment of Les Rochers. It also boasts pristine mortar pits, sections of trench, the foundations of a Victorian gantry, and Milly's Wood. Access to all of these sites must be maintained, and where necessary improved (mortar pit). A small amount of work is needed in the Observation Bunker, and the display boards in the Woodland Bunker need to be replaced.

The section of wall at the scramble track end of the woodland should continue to be restored with help from stone mason, Andy Black, as part of the development of skills sessions in the woodland. In addition to this, the sycamore stand in Milly's Wood should be managed as a coppice area for wood-working, with local craftsman Paddy Campbell taking the lead in the development of this site.

The following work is to be carried out from **Feb to Dec** (avoiding breeding season from April to end-June) :

- Woodland Bunker – refurbishment of wall displays and repair of electrics
- Observation Bunker – Perspex windows to be re-fitted and development of the smaller room (the best suggestion so far has been to turn it into an exhibition room of archaeological finds from the site – could link to Alderney Society and museum)
- Access to smaller historic features to be improved
- Regular skills classes to be organised and periodic events held (inc. Arbor Day 22nd Feb)

Management of the main planted areas

Coming into 2014 the broad planting scheme for the woodland has been met, with the exception of planting in zones F (deemed unsuitable to provide sufficient habitat) and I.

During the first phase of selective conifer thinning, it has emerged possible to more closely connect two of the planting zones (H and I) through the removal of a small number of conifers. These conifers lie outside of the main mature conifer belt, and their removal is unlikely to impact the aesthetic value of the site. It is thought that close to 100 native saplings could be planted following their removal, eventually forming a connecting corridor between zones H and I.

The following work is to be carried out before tree planting in Woodland Week (22nd-29th Nov):

- Permission sought for small-scale removal of conifers from the B&DCC **Jan-Feb**.
- Removal and processing of the conifers (including transportation from site, stock piling at Essex Farm and specific harvesting to create benches, etc.) **Jan-March or Oct-Nov** (avoiding breeding season).
- Ground preparation using the tractor and flail **Feb-March or Oct-Nov**.
- Planting (zone I; connecting I to H; inter-planting) **Feb-March or Oct-Nov**.



Figure 2. Illustrating the areas that have been planted to date (blue)

Aftercare of Planted Trees

After planting it is necessary to prevent saplings being smothered by grass, bramble, wild clematis etc. and so tree guards are to be weeded and cleared throughout the woodland. Guards on dead trees should also be removed and collected, then stored in the Woodland Bunker.

The bulk of this work in 2013 was carried out from September to November, though any “spare” volunteers sessions in summer can be used to make a start on this. It is also worth bearing in mind that September/October is the best time to undertake reed-bed management, so this will have to be balanced with the growing task of aftercare of planted trees.

Surveying ash trees for signs of ash dieback is a spring/summer task, and was not formally undertaken in 2013; casual observations were made during tree guard weeding and nine samples sent for analysis to Guernsey. It may be worth trying to organise an island-wide survey of ash trees with the State’s Agricultural team in 2014.

The following work is to be carried out:

- Clearing of grass, bramble, wild clematis, etc. from inside and directly outside of tree guards **May-Nov.**
- Clearing of bracken from around tree guards to prevent saplings being crushed **Oct-Nov.**
- Survey of ash trees for symptoms of ash dieback **April- Sept.**

Footpath Maintenance

The footpaths throughout the ACW site should be maintained as part of the wider footpath network. The majority of these can be cut by tractor and in less accessible sites by hand.

Minor maintenance is required at the bottom section of the new historic track (bulldozer – possibly also required on the steep section of path between the Observation Bunker and conifers)

The new footpath from Longis Road may need some attention, including the removal of tree stumps, and maintenance of steps.

The maintenance of the sections of path replaced by the new historic track will be progressively reduced.

Ideally a way needs to be found to link the woodland path network with the existing Island footpath network to encourage and improve access to the woodland.

These works are to be carried out between **Feb and March** and **Jul to Dec** (avoiding breeding season from April to end-June).

Greenwood project

Last Woodland Week a Greenwood project started up as a part of woodland management strategy to make best use of the Community Woodland and it is expected to continue in the coming years.

The aim is to use a traditional woodland management technique, known as coppicing, to improve the condition of our Community Woodland, to conserve habitats in which wildlife can thrive and to provide quality materials to support local and traditional uses.

The coppicing will involve cutting predominately sycamore, although other species such as ash, hornbeam or hazel could be considered given their efficient re-sprouting capacity. It is intended that this work will commence as of January 2014.

The Greenwood area is located in a part of the woodland dominated by sycamore and close to a main road, allowing easy access to residents and visitors and a full enjoyment of the area.

More detail of the proposed project will be reflected in the Management Plan which will be presented in the coming year.

Ragwort Control

Ragwort grows prolifically in certain parts of the ACW, and is likely to be especially abundant in recently cleared/planted areas. It was controlled largely through the use of chemical in 2013, with a glyphosate solution being applied to the plants on hot, still days in summer, and followed by hand control. It is recommended that this method be continued in 2014. **May-July**

Management of Glades

There are two significant areas of grassland in the woodland, and both should be managed to halt the succession of bramble and scrub therein. Research must be undertaken as to the best methods to use (grazing/cutting). Further encroachment of conifers should also be monitored/controlled. **Feb-Nov** (avoiding breeding season from April to end-June).

Task	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Conifer thinning												
Tree planting												
Children's area												
Woodland trail												
Aftercare of planted trees												
Survey ash trees												
Ragwort control												
Management Plan												
Footpath maintenance												
Refurbishment of Bunkers												
Amenity feature maintenance												
Greenwood Project												
Glades management												
Key events												

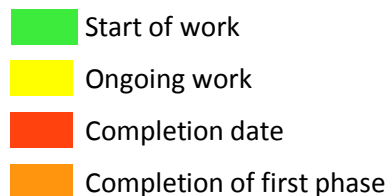


Figure 3. A GANTT Chart outlining the suggested timescale for the development of the woodland and its features for 2014.

APPENDIX 6- EXCAVATION AT LES ROCHES REPORT 2011

Excavations at Les Rochers, Alderney, 2011

Philip de Jersey

Introduction

This short report describes the results of five small trenches excavated at Les Rochers, Alderney, between 20-26 August 2011. The trenches were dug as the result of discussion with the Alderney Wildlife Trust, primarily in an attempt to answer two related questions: would the Trust's Community Woodland scheme, and in particular the planting of many hundreds of trees, be harmful to archaeology in the area; and what evidence could be found for that archaeology, and in particular any prehistoric remains?

Some further background to the work is necessary, not least because the nature of the Rochers site is, to say the least, somewhat controversial. In a recent article in the *Alderney Society Bulletin*, Royston Raymond has argued that many of the boulders which are scattered around the site, or were formerly on the site, must have been brought there by human agency during the late Neolithic period (Raymond 2010-11, 74). His evidence for this is partly geological, and partly based on historical records. In the same journal, Dr Trevor Davenport has considered some aspects of the geological evidence. He thinks it 'probable' that the rocks are diorite (2010-11, 82), and thus of the same geology as the underlying rock type, and thus it is possible that some of the boulders have formed *in situ*, as the result of exfoliation weathering of the bedrock. This, incidentally, is the view of Dr John Renouf (pers. comm.), who has been advising archaeologists in the Bailiwicks of Guernsey and Jersey about their geology for several decades. Davenport, however, queries whether all of the boulders on the Rochers can have developed in this way, particularly the larger, angular blocks (2010-11, 86), and thus leaves open the possibility that some of the rocks have been brought in by human hands.

The historical evidence is also open to debate. Raymond cites various eighteenth and nineteenth century sources which mention (for example) 'a large number of boulders' (Jacob, 1830), or speculate about their origins: 'These Stones are therefore certainly strangers to the place where they lay...' (Martin, 1770; both references quoted by Raymond 2010-11, 69, 70). On Captain Martin White's survey of 1824 there are 'Huge Stones' marked on the northern slopes of the Rochers, represented on the chart as about a dozen specks scattered irregularly across the area. There is no indication that these stones were in alignment, and indeed their representation on the chart is arguably very stylised.

Raymond makes particular use of the 1883 survey by Colonel A.R.V. Crease, who marks out what Raymond interprets as 'three definite alignments in addition to other groupings of rocks...', and another survey by Crease, of 1880 – now apparently mislaid – which shows 'one particular set of alignments, presumably the one to the east of the magazines, which specifically showed approximately 170 rocks, of various sizes, set in three rows aligned east to west.'

The present writer has made no particular secret of his scepticism concerning the reports of 'alignments' at Les Rochers. What seems extraordinary to my mind is that none of the antiquarian visitors of the nineteenth century – notably members of the Lukis family – described the stones in this way. Indeed F.C. Lukis (1847, 4-5), went so far as to say that

Les Rochers, an elevated spot in the centre of the island, mentioned by Jacob in his *Annals of the Norman Isles*, and supposed by him to be druidical, possesses nothing in common with such structures; they are large irregular blocks of stone which lie scattered about *on their natural bed* [my emphasis].

One of F.C. Lukis's sons, John, excavated a tumulus at Les Rochers in 1838, rather unhelpfully describing it simply as 'on the left hand and to the eastward' (Kendrick 1928, 238). He visited again in 1846 and supplied most of the information which his father published in the following year. In the following decade, F.C. Lukis's youngest son, Francis du Bois Lukis, stayed on the island for several weeks in 1853 and added considerably to the information previously obtained. None of these records, now held in the Lukis Archive in Guernsey Museum, make any mention of 'great stones' at Les Rochers; the brief excavation of the tumulus by John Lukis, somewhere in this general area, appears to be the only significant feature recorded by the Lukis family at Les Rochers.

If there had been significant megalithic structures at Les Rochers surviving into the post-medieval period, then it is difficult to believe that the Lukis family would not have heard about them, or recorded them in some form or other. Absence of evidence does not prove that they never existed, but as circumstantial evidence the lack of *any* mention by Lukis and other nineteenth century antiquarians is striking. Even if they had existed in 1824, at the time of White's survey, but had been destroyed before the Lukis family arrived on the island, it is difficult to believe that F.C. Lukis or John Lukis would not have learnt about these recently-destroyed stones. It is also clearly difficult, if not impossible, to reconcile this apparent absence of alignments in the 1840s/50s with Crease's maps of the 1880s which – depending on how one interprets the rows of dots – *might* show alignments. It seems unlikely, to put it mildly, that alignments were created in the intervening few decades.

The excavations of 2011

Les Rochers covers a large area of central Alderney and it was clearly not possible to investigate more than a very small proportion of the site, given the time and resources available. In the absence of any preliminary geophysical survey, the decision was taken to excavate five test-pits widely scattered over the area (Fig. 1). Their precise location was based on several factors, notably the presence of stones, and in one case (trench E) the fact that three sherds of prehistoric pottery had been picked up at that spot in January 2011.

Trench A

The first trench, of 5m (east/west) x 2m (north/south), was located across the westernmost 'rows' of stones marked on the Crease survey. The precise location was chosen to encompass a slight change in the ground level and a group of small stones which had been exposed by clearance of bracken and brambles in recent weeks. It was also suggested that a line of stones might be present beneath the surface, since others were visible – possibly aligned – to the north and the south of the trench.

Beneath the turf was a layer (context A/001) of sandy brown soil, up to 45cm in thickness at the west end of the trench where the ground level rose slightly. Within this context was a scatter of stones, roughly in the centre of the trench, mostly consisting of angular pieces of granite, probably representing quarry waste. There was no structure to this group of stones and after being photographed *in situ* they were removed. To the south of the stones, a pit could be seen in plan just within the confines of the trench, and in section (c.30cm deep, and a maximum of 2.15m wide) in the southern baulk. The fill (context A/002) was mostly orange gravel and it was cut down (context A/003) from only just below the present ground surface, indicating a recent date (probably Second World War or later).

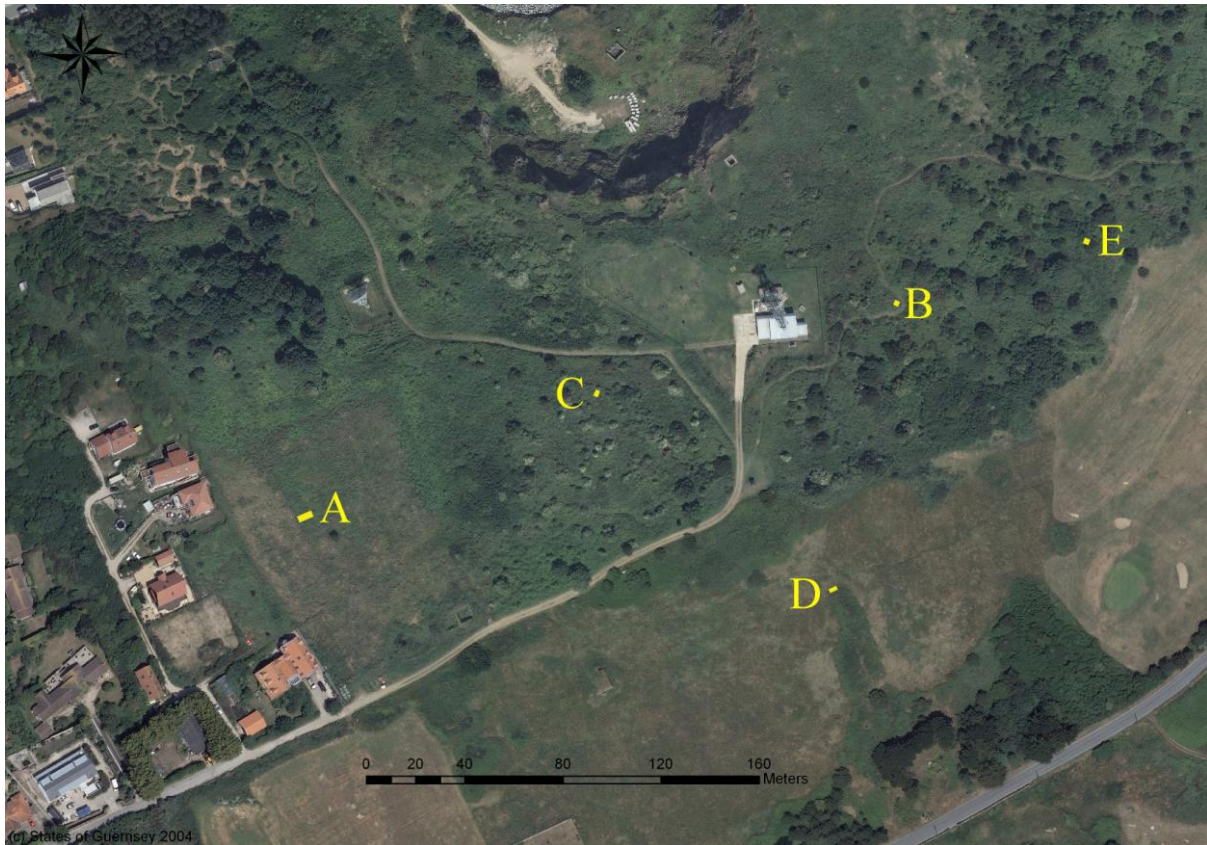


Fig. 1. Location of the five test-pits excavated at Les Rochers, August 2011.

Beneath A/002 was a general layer of a very hard, pale brown, gravelly soil (context A/004). This was devoid of finds and appeared to be the natural subsoil. No features were identified in this layer and after removing a further 20cm in the south-west corner of the trench, excavation ceased.

There was no sign within the trench of the possible alignment indicated by stones on the surface to the north and south.

Full details of the finds from this trench (and trenches B-E) are provided in the Appendix, below. There were two small-finds from trench A: a stone pounder (small-find 1), recovered from the ground surface before excavation, and part of a stone hone (small-find 2), from context A/001.

The same context also contained a sherd of medieval Normandy gritty ware; a plain glass lens with a screw fitting, perhaps German; and a clay pipe stem stamped with the name of Chapple, Guernsey, dating to the mid-nineteenth century. Although the stone pounder might perhaps be prehistoric – but is perhaps more likely to be medieval – there was otherwise no evidence of prehistoric occupation recovered from this trench.

Trench B

The second trench, measuring 3m x 2.5m, was placed at the east end of a group of large stones located approximately fifty metres east of the radio tower. These stones are illustrated in the photograph taken by Peter Arnold in the 1960s, recently reproduced in the *Alderney Society Bulletin* (vol. XLV, 2010-11, p. 66). Beneath a poorly-developed turf was a sandy dark brown soil, context B/001, extending across the trench at a consistent depth of some 13-15cm. There were no finds from this context. Below this layer, context B/002 was the orange gravel natural. The large stones were clearly not set into the natural gravel, but lay within the

topsoil B/001 (Fig. 2); they must have been moved into this position in the fairly recent past. In fact Trevor Davenport (pers. comm.) has observed that the stones do not appear to be visible in this position on the RAF reconnaissance photographs of the Second World War, indicating that they have been moved at some point in the past sixty-five years.



Fig. 2. Trench B, showing large stones in modern topsoil.

Trench C

Trench C, measuring 2m x 2m, was located immediately south of two large boulders, lying approximately eighty metres west-south-west of the radio tower, on ground sloping from south down to north. The particular location was chosen because it seemed possible that archaeological deposits might have built up behind the stones, and also because it might shed some light on the nature of the stones themselves.

The whole trench was covered by matted root cover which after removal revealed a humic, brown/black topsoil, grading into gravel below a depth of about 15cm. Occasional stones protrude from the gravel, and the larger stones at the north of the trench could clearly be seen to be the product of natural weathering *in situ* (Fig. 3). Only one find was recovered from this trench: a piece of flint from context C/001, described as adebitage flake from a plain platform unidirectional blade core (D. Lane, pers. comm.).

Trench D

The fourth trench, measuring 3m east/west by 2m north/south, was placed at the north end of a boundary wall formed of large angular blocks, running approximately north/south and apparently marked on the Crease map. Beneath the turf was a layer of between 20-30cm of a light brown, sandy topsoil (context D/001), much disturbed by rabbit burrows. This graded into a much harder subsoil (context D/002), seemingly identical to context A/004, some 220 metres to the west-north-west. A couple of larger boulders lying on D/002, in the western half of the trench, had

probably been dislodged from the field wall; there was no sign within the trench of this boundary continuing to the north.

There were no finds from D/002, which appears to be natural. The finds from D/001 were all modern, apart from four pieces of flint. David Lane (pers. comm.) has described these as ‘all debitage, with one piece possibly used opportunistically as a scraper’.



Fig. 3. Trench C, showing boulders weathering *in situ*.

Trench E

The final trench, measuring 2m x 2m, was located on the eastern edge of the feature marked as an ‘old gravel pit’ on the Crease plan. On a preliminary visit to the Rochers in January 2011, three small sherds of prehistoric pottery were picked up roughly at this point, and thus the trench was placed to ascertain whether there might be further material in the immediate vicinity. There was no real turf in this area but a single layer (context E/001) of a light brown, humic topsoil, to a depth of about 25cm; this lay directly on top of the orange gravel natural.

Finds from E/001 were modern, with the exception of three flints: a multidirectional flake core, probably abandoned as no longer workable, a piece of debitage, and a piece of flint debris (D. Lane, pers. comm.). No further prehistoric pottery was recovered.

Discussion

The excavations of August 2011, covering an area of just 31.5m², investigated only a tiny proportion of Les Rochers, and it could easily be argued that evidence for prehistoric occupation of the area was missed simply because we did not excavate in the right place. However, the paucity of finds which were recovered from these five sites, scattered quite widely across the hillside, does not bode well for the chances of prehistoric material being found elsewhere on the Rochers. Aside from the flints, almost all the finds were post-medieval, and even for the flints, an average of only one piece per four square metres is remarkably low, indeed lower than one would expect from walking almost any field in

Guernsey. David Lane has commented that the flint indicates ‘background’ prehistoric knapping activity, probably at quite a late date – perhaps Bronze Age – but the small quantities from each trench (and none at all from trenches A and B) beg the question as to where this took place, since none of the groups display a knapping assemblage. He has queried whether the excavated soil might have been redeposited from elsewhere, and while it is difficult to give a blanket response for all of the trenches, it is apparent that the degree of German disturbance could well have led to the significant redistribution of soil at the Rochers. In trenches B, C and E the soil was particularly poorly-developed and potentially quite recent – i.e. post-medieval – in origin.

There were no indications of any prehistoric structures, large or small, in any of the excavated trenches, and certainly no sign of stone alignments. Once again it might be argued that we simply dug in the wrong place, but in this respect I would hark back to the evidence – or lack of evidence – implied by the observations of the Lukis family in the mid-nineteenth century. It is simply inconceivable that John and Francis du Bois Lukis would not have noted the presence of *genuine* stone alignments at Les Rochers. Certainly there were stones scattered over the hill, and some of them may indeed have been moved about by man, but it is a step too far to interpret them as deliberately constructed prehistoric alignments.

Acknowledgements

The excavations at Les Rochers were kindly facilitated by the Alderney Wildlife Trust, and I am particularly grateful to Julia Henney of the Trust, and her colleagues, for their assistance. I am also grateful to Emma Durham and Jenny Cataroche, who carried out much of the excavation work. David Lane kindly reported on the flints. Many Alderney residents discussed aspects of the Rochers with us and I would particularly like to thank Trevor Davenport, Peter Arnold and David Thornburrow for their comments.

Appendix. List of finds.

Most of the finds from the trenches on the Rochers consisted of modern (nineteenth and twentieth century) material which was briefly recorded and then disposed of. Those items which have been retained and deposited in Alderney Museum are noted as ‘retained’ in the lists below.

Trench A

unstratified 1 uncertain circular copper alloy object, diameter 49mm, depth 14mm (retained)
1 stone pounder (retained; small-find 1)
1 piece clay pipe stem
4 sherds creamware, including one transfer-printed and one stamped C[A?]C & Co
A/001 1 whetstone (retained; small-find 2)
1 plain glass lens mounted in copper alloy screw thread (retained)
2 pieces clay pipe stem
1 piece clay pipe stem, marked Chapple, Guernsey (retained)
6 sherds porcelain
1 sherd Normandy Gritty Ware (retained)
12 pieces of animal bone
3 pieces of roof tile
2 pieces of brick
2 pieces of iron (one nail, one short curved bar)

Trench C

C/001 1 flint (retained)

Trench D

D/001 4 flints (retained)
3 pieces of brick
1 piece of roof tile
5 pieces of glass
1 piece of animal bone
1 sherd stoneware
1 sherd transfer-printed pottery
1 sherd creamware

Trench E

E/001 3 flints (retained)
2 pieces of iron (including one piece from shoe, and one short curved bar)
1 golf ball
1 piece of burnt bone
2 sherds transfer-printed pottery
1 sherd creamware
1 sherd flowerpot
1 piece of marmalade jar

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