

Ecological Appraisal

Ball Copse / The Grove, Brixham, Torbay

Prepared for: Torbay Council

Prepared by:

Julie Jamieson
BSc (Hons) Env Cons, Grad CIEEM

Natural England Bat / Dormouse Licence Registration No: CLS 03256

13/12/2016

Checked by:

David Hansford
Tech Cert (ArborA.), BSc (Hons), MArborA

15/12/2016

t 01392 811338 (24hrs) Brookfield Yard
f 01392 811843 Tedburn Road
e info@hi-line.co.uk Whitestone
w www.hi-line.co.uk EXETER EX4 2HF

Table of contents

	Page
1 INTRODUCTION	2
1.1 Brief	2
1.2 Survey rationale	2
1.3 Scope of survey	2
1.4 Limitations	2
1.5 Liabilities	2
2 SURVEY METHODOLOGY	3
2.1 Desk Study	3
2.2 Site Appraisal	3
3 RESULTS OF DESK STUDY	4
3.1 Protected Sites	4
3.2 Protected Species	5
4 SURVEY FINDINGS	7
4.1 Situation	7
4.2 History	7
4.3 Trees and vegetation	7
5 IMPACTS ASSESSMENT	8
5.1 Consideration of Significant Impacts	8
5.2 Impacts Summary	11
 Appendices	
I Photos	12
II Relevant Legislation	13
III Maps	15

1 INTRODUCTION

1.1 Brief

I was instructed by Neil Coish of Torbay Council to undertake an ecological appraisal of an area of woodland located north of Brixham, Torbay. The woodland comprises two individual plots known as Ball Copse and The Grove.

1.2 Survey rationale

Surveys and inspections by The Forestry Commission have revealed that both the woodland plots are infected with the pathogen *Phytophthora ramorum*. In order to prevent the infection from spreading to other trees and woodlands, the Forestry Commission have served Torbay Council with a Plant Health Order Notice which requires that all of the larch and sweet chestnut trees be removed by the end of March 2017.

The removal of the trees is a legal requirement under Article 31 (4) of The Plant Health (Forestry) Order 2005, and it is an offence not to comply with the Notice. In order to ensure compliance within the given time-frame, it will be necessary to begin felling operations at the beginning of January 2017.

The purpose of the ecological appraisal is to highlight any potential wildlife issues that might arise, and to ensure that these are addressed accordingly.

1.3 Scope of survey

This report details the findings of a desk-based search for records of protected sites and species and an ecological appraisal, or “walkover survey”. The aims of this survey were to assess the habitat and to identify any constraints in relation to protected species or habitats.

Recommendations are given for appropriate precautions and mitigation.

1.4 Limitations

Due to the short timescale between the initial ecological appraisal and the commencement of the works, and the time of year, it was not possible to conduct detailed surveys for protected species (such as bats and dormice) during their active season.

1.5 Liabilities

Whilst every effort has been made to guarantee the accuracy of this report, many species of animal are capable of migration, and although certain species might not have been located during the survey, their presence cannot be discounted at a later date.

2 SURVEY METHODOLOGY

2.1 Desk Study

A search was carried out using the government interactive mapping website www.magic.gov.uk/MagicMap.aspx to highlight any statutory geological, historical, or nature conservation sites close to the woodland.

A search for relevant protected species records was carried out using the National Biodiversity Network Gateway www.data.nbn.org.uk. The search criteria was for records of any protected species (that might be affected by the proposals), within 1 km of the woodland in the last 10 years. In the case of bats, the search area was expanded to a 5 km radius.

2.2 Site Appraisal

I visited the site on two separate occasions; on Tuesday 29 November, and on Tuesday 6 December 2016.

The habitat throughout the woodland was broadly assessed for its ecological value and potential to support protected species, paying particular attention to the following features (as appropriate):

Bats	Trees with features likely to support roosting bats, such as holes, cavities, cracks, splits, loose bark, dense ivy
	Built structures with the potential to support bats
	Important interconnecting landscape features including watercourses, mature hedgerows and tree-lines
Dormice	The presence of dense under-storey, coppice or scrub and interconnecting species rich hedgerows
	Evidence of dormouse activity such as natural nests and characteristically gnawed hazelnuts
Badgers	Signs of badger activity, such as sett entrances and excavations, runs, latrines, and snuffle holes
Amphibians	The presence of breeding sites (water bodies) and hibernation features
Reptiles	Scrub/grassland habitat and hibernation features
Birds	Old nests and suitable nesting places including ivy, dense under-storey, scrub, tree holes and hedgerows
Otters	The presence of suitable watercourses, and where these exist, possible holts and signs of otter activity such as spraint, slides, footprints and feeding remains

3 RESULTS OF DESK STUDY

3.1 Protected Sites

3.1.1 Areas of Outstanding Natural Beauty

The woodland is situated within the South Devon Area of Outstanding Natural Beauty.

3.1.2 Sites of Special Scientific Interest

Saltern Cove geological SSSI is located approximately 1.8 kilometres north-west of the study site and Berry Head to Sharkham Point SSSI is approximately 1.7 kilometres south-east – this is also part of the **South Hams Special Area of Conservation (SAC)**.

3.1.3 National Nature Reserves

Berry Head NNR is located approximately 2 kilometres east of the woodland.

3.1.4 Local Nature Reserves

Sugar Loaf Hill and Saltern Cove LNR is located 1.8 kilometres north-west of the woodland.

3.1.5 Scheduled Monuments

Battery Gardens is situated approximately 300 metres east of the woodland. This is a Scheduled Monument, described as a “World War II emergency coastal battery and remains of a Victorian practice battery”.

Windmill Cave Scheduled Monument is approximately 1.1 km south-east of the woodland.

3.2 Protected Species

3.2.1 Dormice *Muscardinus avellanarius*

There are no dormouse records for the 1 km search zone around the woodland. The nearest dormouse record is for a site on the opposite side of the River Dart, approximately 6.4 kilometres away.

3.2.2 Otters *Lutra lutra*

There are no otter records for the 1 km search zone around the woodland. The nearest otter record is for a site on the River Dart at Noss Marina, approximately 4 kilometres away.

3.2.3 Badgers *Meles meles*

There are badger records for a location at Berry Head.

3.2.4 Bats *Chiroptera*

The following bat species have been recorded within 5 km of the woodland in the last 10 years:

Common pipistrelle	<i>Pipistrellus pipistrellus</i>
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>
Brown long-eared	<i>Plecotus auritus</i>
Natterer's	<i>Myotis nattereri</i>
Daubenton's	<i>Myotis daubentonii</i>
Whiskered	<i>Myotis mystacinus</i>
Noctule	<i>Nyctalus noctula</i>
Barbastelle	<i>Barbastella barbastellus</i>
Greater horseshoe*	<i>Rhinolophus ferrumequinum</i>
Lesser horseshoe	<i>Rhinolophus hipposideros</i>

*The woodland is situated less than 2 kilometres from a greater horseshoe bat roost at Berry Head. This roost is an important feature of the **South Hams SAC**, and in order to ensure adequate protection for the bats, extensive surveys have been carried out to identify known flight paths and sustenance areas close to the roost.

Although the woodland does not appear to be part of an identified flight path or strategic flyway (500m buffers around flight paths), it does fall within the **Sustenance Zone** and is included in the **South Hams SAC Consultation Zone**.

3.2.5 Other Species

A search was also carried out for records of water voles *Arvicola terrestris*, great crested newts *Triturus cristatus*, cirl buntings *Emberiza cirlus*, goshawks *Accipiter gentilis*, and barn owls *Tyto alba*. No records were found for any of these species within the search area.

3.2.6 Limitations

Due to time constraints, this desk-based search was carried out using publicly accessible websites which might not contain all the available records of a certain species. Further records may be held by the Devon Biodiversity Records Centre and local interest groups.

It should also be noted that a lack of records does not necessarily prove the absence of a species from an area. Some species may be under-recorded in an area, or it might be that certain records are not made widely available.

4 SURVEY FINDINGS

4.1 Situation

The study site is comprised of two individual woodland plots known as Ball Copse and The Grove, with a total area of approximately 17 hectares. It is located in Churston, just north of Brixham, and is accessible via a walled footpath leading from the lane just south of Churston Court. The woodland is bordered by Churston Golf Course to the north and open fields to the south and west. A main footpath runs through the centre of The Grove leading eastwards, emerging from the woodland at Churston Cove. This end of the woodland is also accessible via the South West Coast Path.

4.2 History

The majority of the site is listed as ancient replanted woodland, with a compartment at the eastern end of The Grove listed as ancient and semi-natural. The woodland stands on Devonian limestone, which used to be burnt in kilns with coal to produce quicklime. Two lime kilns are still in evidence on the site and can easily be observed from the main footpath through the centre of the woodland.

The majority of the trees appear to be of a similar age which indicates that they were planted around the same time, probably as a commercial crop, or replacement of such. There are also signs of historical coppicing throughout the woodland.

The woodland is currently used by the public for dog walking and recreational purposes. It is clearly a very popular site with a heavy footfall and signs of regular use including evidence of bonfires and minor litter around features of interest, such as the lime kilns and where the woodland opens up at Churston Cove. There are also bike trails through part of the woodland, especially on the northern slopes.

4.3 Trees and vegetation

The woodland is mostly deciduous with a mix of broadleaves and larch *Larix spp*, although there is the occasional Scots pine *Pinus sylvestris* and holm oak *Quercus ilex*. The broadleaf trees within the woodland include ash *Fraxinus excelsior*, sycamore *Acer pseudoplatanus*, sweet chestnut *Castanea sativa*, beech *Fagus sylvatica*, oak *Quercus spp* and cherry *Prunus avium*. Most of these trees are of a similar age and structure, having been planted together as a crop in the past, although there are a few more mature trees scattered throughout the woodland. There are several fallen trees and old log piles in the woodland which provide habitat for a diversity of invertebrates and small mammals.

The under-storey is generally quite sparse but contains hazel *Corylus avellana*, hawthorn *Crataegus monogyna*, elder *Sambucus nigra*, holly *Ilex aquifolium* and the occasional yew *Taxus baccata*.

Detailed survey of the ground flora is not possible during the winter as many plant species are dormant, and deep leaf litter obscures much of the ground, but the following species were evident during the survey; hart's-tongue fern *Asplenium scolopendrium*, dog's mercury *Mercurialis perennis*, butcher's broom *Ruscus aculeatus*, tutsan *Hypericum androsaemum*, pheasant berry *Leycesteria formosa*, bramble *Rubus fruticosus agg*, common nettle *Urtica dioica* and stinking iris *Iris foetidissima*. Climbers present include ivy *Hedera helix*, clematis *Clematis vitalba* and honeysuckle *Lonicera periclymenum*.

5 IMPACTS ASSESSMENT

5.1 Consideration of Significant Impacts

5.1.1 Woodland

The most obvious and immediate impact is the scale of tree loss that will occur. The larch trees occupy several blocks within the woodland with a swathe running through the central portion of The Grove. Similarly the sweet chestnut trees occur in scattered accumulations throughout. Tree clearance will take place in blocks and so there will unavoidably be some loss of non-target species.

Potential Impact: The tree felling will undoubtedly create large open gaps in the woodland which will considerably alter the structure and integrity of the site.

Proposed Mitigation: Wherever possible, felling of trees should be carried out using hand-held tools to avoid indiscriminate felling of whole blocks of trees that contain a majority of non-target species. Mature trees should be retained as standard.

Re-planting of native broad-leaved trees should be carried out once the felling is complete.

5.1.2 Bats

The woodland is likely to be used by a variety of bat species, for both foraging and commuting. It occupies a shallow, dry valley and is connected to a strip of woodland that runs along the coast directly north of Churston Golf Course.

Most of the trees within the woodland are tall and thin with no obvious features suitable for roosting bats. Many of the larch trees have a covering of ivy, but although there is an abundance of foliage, the ivy stems are relatively narrow and unlikely to provide adequate cover for roosting bats.

It should be noted that bats will occupy very small features in narrow diameter stems and branches, and at a range of heights from the ground. Many species of bat have been found roosting and hibernating in narrow splits less than 2 metres high. Ball Copse contains a number of sycamore and ash coppice stools, many of which exhibit features favoured by bats, in some cases on all of the coppice stems. These were all checked during the surveys, and none contained bats or signs of recent use, but tree-dwelling bats frequently change roost for a variety of reasons, and so their absence on one day does not necessarily mean that they will not be present on another. Also, it should be noted that bat roosts are protected even when the bats are not present.

The lime kilns offer limited roosting habitat for bats due to their open structure, meaning that bats would be exposed and vulnerable. There are some cracks and openings between the stone work that might accommodate bats, but the kilns are subject to a certain amount of disturbance as revealed by the presence of litter and evidence of past fires in their base.

Potential Impact: There will be a loss of some foraging habitat and the potential risk of damage or disturbance to roosts.

Proposed Mitigation: Ecologist involvement is strongly advised throughout these works. A suitably experienced bat ecologist should inspect all trees with potential bat-roosting features within identified woodland blocks prior to the machinery entering these areas. Any confirmed bat roosts must be retained with a buffer of trees remaining in place around

them. If this is not possible (due to the presence of *Phytophthora* infected trees), an EPS licence must be obtained prior to the felling of any tree containing a bat roost.

Once all the works have been completed, a variety of bat boxes should be installed on suitable trees throughout the woodland to replace lost roosting habitat.

5.1.3 South Hams SAC

The site falls within the South Hams SAC Consultation Zone, which means that consideration must be given to any plans or projects that might impact upon the SAC – in this case, anything that might adversely affect the strategic flyways or sustenance area of the greater horseshoe bats. Where there are likely to be significant impacts upon the bats, it is necessary to conduct a Habitats Regulations Assessment.

The woodland is not located in one of the identified strategic flyways, but it is included within the sustenance zone, and so the habitat must be assessed for its likelihood to provide a foraging resource for the greater horseshoe bats.

Greater horseshoe bats rely upon a range of habitat types for feeding including permanent pasture (unimproved and semi-improved, preferably grazed by cattle), tall hedgerows with mature trees, mixed deciduous woodland, wetland and scrub. Greater horseshoes tend to feed by flying quite low under the overhanging tree canopy, often taking prey from the ground. The interior of the woodland at The Grove is quite open with a very high canopy cover, so its value to greater horseshoe bats is possibly limited. The mature tree-lines along the woodland edges might provide more suitable foraging habitat, particularly where the adjacent fields are grazed by cattle, such as the field directly north of Ball Copse.

Potential Impact: There is a possibility that the removal of woodland blocks might impact upon the feeding habits of bats, although it is considered that greater horseshoes are more likely to rely upon the outer woodland edges than the interior of the woodland.

Proposed Mitigation: Mature trees should be retained where possible and efforts must be made to avoid creating large gaps in the tree-lines around the outer woodland edge.

Allow some natural re-generation of trees, shrubs and ground flora to encourage invertebrate diversity and provide cover. Re-plant with native, broadleaved trees and shrubs.

Torbay Council, as the decision making authority, should consider whether Habitats Regulations Assessment Screening is necessary.

5.1.4 Nesting birds

The woodland is likely to be used by a variety of birds for nesting and foraging. The following birds were encountered during the survey; blackbird *Turdus merula*, robin *Erithacus rubecula*, treecreeper *Certhia familiaris*, long-tailed tit *Aegithalos caudatus*, goldfinch *Carduelis carduelis* and jay *Garrulus glandarius*.

Fortunately the tree felling will be carried out during the winter with an enforced completion date of the end of March 2017. This means that the main bird-nesting season will largely be avoided. Some birds start nesting early in the year, but it is felt that the disturbance within the woodland could deter many birds from nesting here, and if regular checks are carried out for nesting activity, that damage and disturbance can be avoided.

Potential Impact: None perceived provided that nesting bird checks are carried out.

5.1.5 Built structures

The woodland is surrounded by an old stone wall and there are two lime kilns in The Grove, situated on opposite sides of the main footpath. Although these structures are not listed as Scheduled Monuments, they are a valuable reminder of the site's history and should be preserved.

Potential Impact: There is a possibility that heavy forestry machinery might damage the lime kilns.

Proposed Mitigation: The areas around the lime kilns should be taped off to prevent heavy machinery from causing any damage to these structures.

5.1.6 Dormice

There is a lack of dormouse records for the surrounding area, and the woodlands here are largely isolated from suitable habitat by open amenity areas and residential development. The woodland contains similar aged trees with a high, open canopy and a lack of dense under-storey. There are limited food sources for dormice in the woodland and the heavy public pressure on the site also means that it does not represent prime dormouse habitat.

Potential Impact: None perceived.

5.1.7 Otters / water voles

The site does not contain any watercourses, water bodies, wet ditches or scrub and is not situated close to any sites that are known to support otters or water voles.

Potential Impact: None perceived.

5.1.8 Badgers

No evidence of badger activity was noted anywhere within the woodland.

Potential Impact: None perceived.

5.1.9 Reptiles / amphibians

There are no records of great crested newts in the area and there are no water bodies in or near to the woodland.

There is some limited scope for reptiles such as slow worms *Anguis fragilis* and common lizards *Zootoca vivipara* to be present at the woodland edges or hibernating under existing log piles and dead fallen trees.

Potential Impact: Low possibility of reptiles being disturbed during the works.

Proposed Mitigation: On-site ecologist should highlight suitable reptile hibernacula and advise operatives on safe-working methods.

5.2 Impacts Summary

Table 2 : Assessment of potential impacts and suggestions for mitigation

Target feature /species	Potential Impact	Mitigation/Avoidance	Net gain /loss for wildlife
South Hams SAC	Possible impact upon greater horseshoe bat sustenance zone	Retain mature trees and avoid creating large gaps in the tree-lines around the outer woodland edge Torbay Council should consider whether Habitats Regulations Assessment Screening is necessary	Possible temporary disturbance of feeding habitat
Woodland	Loss of large blocks of trees affecting the structure and integrity of the woodland	Hand-fell some trees to avoid indiscriminate felling of whole blocks that contain a majority of non-target species Mature trees to be retained as standard Re-planting of native broad-leaved trees	Temporary loss of large blocks of woodland cover. Future woodland improvement with re-planting of native broadleaves
Built structures	Possible damage to lime kilns	Tape off areas around kilns to prevent damage from machinery	N/A
Bats	Risk of roost disturbance /damage Possible temporary loss of some feeding habitat	Ecologist involvement essential to check for bat roosts. Bat boxes to be installed throughout the woodland to replace lost roosting habitat. Allow some natural regeneration and replant with native broadleaves	Temporary partial loss of feeding habitat Increased potential roost sites
Dormice	Unlikely to be present	Continued monitoring required	N/A
Birds	Risk of harm/disturbance to nesting birds	Nesting bird checks to be carried out in March	None
Badgers	Unlikely to be present	None required	N/A
Otters / water voles	Unlikely to be present	None required	N/A
Reptiles	Low potential of reptiles being present	Possible habitat to be protected. Provide log piles as hibernacula	Increased potential habitat

Appendix I – Photos



Photo 1 – young thin trees in Ball Copse



Photo 2 – stone wall separating Ball Copse from The Grove



Photo 3 – tall thin trees in The Grove



Photo 4 – larch trees covered with ivy



Photo 5 – one of the two lime kilns in The Grove



Photo 6 – an existing log pile providing habitat for invertebrates and small mammals

Appendix II – Relevant Legislation

Bats, otters, dormice and **great crested newts** are all protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010 (as amended). The legislation makes it illegal to:

- Deliberately capture, injure or kill any of these species
- Deliberately disturb these species
- Damage or destroy their breeding site or resting place
- Intentionally or recklessly obstruct access to any structure or place that they use for shelter or protection
- Disturb these species whilst they are occupying such a place

Greater horseshoe bats are one of five bat species included on Annex II of the European Directive on the Conservation of Natural Habitats and Wild Flora and Fauna (1992) 92/43/EEC, which calls for the creation of **Special Areas of Conservation (SACs)** to protect them. (The directive has been transposed into England and Wales law through the Conservation of Habitats and Species Regulations 2010.

Where any plan or project other than one directly connected with the management of the SAC is likely to have a significant effect on the site (there is no requirement for the project to be on the site or even neighbouring it) it must be subject to a full assessment of its implications for the conservation objectives of the site.

Badgers are protected under the Protection of Badgers Act 1992. This legislation makes it illegal to:

- Wilfully kill, injure or take a badger
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett
- Disturb a badger whilst it is in its sett

Adders, common lizards, grass snakes and **slow worms** are protected under the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to:

- Intentionally kill or injure these species

All wild **birds** are protected under the Wildlife and Countryside Act 1981 (as amended). This makes it illegal to:

- Intentionally kill, injure or take any wild bird
- Intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built
- Intentionally take or destroy the nest or eggs of any wild bird
- Intentionally or recklessly disturb a Schedule 1 bird while it is building a nest, or is in, or near a nest containing eggs or young
- Intentionally or recklessly disturb dependant young of a Schedule 1 bird

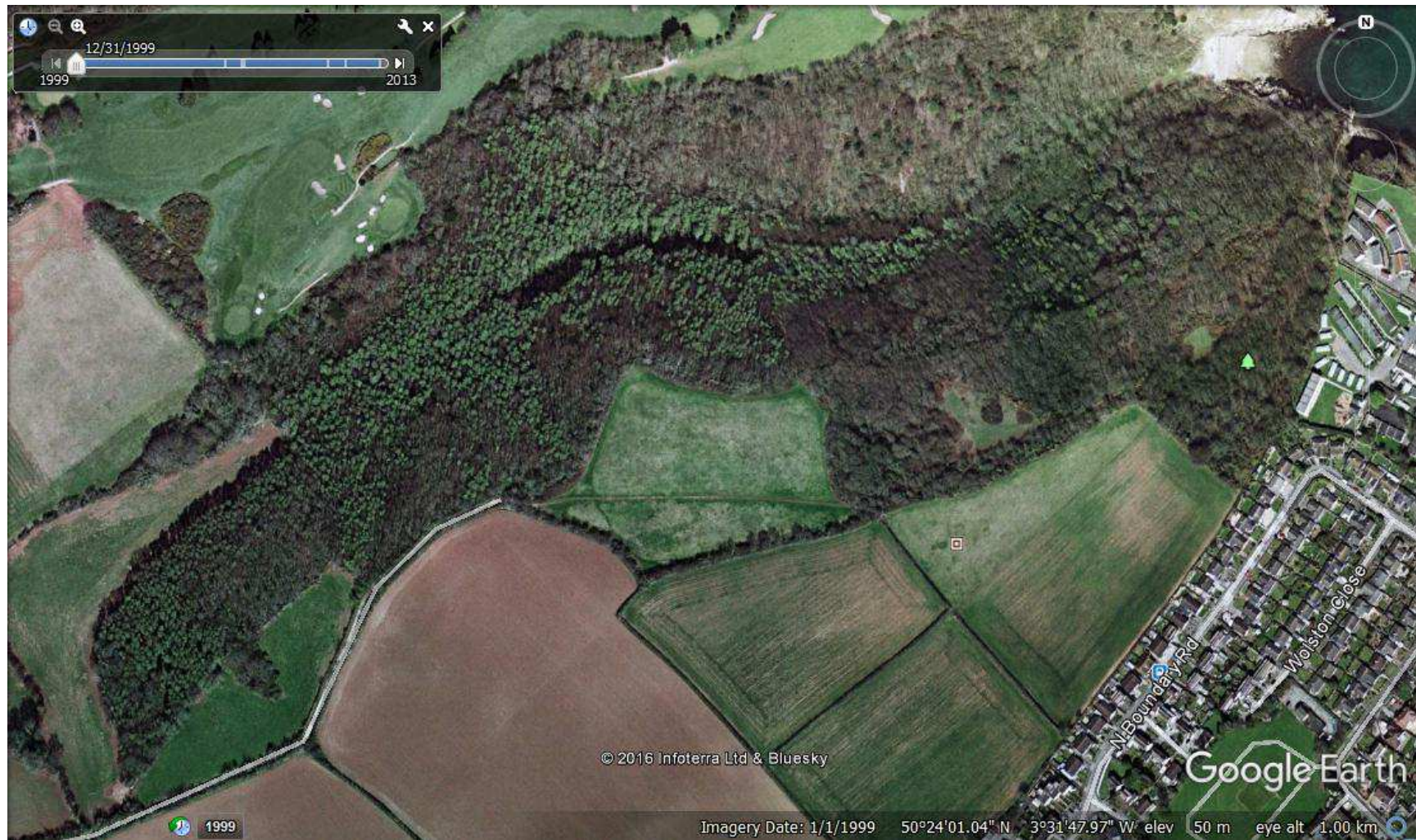
Phytophthora ramorum is a harmful organism placed under quarantine by European legislation (2000/29/EC (amended to cover *P ramorum* by an emergency measure in 2002 (2002/757/EC)). Where trees are infected by *P ramorum*, the Forestry Commission will issue a Notice under The Plant Health (Forestry) Order 2005 which sets out measures that the landowner is required to undertake in order to prevent the spread of the organism. The Plant Health Order has a number of powers including:

- prohibiting the landing of specified tree pests, trees and 'relevant material' (defined as wood and bark, soil, growing medium or used forestry machinery)
- setting out the protected zones for various pests and prescribes the conditions for entry into and movement within the zones for relevant material
- setting out the powers of inspectors to enter premises (other than private dwellings) and to undertake examinations etc., or order remedial action to be taken
- prescribing offences and penalties for failing to comply with the Order

The Order is the principal instrument in Great Britain implementing the plant health requirements in the European Community in respect of forestry material, as set out in Council Directive 2000/29/EC

Appendix III - Maps

Map 1 – Aerial image taken during the winter 2009, before the larch trees showed signs of infection



Map 2 – Magic map showing the location of the woodlands in relation to the South Hams SAC

