

Wild Roseland – Woodland Habitat Ground-Truthing Report

Introduction

The collection of environmental data is an important activity in understanding the ecology and landscape value of the Roseland Area. Wild Roseland identified the collection of data as one of a number of key tasks for the group to undertake. A number of surveys are carried out by the group looking at a variety of habitats and species, e.g. hedgerows, bats and hedgehogs.

In 2013 an aerial survey of Cornwall allowed the identification of the vegetation cover of the land by interpretation of the aerial photographs. This enabled an assessment of the landcover to identify habitat types and to determine changes in habitat areas by comparing the results with those carried out and published in the report *Cornwall's Land Cover 1995-2005 (ERCCIS and Cornwall Wildlife Trust 2010)*.

Wild Roseland approached the Cornwall Wildlife Trust to offer to undertake survey work on the ground to verify the accuracy of the photographic based survey of identified semi-natural habitat areas. Woodland cover is the easiest land cover type to identify and assess due to its physical presence in the landscape and its visual accessibility.

It was agreed with the Trust that survey work would concentrate on those areas identified as being covered with types of semi-natural woodland.

If found to be successful it is intended that with suitably skilled volunteers available, ground-truthing of other habitat types, such as grassland and wetland, could be undertaken.

Summary

Of the 50 woodlands identified in the Philleigh, Ruan Lanihorne, St Just and Veryan Parishes, 43 were visited and of those 36 were surveyed. Woodlands in Gerrans Parish were not visited.

Of the woodlands surveyed 13 had inaccuracies in their boundaries, 5 new woodlands were identified with areas totalling @ 6.0ha., and 2 had an incorrect woodland classification resulting in the declassification of 0.9ha of land cover classified as natural woodland.

Boundary inaccuracies were minor in all but 2 woodlands, Melinsey Valley Woods and Parnalls Wood in Veryan Parish, where an additional @ 7ha. was classified as semi-natural woodland.

The maps produced as a result of the interrogation of aerial photography was found to be @ 95% accurate in determining the extent of woodland and @ 82% accurate in determining the semi-natural woodland habitat type. Overall an additional @ 15ha. of semi-natural woodland was identified.

Wild Roseland – Woodland Habitat Ground-Truthing Report

Woodland Habitat Ground-Truthing

Method

Wild Roseland volunteers visited woodlands on a Parish by Parish basis and followed a simple woodland survey form (see Appendix A) and national woodland classifications (*Joint Nature Conservation Committee Handbook for Phase 1 habitat survey 1990 as amended 2010*) to determine the accuracy of the mapped interpretation of the aerial photographs.

Woodlands were surveyed from public rights of way or highways or with the permission of landowners.

Woodlands are located in this report through grid references (GR).

This work was carried out in May and June of 2019 and a presentation of the survey results are in this report (see Appendix B). Boundary accuracy is not physically measured but assessed by eye with reference to other landscape features.

Differences between the photographic interpretation and the truth found on the ground, were identified and quantified. The following report identifies the extent of those differences both in terms of land cover area and woodland classification.

Results

Philleigh

Ten woodland areas were identified in the Philleigh Parish. Eight woodland visits were carried out and two other woodland areas at Borlase Wood (GR-856404) and the woodland along the stream corridor between Lanhoose and Philleigh village (GR-867378-869391) were not visited.

Cododden Wood (GR844390) was visited, and the boundaries confirmed, but there was no ground survey undertaken.

Woodlands were surveyed at Chapel Wood West (GR-844398); Woodland Strip West of Tolverne (GR-844402) ; Woodland West of Tolverne Farm (GR-848395); Polgerran Wood (GR-849402) ; Woodland North of Philleigh (GR-870404) ; Woodland North of Philleigh Church (GR-872396): their boundaries confirmed as accurately mapped.

The boundaries of Chapel Wood East (GR-845398) were found to extend in south-east corner with strong tree canopy links east and west woodlands beyond the mapped boundaries. An increase in area of @ 0.5ha.

Wild Roseland – Woodland Habitat Ground-Truthing Report

Ruan Lanihorne

Five woodland areas were identified in the Ruan Lanihorne Parish. Four woodlands were visited and surveyed and woodland at Ardevora (GR-877410) was not visited.

Woodlands were surveyed at Lanihorne Wood (GR-907434) and Sett Bridge Wood (GR-888422) and their boundaries confirmed as accurately mapped.

The boundary of Trethewey Wood (GR-913438) was found to have extended through the extension of broadleaved woodland canopy over former Willow Carr an area of @ 0.2ha.

The woodland corridor at Trethewey Farm (GR-912432) an area of @0.5ha. was found to be a planted driveway of conifer trees with no understorey nor woodland ground flora and should not be classified as semi-natural woodland.

St Just

Sixteen woodland areas were identified in the St Just Parish. Twelve woodlands were visited and four other woodland areas at Tretham Stream Wood (GR-860364); Trevarras Woods (GR-854383); St Just Stream Woods (GR-851370); Woodland SW of Water Tower St Mawes (GR-844342) were not visited.

Woodlands at Tolcarne Wood (GR-842385); Commerans Farm Wood (GR-845375); Penperth Woods (GR-849388); Woodland near Sewage Works St Mawes (GR-842335) were visited and the boundaries confirmed, but there was no ground survey undertaken.

Woodlands were surveyed at Bosloggas Woodland Corridor (GR-850343) and Priory Wood (GR-857338) and their boundaries confirmed as accurately mapped.

Woodland at Messack (GR-842357-840365) was survey by National Trust staff and the boundaries were confirmed as accurately mapped.

The north-eastern boundary of Bosloggas Wood South (GR-854342) has a minor extension northward along the stream.

The boundary of Camerance Wood (GR-840382) has extended south to include an area of @ 0.2ha. regenerated by Oak and Ash < 5m and with 60% canopy cover.

A new broadleaved woodland area of @ 0.2ha. was identified through survey at Veskelly (GR-848343).

A new broadleaved area of @ 3.0ha. was identified through survey at Turnaware Quay (GR-837382).

Wild Roseland – Woodland Habitat Ground-Truthing Report

A new broadleaved area of @ 0.4ha. was identified through survey to the west of Windmill Hill (GR-846350).

Veryan

Nineteen woodland areas were identified in Veryan Parish and all were visited. Two woodlands near to Trenona Farm (GR-918410) and near to Trevilveth Farm (GR-947428) were visited and their boundaries confirmed, but there was no ground survey undertaken.

Woodlands were surveyed at Paradoe Wood (GR-917378); Veryan Sports and Social Club (GR-911395); near Tregenna Farm (GR-951405); Sunny Corner Portloe (GR-934394); Upper Melinsey Valley (GR-905396); South of Century Lane (GR-919393); Trencreek Farm (GR-930438); and their boundaries confirmed as accurately mapped.

The boundary to Carne Beach Woodland (GR-906383) has extended to a small extent, @ 0.2ha., to north and east.

The boundary to Castlezens Wood (GR-928423) is extended a small way to north an increase of @ 0.5ha.

The boundary to Parnall's Hill Woodland (GR-958418) has extended by an area @ 3.0ha north, south and east to include mixed woodland.

The boundary to Melinsey Valley Wood (GR-904390) have extended on all valley sides with mix of new planting 6.0ha and regenerated woodland 4.0ha.

The boundary to Plantation Wood (GR-920398) has extended to the south overreaching a stream into adjacent field with a canopy of Oak, Beech, Sycamore and Willow creating an additional area of @ 0.2ha.

The boundary to Treburthes Wood (GR-914403) has extended to the east creating an additional area of @ 0.6ha.

The boundary of woodland nr. Polmenna (GR-952425) has extended to the south west an increase of @ 0.2ha.

A newly identified broadleaved woodland area of @ 2ha. has been identified at Trounce Guy's Bank in West Portholland (GR-958417).

A newly identified broadleaved woodland area generated from former willow carr of @ 0.3ha. has been identified nr. Polgrain Farm (GR-958422).

The area of woodland at Gwendra Farmstead (GR-902384) @ 0.4ha., was not semi-natural woodland lacking any understorey or woodland ground cover and being dominated by Monterey Pines.

Conclusion

Wild Roseland – Woodland Habitat Ground-Truthing Report

There needs to be a good understanding of the efficacy of technology in interpreting aerial photography. Ground truthing has a role to play in monitoring that and feeding back common interpretive errors.

The context for ground-truthing needs to be understood in terms of the rate of the natural regeneration of habitats and the effects of topography and aspect.

The passage of time, 6 years, between the aerial photographs and the ground truthing exercise has seen regenerative changes in woodland areas both natural and through the growth of new planting.

Canopy heights on steeply sloping ground proved difficult to determine with any accuracy and in some woodlands on such topography the extent of such woodlands has been found to be marginally different.

Determination of tree species, the mix of semi-natural, plantation and exotic planted trees is not always clear from overhead where the nature of shrub layers and ground cover cannot be observed.

Ground-truthing has several benefits including :

1. greater awareness of the character of habitats in the Roseland area;
2. observation of the causes of change ;
3. increased public awareness of the distribution and quality of semi-natural habitats

This exercise was undertaken with five volunteers working as three teams. The skills level was mixed and the degree of access to land was limited. The ground-truthing of grassland, maritime and wetland habitats requires different set of skills to those required for semi-natural woodlands.

The process of ground-truthing of necessity is a resource hungry activity. Training of volunteers and obtaining access to land will make future exercises more time consuming and administrative. To ground-truth all semi-natural habitat types for the whole of the Roseland area is not a realistic proposition.

A more selective way of ground-truthing grasslands and wetlands needs to be developed that can be achieved by focussing on two or three small areas rather than Roseland-wide.

Appendix B

Woodlands by Parish

Gerrans Parish

Not Surveyed

Philleigh Parish (10)

Chapel Wood West (GR-844398) Boundaries OK

Survey 15/5/19 Broadleaved woodland with coppice, dead trees, earth bank and ditches sloping westwards towards Fal River. Dominated by Oak with Rowan, Hazel, Hawthorn, Wild Cherry and Holly with an understorey of bilberry, bluebells, ivy, bramble, bracken, honeysuckle and white heather.

Chapel Wood East (GR-845398) Boundary extended in south-east corner and strong tree canopy links east and west woodlands.

Survey 15/5/19 Broadleaved woodland with dead trees, earth banks and ditches extended to incorporate area of woodland with pit in south east corner. Dense canopy dominated by Oak with Sycamore, Willow, Silver Birch, Holly and Hazel with a patchy understorey of bluebells, brambles, wood avens, celandine and nettles.

Woodland Strip West of Tolverne (GR-844402) Boundaries OK

Survey 15/5/19 Broadleaved woodland with dead trees, earth bank, ditches and riverbank. Dominated by Oak with Hazel, Hawthorn and Holly with an understorey of dog rose, bluebells, ivy and brambles.

Woodland West of Tolverne Farm (GR-848395) Boundaries OK.

Survey 15/5/19 Broadleaved woodland with dead trees, earth banks, and ditches along a linear valley bottom. Dominated by Oak with Ash, Sycamore and Holly with an understorey of bluebells, bracken and honeysuckle.

Cododden Wood (GR-844390) Boundary OK

Not surveyed

Polgerran Wood (GR-849402) Boundary OK

Survey 15/5/19 Broadleaved woodland with dead trees, earth bank, stonewall and riverbank. Dominated by Oak with Holly understorey. Other trees Ash, Sycamore, Beech and Hawthorn with an understorey of bluebells

Borlase Wood (GR-856404) Not Visited

Wild Roseland – Woodland Habitat Ground-Truthing Report

Woodland North of Philleigh (870404) Boundary OK

Survey 13/5/19 Broadleaved woodland sloping with a northerly aspect containing dead trees, earth banks, ditches, stream and waterside. Dominated by Oak with Ash, Sycamore, Beech, Hazel, Hawthorn, Holly and Elder with an understorey of bracken, bluebells, elder, brambles and honeysuckle.

Woodland North of Philleigh Church (872396) Boundary OK

Survey 13/5/19 Broadleaved woodland with dead trees, earth bank and ditches. Dominated by Sycamore with Ash, Oak, Hawthorn, and Holly with an understorey of nettles and brambles.

Lanhoose to Philleigh Woodland Corridor (GR-867378-869391) - Not visited

Ruan Lanihorne (5)

Ardevora Woods (GR- 877410) – Not visited

Lanihorne Wood (GR-907434) Boundaries OK

Survey 25/5/19 Broadleaved Woodland with dead trees, earth banks, ditches and a stream sloping toward Fal river with a northerly aspect. Dominated by Oak with Ash, Sycamore, Beech, Hazel, Holly, Hawthorn and an understorey Bluebells, Elder, Brambles Ivy and Bracken.

Sett Bridge Wood (GR-888422) Boundaries OK

Survey 2/6/19 Broadleaved woodland with dead trees, ditches, stone walls, a quarry and a spring. Dominated by Oak with Ash, Birch, Hazel, Holly and Hawthorn with an understorey of Ivy, Laurel, Elder, Fern, Bramble, Honeysuckle and Rhododendron. Pheasants present.

Trethewey Wood (GR-913438) Eastern Boundary extended by regenerated broadleaved woodland

Survey 20/5/19 Broadleaved Woodland with dead trees, earth banks and stream on a north facing slope. Dominated by Oak with Beech, Sycamore, Alder, Ash, Willow, Hawthorn, Holly, Hazel, and Elder with an understorey of Bluebells, Fern, tree seedings, Bramble, Rhododendron, Laurel, Ivy, Wild Garlic, Bracken, Goosegrass, Winter Heliotrope, Archangel, Sock and Stitchwort.

Woodland corridor Trethewey Farm (GR-912432) Not semi-natural woodland

Survey 20/5/19 Conifer plantation set out along driveway with no understorey.

Wild Roseland – Woodland Habitat Ground-Truthing Report

St Just (16)

Bosloggas Wood South(GR-854342) Area of woodland extended to north-west.

Survey 2/6/19 Broadleaved woodland with earth banks and ditches sloping towards a stream with a northerly aspect. Dominated by Sycamore with Ash, Oak, Wild Cherry, Blackthorn, Hawthorn, Holly and Hazel with an understorey of Bluebells, Brambles, Nettles, Rhododendron, Tree Fern and Bamboo. North Eastern boundary has extended northwards along the stream to include further mature broadleaved trees.

Bosloggas Woodland Corridor (GR-850343) Boundaries OK

Survey 2/6/19 Mixed woodland linear to stream and garden boundary with garden escapes. Dominated by Fir and Ash with Sycamore, Beech, Blackthorn, Hazel and Pittosporum with an understorey of Sorrel, Nettles, Brambles and Fat Hen.

Veskelly Wood (GR-848343) New Woodland Area

Survey 2/6/19 Broadleaved woodland level with stream and ditches bounded by farmland. Dominated by Ash with Oak, Sycamore and Hazel with an understorey of Bramble, Nettles, Red Campion and Foxglove.

Tolcarne Wood (GR-842385) Boundary OK

Not surveyed

Camerance Wood (GR-840382) Boundary to extend south to include a regeneration of Oak and Ash < 5m and with 60% canopy cover.

Survey 22/5/19 Broadleaved woodland with dead trees, earth banks, glades and ditches. Dominated by Oak with Ash, Birch, Sweet Chestnut, Sycamore, Willow, Beech and Holly with an understorey of honeysuckle, wood sedge, bluebells, bramble and ivy.

Messack Wood (GR-841359) Survey by National Trust rangers

Commerans Farm Wood (GR-845375) Boundary appears to far to the south west.

Not surveyed

Tretham Stream Wood (GR-860364) Not visited

Trevarras Woods (GR-854383) Not visited

St Just Stream Woods (GR-851370) Not visited

Penperth Woods (GR-849388) Boundary OK

Not surveyed

Woodland near Sewage Works St Mawes (GR-842335) Boundaries OK

Not surveyed

Wild Roseland – Woodland Habitat Ground-Truthing Report

Priory Wood (GR-857338) – Boundaries OK

Survey 2/6/19 Broadleaved woodland with dead trees, earth banks and ditches sloping towards Percuil River with northerly and easterly aspects. Dominated by Ash with Oak, Sycamore, Hazel, Hawthorn, Holly, Blackthorn and Hazel with an understorey of Bluebells, Ferns, Brambles and Nettles. Gorse scrub extending from woodland edges into fields to north-east and south-west.

Turnaway Quay Wood (GR-837382) New woodland area.

Survey 22/5/19 Broadleaved woodland with dead trees, earth bank, glades and ditches bounded by Carrick Water to the west. Dominated by Oak and Sycamore with Ash, Birch, Willow, Blackthorn, Hawthorn and Holly with an understorey of honeysuckle, ivy, bramble and bluebells.

Woodland SW of Water Tower St Mawes (GR-844342) Not visited

Woodland west of Windmill Hill (GR-846350) – New Woodland Area

Survey 2/6/19 Mixed woodland with dead trees on sloping ground with western aspect. Dominated by Sycamore with ash, blackthorn, Sycamore and Fir with an understorey of Bramble and Ivy.

Veryan (19)

Carne Beach Woodland (GR-906383) Boundary extended to a small extent to north and east.

Survey 5/6/19 Mixed Woodland with dead trees and ditches. Dominated by pine trees with Ash, Sycamore, Sweet Chestnut, Blackthorn, Beech and Hawthorn with a poor understorey of three-cornered leek, bluebells, ivy, red campion, brambles, hogweed, harts-tongue fern, iris and sorrel.

Castlezens Wood (GR-928423) Boundary extended to north

Survey 18/6/19 Broadleaved woodland with dead trees and stream. Dominated by Oak with Alder, Ash, Sycamore, Goat Willow, Hawthorn and Elder

Gwendra Farmstead (GR-902384) Not semi-natural woodland

Survey 5/6/19 A stand of Monterey Pines with no understorey. Dominated by Monterey Pine with Holly, Blackthorn, Sycamore, Ash and Hazel with no understorey.

Parnall's Hill Woodland (GR-958418) Boundary extend north south and east

Survey 10/7/19 Mixed Woodland with dead trees, rides with a western aspect. Trees include Alder, Ash, Conifer, Oak, Sweet Chestnut, Sycamore, Beech and Holly with an understorey of bluebells, brambles, ivy, sorrel, charlock, red campion, alexanders.

Wild Roseland – Woodland Habitat Ground-Truthing Report

Melinsey Valley Wood (GR-904390) Boundaries extended on all valley sides with mix of new planting and regenerated woodland.

Survey 28/5/19 Broadleaved woodland with coppice, dead trees, earth banks, rides, glades, pollard, ditches and stream bank. New planting to west of stream corridor and established broadleaved woodland in plantation on eastern boundary. Dominated by Oak with Alder, Ash, Conifer, Sweet Chestnut, Sycamore, Wild Cherry, Willow, Beech, Holly, Blackthorn, Hawthorn, Hornbeam and Copper Beech with an understorey of bluebells, three-cornered leek, wild garlic, cleavers, elder, foxglove, sorrel, red campion and bracken.

Paradoc Wood (GR-917378) Boundary OK

Survey 4/6/19 Broadleaved woodland following stream through valley with dead trees, earth bank and glades. Dominated by Sycamore with Alder, Ash, Conifer, Lime, Oak, Sweet Chestnut, Beech, Hazel, Hawthorn, Blackthorn, Holly and Elder with an understorey of harts tongue fern, bracken, bluebells, nettles, ivy, red campion, honeysuckle, celandine, stitchwort, foxglove, cleavers, lords and ladies, brambles, and alexanders.

Plantation Wood (GR-920398) Boundary to south has overreached stream with a canopy of Oak, Beech, Sycamore and Willow.

Survey 5/6/19 Broadleaved woodland with dead trees, earth banks, stream bank and ditches. Dominated by beech and Sycamore with Alder, Ash, Conifer, Oak, Sweet Chestnut, Willow, Blackthorn, Hawthorn, Hazel, Holly and Laurel with an understorey of rhododendron, fern, bluebells, three-cornered leek, cleavers pennywort, harts tongue fern, brambles, ivy, bracken, red campion and violet.

Veryan Sports and Social Club Woodland Corridor (GR-911395) Boundary OK

Survey 5/6/19 Broadleaved woodland corridor alongside sports field. Dominated by Ash with Conifer, Sycamore, Sweet Chestnut, Hazel, Hawthorn, Holly and Elder with an understorey of bramble, nettle, ivy, red campion, dock and wild rose.

Treburthes Wood (GR-914403) Boundary extended to east.

Survey 5/6/19 Broadleaved woodland with stream. Dominated by Ash with Sycamore and Blackthorn with an understorey of dock, nettles, red campion, sorrel and brambles.

Woodland nr. Polgrain (GR-958422) Newly identified broadleaved woodland former Willow Carr

Survey 10/7/19 Broadleaved woodland on marshy ground with dead trees, ditches and a stream. Dominated by Willow and Hazel with Alder, Ash, Oak, Sycamore with an understorey of bramble, alexanders, wild rose, ivy, cleavers.

Wild Roseland – Woodland Habitat Ground-Truthing Report

Woodland nr. Polmenna (GR-952425) Boundary extended to south west.

Survey 18/6/19 Broadleaved woodland with coppice, dead trees, earth bank, ditches with quarry and streamside. Dominated by Oak with conifer, Sycamore, Hawthorn, Blackthorn and laurel with an understorey of bluebells, bramble, red campion, rose, ivy, sorrel, ramsons, yellow rattle, bryony, cleavers, bracken, honeysuckle and hogweed

Woodland nr. Tregenna (GR-951405) Boundary OK

Survey 30/5/19 Broadleaved woodland on cliffside with dead trees and a quarry. Dominated by Sycamore with Blackthorn and Hawthorn with an understorey of bracken, honeysuckle, red campion, stitchwort, bluebell, ivy, primroses, nettle, bramble, foxgloves, sorrel and cleavers.

Woodland nr. Trencreek Farm (GR-930438) Boundary OK

Survey 10/7/19 Broadleaved woodland with streamside and dead trees. Dominated by Oak with Alder, Ash, Holly, Hazel and Hawthorn and an understorey of bramble, fern, wild carrot, thistle, red campion, honeysuckle, cleavers and iris.

Woodland nr. Trenona Farm (GR-918410) Boundaries OK

Not surveyed

Woodland nr. Trevilveth Farm (GR-947428) Boundaries OK

Not surveyed

Sunny Corner Woodland (GR-934394) Boundary OK

Survey 10/7/19 Broadleaved woodland

Trounce Guy's Bank (GR-958417) Newly identified broadleaved woodland.

Survey 10/7/19 Broadleaved woodland with dead trees, earth bank and Cornish hedge. Trees include Ash, Conifer, Oak, Sycamore, Wild Cherry, Willow, Beech, a plantation of Sweet Chestnut and an understorey of hazel, elder, bramble, ivy, bracken, foxglove, bluebell and red campion.

Upper Melinsey Valley Wood (GR-905396) Boundary OK

Survey 5/6/19 broadleaved woodland with dead trees and a stream. Dominated by Oak with Ash, Sycamore, Beech and Hawthorn

Wood South of Century Lane (GR-919393) Boundary OK

Survey 1/5/19 Broadleaved woodland with dead trees and ditches. Dominated by Oak with Sycamore, Hawthorn and Blackthorn with an understorey of three-cornered leek, bluebells, brambles and nettles.