



QLPS HEDGEROW SURVEY REPORT

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QUANTOCK HEDGEROWS AND VETERAN TREES

The Quantock Landscape Partnership Scheme (QLPS) was a National Lottery Heritage Fund supported programme that ran from 2020 to 2025. Hosted by the Quantock Hills National Landscape it has 23 different project strands. One of these was entitled “Quantock Hedgerows and Veteran Trees” and encompassed a grants programme to support restoration and new planting, and an extensive hedgerow survey programme. This report details the findings of the survey work.

From 2021 to 2025 QLPS staff and volunteers surveyed a variety of properties with hedges including 26 farms (hobby, livestock and arable), 6 villages, 1 campsite ,1 manor house and 1 holiday site.

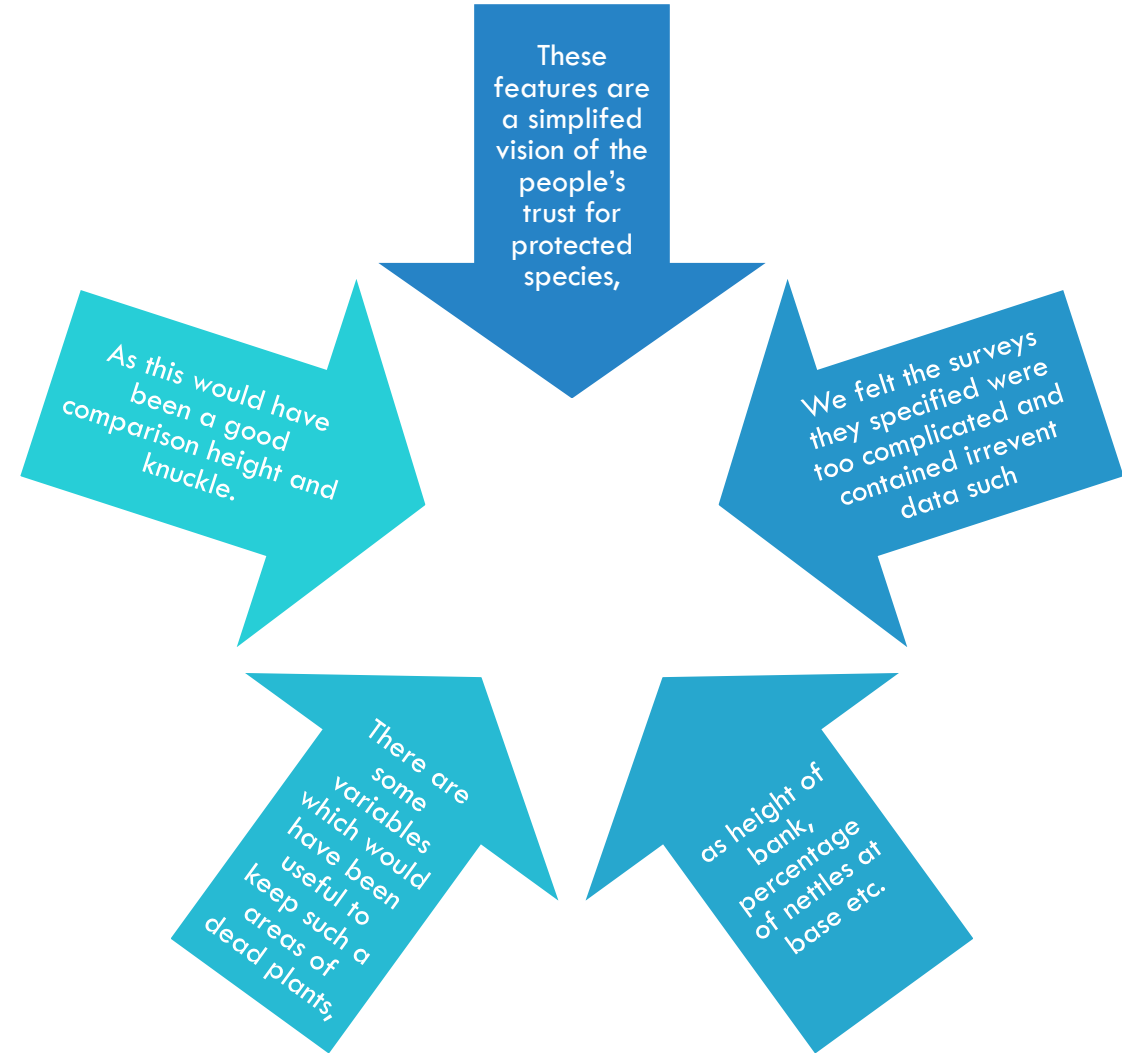
In total we surveyed 695 hedgerows across those sites.

Based on the Ordnance Survey maps within the QPLS project boundary it has been estimated that there are between 4200 to 4500 boundary lines, so we have surveyed around 16 – 17% of the total field edges. Note that the proportion of hedges surveyed will be higher as a significant number of the boundaries will be fences, ditches, or other features rather than actual hedges.

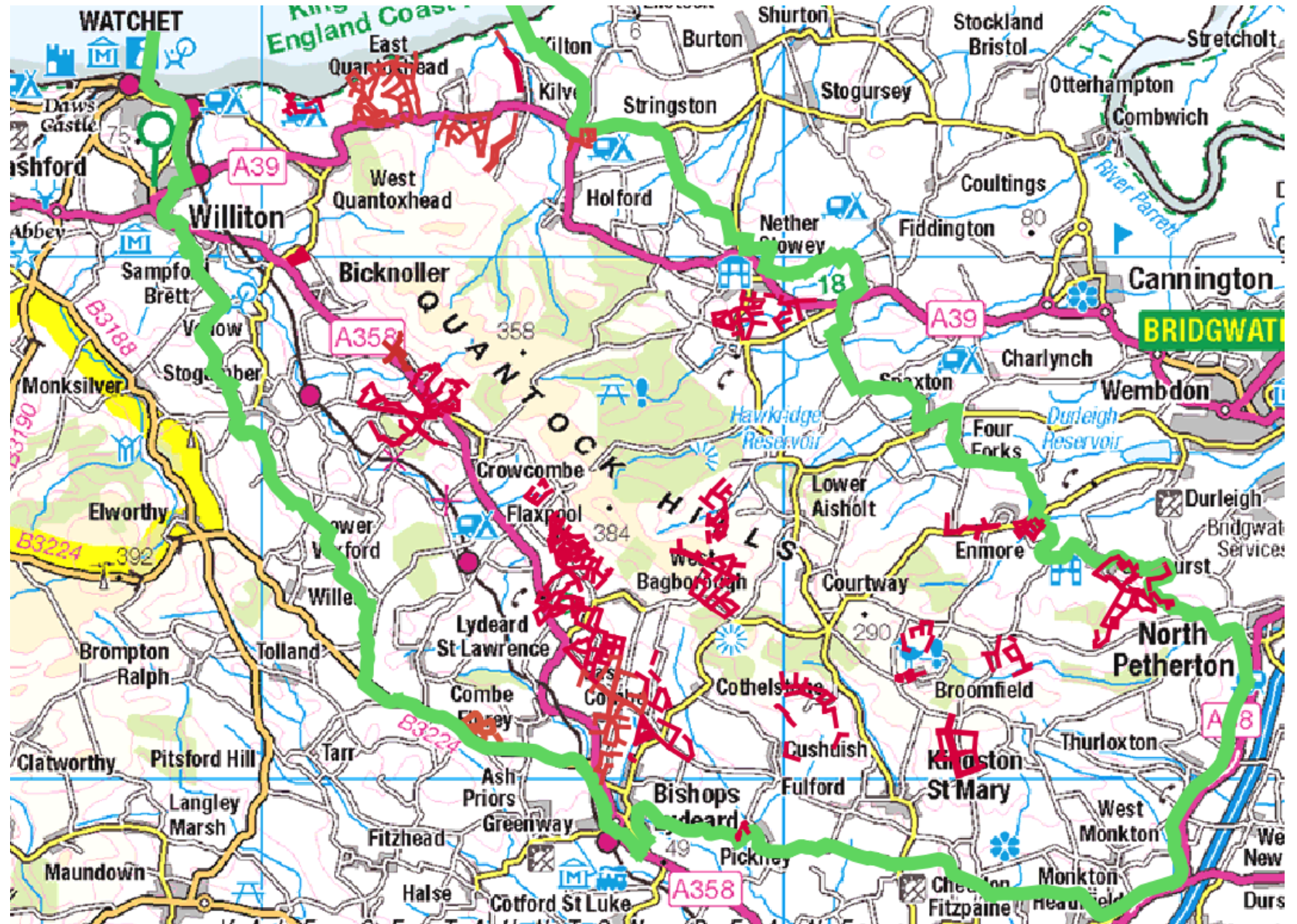
Site name	Number of hedgerows on site
Bicknoller farm	4
Stowey Rocks farm	2
Stream Farm	14
Tetton Farm	20
Cothelstone estate	17
Lydeard Farm	10
Triscombe Farm	8
Durborough Farm	12
New Stowey Farm	33
Mills Farm	21
Kenley Farm	23
Enmore Parish (various)	17
Stoneage Organics	11
North west crowcombe estate	30
Huntstile Farm	46
Smokeham Farm	27
Halsway Manor	12
Hurley Farm	22
Crowcombe Parish (various)	4
Lower Halsway Farm	10
Shopnoller Farm	71
Pickney (other)	5
Home Farm Centre	12
Pickney Farm	6
Rock Farm	32
Volis Farm	18
Eastcombe Farm	41
Townsend Farm	23
Kilve parish (various)	13
Higher Combe Farm	16
Perry Farm	68
Moorhouse Campsite	12
Broomfield parish (various)	9
bishop's (various)	2
Stowey (various)	1
Lydeard (various)	4
Aisholt parish (various)	12

SURVEYED FEATURES

- Height, length and width
- Bank/walls, fences, ditches
- Surrounding habitat
- Connecting hedgerows
- Knuckles
- Mature trees
- Presence of young trees
- Species in hedgerows
- Gaps and gates



QLPS PROJECT BOUNDARY, SHOWING THE SURVEYED HEDGES



GAPS AND GATES

Gaps are created with through plant deaths, grazing, trampling, over cutting or being crushed by a falling tree.

Gaps can be either through the whole height of the hedge or just at the base if there's no foliage around the base of the hedge.

In order to be a gap a deer or livestock must be able to squeeze through it. Large gaps, small gaps and gates were combined into one total as regardless of how large the space is or what caused it, it is a barrier for migrating wildlife and a lacking in flora.

An outlier in this result set is Hurley farm, where a new management strategy is to strip, thin and coppice the hedgerows to an extreme with the intention of allowing natural regrowth.

Higher Combe farm is also one of note for the opposite reason – for a farm with only just over a dozen hedges they have a very large number of gaps. They have allowed the hedgerows to grow out/up pretty much without any management. In many places there was no longer a hedge just a set of veteran trees on a bank. Or in some field where livestock have had unbridled access they have eaten gaps in and around all large stems

Perry Farm has the most gaps in the hedges this is due to multiple factors such as livestock, deer, public access, high winds, coast factors, a large amount of previous Dutch elm disease and ash die back on site. However it should be noted that the hedges on this farm were quite long and generally thick so they gaps were not as disruptive and obvious as the ones on Hurley or Highercombe.

location	gates and gaps	average
Bicknoller site	4	1
Stowey rocks farm	4	2
Stream farm	18	1.6
Tetton farm	22	1.8
Cothelstone estate	39	2.3
Lydeard farm	5	2
Triscombe farm	14	1.75
Durborough farm	21	2.3
New stowey farm	54	1.7
Mill farm	28	1.3
Kenley farm	47	2.1
Stoneage organic	31	3
Huntstile organic	75	2
Smokeham farm	55	2
Pickney other	8	2
Pickney farm	5	1
rock farm	82	2.6
Volis farm	69	4
Halsway manor	60	3
east combe farm	66	4.1
Townsend farm	24	1
Kilve village	25	1.9
Shopnoller farm	184	2.6
Crowcombe village	15	3.75
Hurley farm	117	5.3
lower halsway farm	73	7.3
home farm holiday centre	42	3.5
enmore village	22	1.3
North west crowcombe estate	89	2.5
perry farm	258	3.8
higher combe	106	6.6
campsite	14	1.2
recreation	2	1
bishops hull	5	2.5
lydeard hill	7	1.75

BANKS, DITCHES AND FENCE

Banks provide habitat for small animals, but fences are designed to restrict access for larger animals navigating between the hedges. While fences are very effective and constraining livestock, they are less so at restricting deer movements as the can jump most standard 1.2m fencelines with ease.

Hedges with established banks are known to provided better botanical variety.

Ditches provided damp conditions resulting in the presents of damp or wetland species.

Hedges with none of these features suggests they are a quite new hedge on land with no livestock.

location	fences	ditches	banks/walls	none
Bicknoller site	4	0	4	0
Stowey rocks farm	0	1	2	0
Stream farm	10	0	6	1
Tetton farm	3	0	11	1
Cothelstone estate	4	6	12	0
Lydeard farm	9	0	6	0
Triscombe farm	8	1	7	0
Durborough	9	0	7	0
New stowey farm	23	14	18	0
Mill farm	9	6	1	7
Kenley farm	22	0	22	0
Stoneage organic	9	5	10	0
Huntstile organic	22	19	20	3
Smokeham farm	10	17	28	0
Pickney other	4	4	4	0
Pickney farm	1	2	6	0
Volis farm	12	4	18	0
Enmore village	12	6	13	0
Rock farm	18	13	32	0
North west crowcombe estate	30	5	34	0
east combe farm	8	5	40	0
Kilve village	1	2	13	0
Halsway manor	20	3	19	0
Hurley farm	22	2	20	0
Crowcombe village	2	0	4	0
lower hallway farm	9	1	8	0
Shopnoller farm	26	22	69	0
Townsend farm	20	2	21	0
Broomfield village	7	0	11	2
home farm holiday centre	8	0	8	0
higher combe farm	12	2	14	0
Perry farm	36	10	64	0
lydeard hill	3	1	4	2
bishop hull	1	0	2	0
Campsite	6	0	11	0
stowey recreation	1	0	1	0
total	401	151	570	16

HEIGHT AND WIDTH

Height and width are estimates made during survey.

The height is based on the managed part of a hedge as there maybe a line of trees behind the hedge. Sometimes a wide hedge will be managed in different ways for the different fields, in these cases we would base it on the managed section in the field we were stood in.

The over all average across all the hedges is 2.6m and the over all average of width is 2.1m

Its interesting that they are so close on many of the sites even though the over all total for width is 300 metres less

locations	height total	average height	total width	average width
Bicknoller site	5.3	1.3	6.5	1.6
Stowey rocks farm	10	5	6	3
Stream farm	26	2.4	34	3.1
Tetton farm	24	2	26	2.2
Cotelestone estate	56.4	3.3	38	2.2
Lydeard farm	23	2.3	30.5	3.1
Triscombe farm	21.5	2.7	16	2
Durborough farm	49.5	5.5	22.5	2.5
New stowey farm	128.8	4	85.9	2.7
Mill farm	59.5	2.8	46	2.2
Kenley farm	78.5	3.6	65.5	3
Stoneage organic	71	6.5	44	4
Huntstile organic	257	6	185	4
Smokeham farm	62	2.3	66	2.4
Pickey other	17.5	3.5	9.5	1.9
Pickney farm	19	3.2	14.5	2.4
Rock farm	87	2.7	79.5	3
Volis farm	48.5	2.7	72.5	4
Halsway manor	35	1.75	35	2.9
east combe farm	51.5	3.2	29	1.8
Townsend farm	57.5	2.5	51	2.2
kilve village	43.5	2.9	31	2.1
Hurley farm	43.3	1.97	42	1.86
Crowcombe village	11	2.75	7	1.75
Shopnoller farm	129.5	1.8	117.5	1.6
lower halsway farm	28.5	2.85	19	1.9
home farm holiday centre	18.5	1.5	14	1.2
Enmore village	31	1.8	21	1.2
North west crowcombe estate	48	1.3	14	1.2
campsite	17.5	1.5	16.5	1.4
higher combe farm	51	3.2	42	2.6
perry farm	188	2.8	183	2.7
Bishop's hull	8	4	7	3.5
Lydeard hill	8.5	2.1	5.5	1.3
Recreation ground	4	4	3	3

LENGTH OF HEDGEROWS

These were calculated using magic maps and Google earth.

140km is roughly 87 miles, the distance for a return trip

From Bridgwater to Bristol city centre.

location	total distance of hedge /m
Bicknoller site	756
Rock farm	5730
Stream farm	2,735
Tetton farm	4347
Cothelestone estate	5,009
Llydeard farm	1,513
Triscome farm	957
Durborough farm	2334
New stowey farm	7161
Mill farm	2,472
Kenley farm	6048
Stoneage organic	1446
Huntstile organic	11000
Smokeham farm	4871
Pickney sites	1050
east combe farm	12785
Volis farm	5005
Halsway manor	3110
Recreation grounds stowey	142
football grounds bishops hull	334
Broomfield village	380
Shopnoller farm	13100
Hurley farm	3360
Crowcombe village	4500
North west crowcombe estate	7970
Enmore village	2940
home farm holiday centre	1080
lower halsway farm	1810
lydeard hill	905
Townsend farm	4681
Perry farm	11420
Higher Combe Farm	4120
Campsite	1250
Kilve village	3000
total distance (metres)	139,651

SPECIES DIVERSITY

In total we discovered out hedgerows contain at least 83 relevant species (but this is most likely higher).

This includes 38 species of native species of shrubs and trees. Additional non-native species included 2 species of willow, 2 species of elm, 2 species of lime, 2 species of buckthorn, 2 species of birch, 2 species of poplar, 2 species of laurel, several species of ornamental roses, and at least 2 species of oak (possibly 3 or 4 though red and Turkish were left out of the official species count).

23 species of native non shrub or tree species. Our most interesting finds include belladonna and wild growing hops.

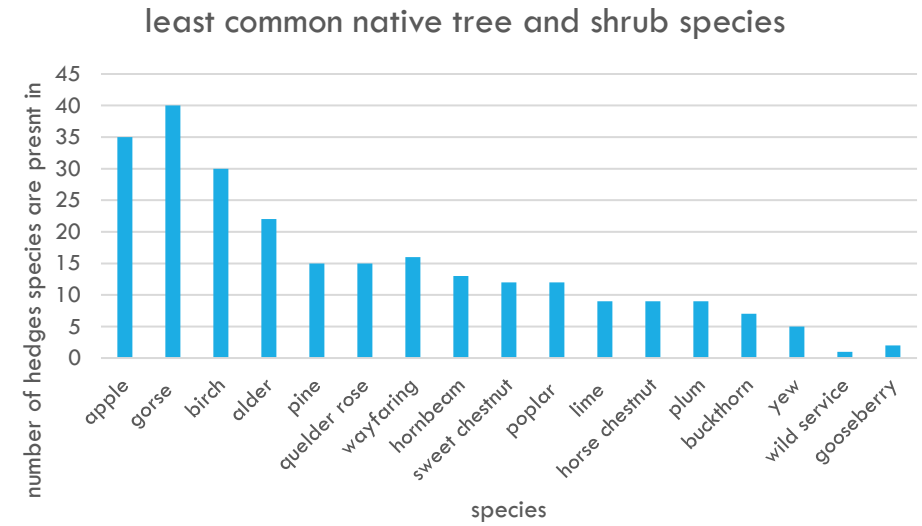
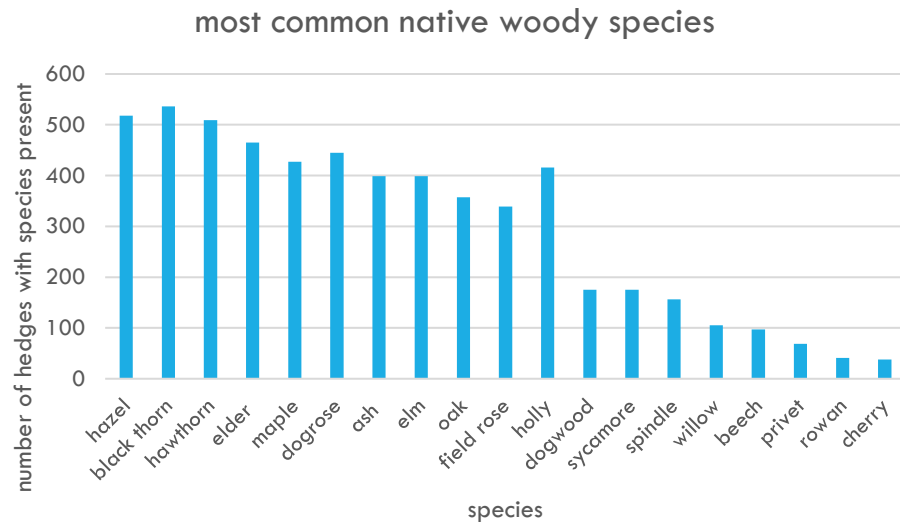
21 species of non-native ornamental or invasive species. Laurel, cypress and box appear to have been mixed in with a number of hedges. This could have been due to people filling gaps or the hedge was once an ornamental garden hedge or as game cover.

We also had one count of Japanese Knotweed and one count of Himalayan Balsam. Both are highly invasive non-native species so it is encouraging that we only found on small population of each.



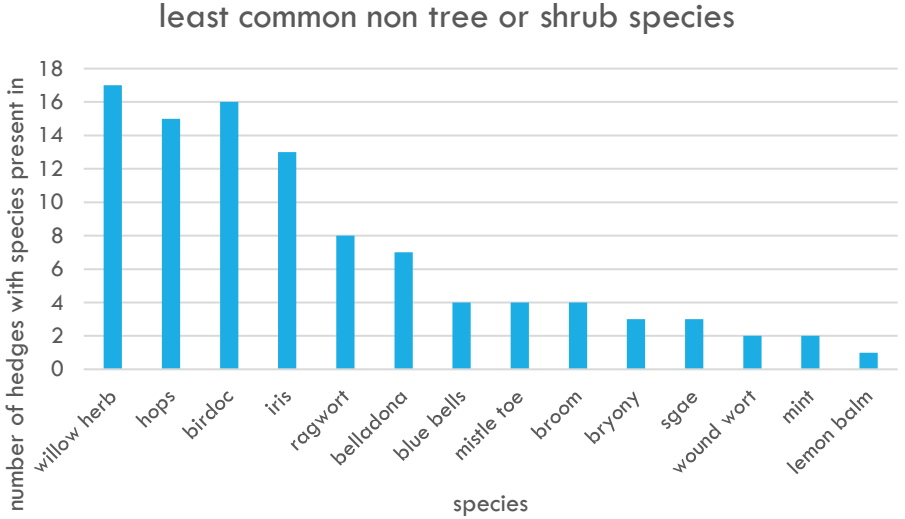
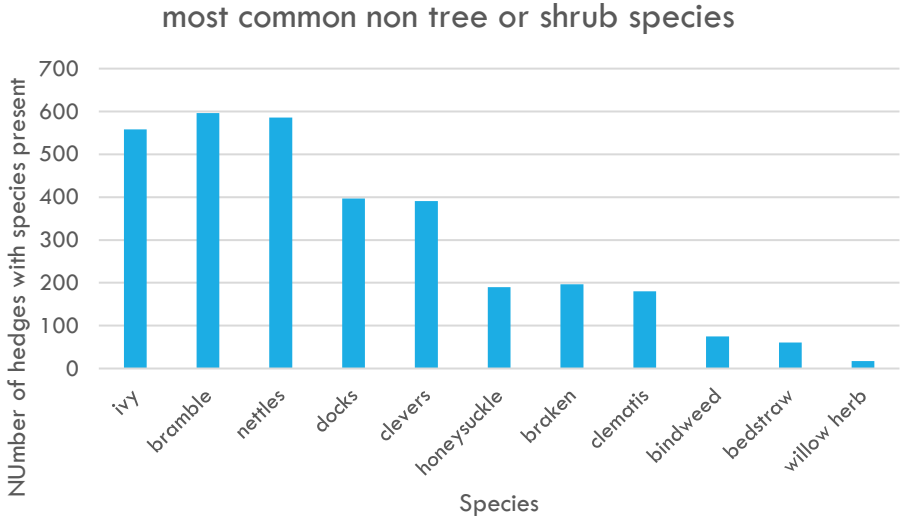
MOST COMMON WOODY SPECIES

LEAST COMMON WOODY SPECIES



MOST COMMON NON WOODY SPECIES

LEAST COMMON NON WOODY SPECIES



OTHER SPECIES

We encountered a variety of garden escapes totally 21 species (plus one or two more species of laurel) and invasive species during the surveys, these are included in the table in not particular order.

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Snowberry was the most common garden escape which was found in 15 hedgerows, followed by box in 12 hedges, laurel in 9 hedges and Buddleia in 8 hedges.

Buddleia
snowberry
larch
astor
mock orange
Himalayan balsam
Japanese knotweed
hypericum
burbus
tulip tree
jungle rose
laurel
cedar
cypress
viburnum
holm oak
fig
box
douglas fir
periwinkle
Medlar

SPECIES DIVERSITY BY SITE

The species count includes all native, non woody, ornamental and invasive species on the site. The average was worked out by adding up all the species counted in every hedge and divided by the number of hedges.

Home farm holiday centre's biodiversity should be considered a slight outlier next to Halsway Manor as a large percentage of the species found on those two sites are ornamental and/or invasive including hypericum, cotoneaster and Japanese knotweed. Both Halsway Manor and Home Farm had a total of 9 non-native species.

Ignoring the nonfarm sites Triscombe, Tetton and Durborough have the lowest number of unique species which is interesting in the case of Durborough as this site is known for being biodiverse.

Stream Farm has the lowest average of species per hedgerow, and the hedgerows in places were almost a monoculture of holly. They did however have one of the rarest species which was black poplar.

The data from Aisholt is partly missing so we don't know the amount of non woody species meaning it is likely that the diversity is slightly higher.

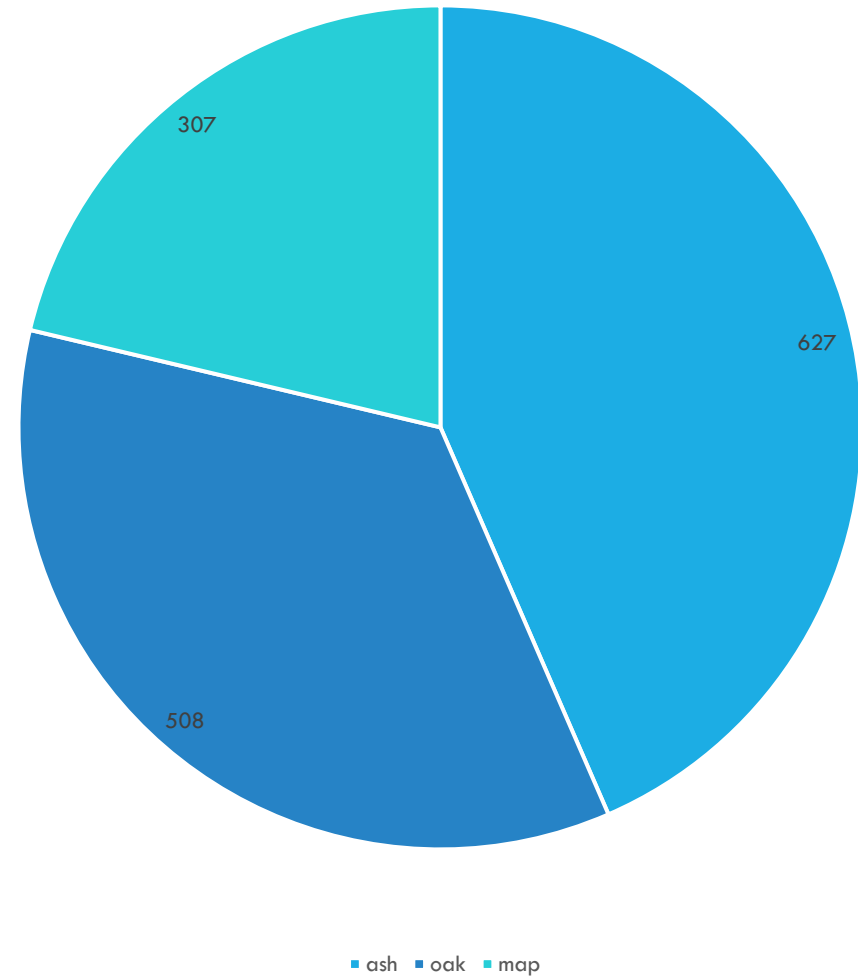
site name	total number of species	average
Tetton farm	21	14
Bicknoller site	18	10
New stowey farm	41	15
Triscombe farm	21	12
Durborough farm	21	12
stream farm	23	9
Cothelstone estate	32	13
stowey rocks farm	20	14
lydeard farm	27	13
Aisholt various	22	12
Campsite	28	10
mills farm	27	15
kenley farm	30	13
Huntstile organic	36	11
Stonage organic	28	11
lydeard hill	21	11
broomfield village	30	12
smoke farm	31	13
pickney farm	27	14
Pickney other	33	16
rock farm	33	14
higher combe farm	32	15
volis farm	37	17
perry farm	51	15
east combe farm	43	17
Townsend farm	26	14
Kilve village	29	13
Halsway manor	41	15
Shopnoller farm	50	15
Hurley farm	33	15
crowcombe village	22	13
lower halsway farm	31	14
north west crowcombe	38	14
home farm holiday centre	42	13
Enmore village	32	16
bishops football ground	12	6
stowey recreation ground	15	15

MATURE TREES

Mature trees in this survey ranged from semi mature trees to veteran trees.

In total we surveyed 2398 hedgerow trees, an average of 3.5 trees per hedge.

Most Common Mature Trees



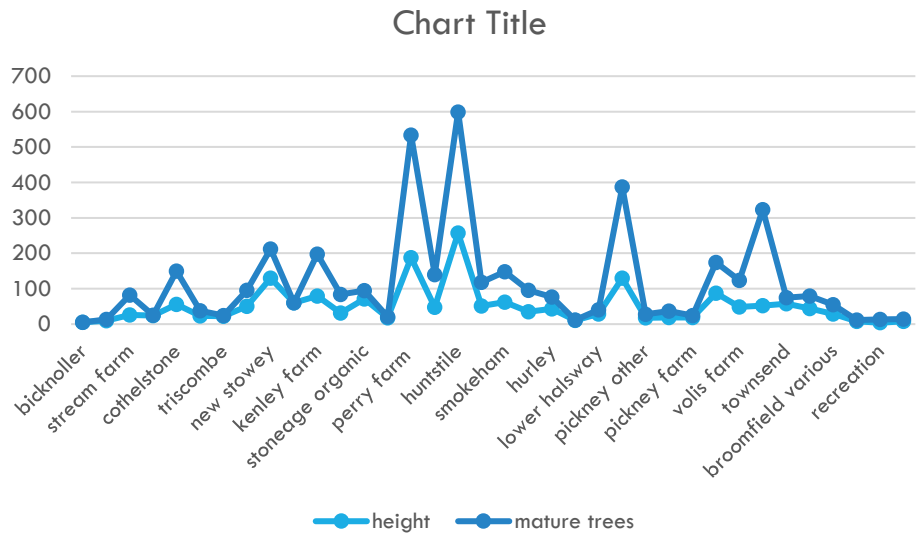
MATURE TREES

In total the semi mature to veteran trees in our hedgerows were spread across 32 species.

The only times fig, medlar and wild service were once seen in hedgerows once and as mature trees.

species	amount
Hazel	151
Elm	148
Hawthorn	91
Sycamore	86
Beech	83
Holly	82
Willow	72
Blackthorn	41
Pine	36
Birch	27
Lime	24
Cherry	24
hornbeam	19
Alder	15
Apple	8
Elder	7
Sweet chestnut	6
Cedar	6
Poplar	6
Rowan	5
Horse chestnut	5
Plum	3
Dogwood	3
Fig	1
wild service	1
Fir	1
Medler	1
buckthorn	1

COMPARISON OF HEIGHT AND MATURE TREES



locations	height	mature trees	number of hedges with mature trees
bicknoller	5	0	0
stowey rocks	10	3	2
stream farm	26	57	10
tetton farm	24	1	1
cothelstone	56	94	13
lydeard farm	23	14	8
triscoombe	22	2	2
durborough	50	66	11
new stowey	130	81	28
mills farm	60	0	0
kenley farm	79	119	19
enmore	31	53	14
stoneage organic	71	24	7
campsite	17.5	8	8
perry farm	188	346	49
nw crowcombe	48	92	20
huntstile	257	351	39
higher combe farm	51	67	11
smokeham	62	88	16
halsway	35	64	11
hurley	43.5	41	14
crowcombe	11	1	1
lower halsway	28.5	14	8
shopnoller	129.5	257	47
pickney other	18	10	4
home farm c	18.5	20	10
pickney farm	19	5	4
rock farm	87	89	25
volis farm	49	73	14
east combe	52	250	32
townsend	58	20	5
kilve various	44	37	9
broomfield			
various	29	32	7
bishop's various	8	4	2
recreation	4	9	1
lydeard various	8	6	3

| KNUCKLES

Knuckles are created from cutting using a flail deck a lump of scar tissue develops where the shrub is cut at the same point every year. We classed a hedge as having a knuckle even if only a few specimens had the knuckles or if the knuckles themselves were small/ only just beginning to form.

According to many studies hedgerows with knuckles are less species rich, however our results show a different story.

Hawthorn, hazel, blackthorn , elder and maple are particularly prone to knuckles. Considering these are in the most common species in our hedges this could be a contributing factor as to why so many of our hedges have knuckles and yet have so much species diversity.

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There were 14 entries with this data missing.



HABITAT

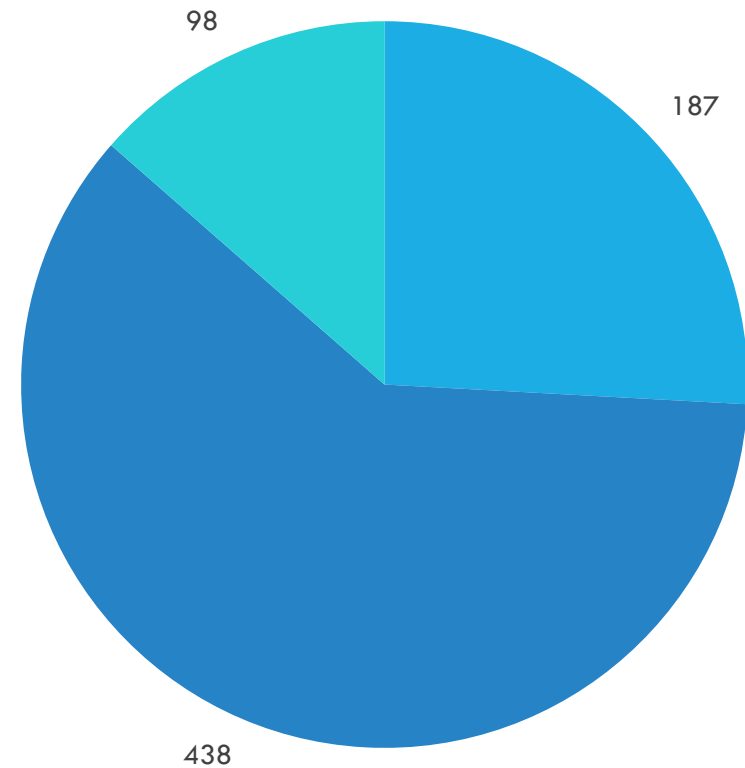
The habitats recorded here are those which surrounded the hedgerow.

They include woodland, grasslands (anything from pasture, amenity silage or meadow), heathland or arable, some also had no surrounding habitat.

We recorded some areas connecting to ponds or other wetlands but this data was patchy, so we didn't use it in the analysis

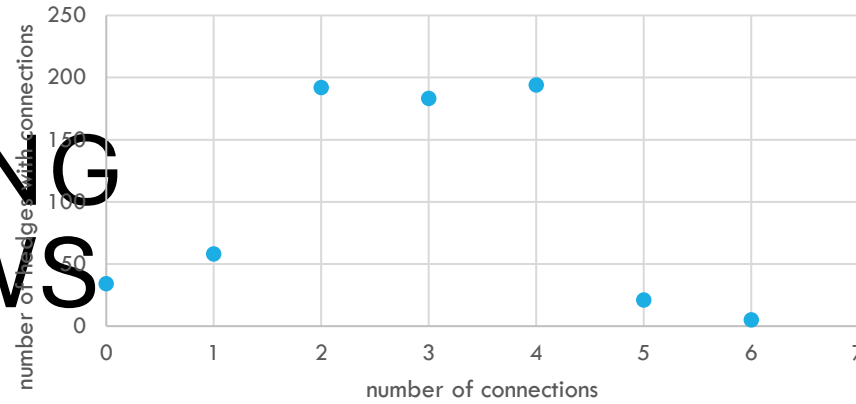
This data does not mean that the field in the Quantock are disproportionately grassland, just that the farms and properties which allowed us assess to survey were predominately graziers or silage farmers.

numerical comparisons of the three most common habitat types bordering hedgerows



CONNECTING HEDGEROWS

frequency of connecting hedgerows



Hedgerows connect the landscape, so if the hedge only connects to one or two other hedges that means that there are only one or two safe routes for animal to get to feeding grounds, nest etc.

In total there are 1940 connection to the surveyed hedges, averaging out as 2.8 connections per hedge.

The most connections to any singular hedges is 6, but only 5 hedges have this many connections. However, 34 of the surveyed hedges do not connect to any other hedges at all.

284 hedges have 0-2 connections while 403 hedges have 3-6 connections.

location	hedge connections	average
Bicknoller site	13	3
Stowey rocks farm	7	4
Stream farm	35	3
Tetton farm	35	3
Cothelestone estate	25	2
Lydeard farm	30	3
Triscombe farm	25	3
Durborough farm	32	4
New stowey farm	113	4
Mill farm	59	3
Kenley farm	61	3
Stoneage organic	23	2
Huntstile organic	101	2
Smokeham farm	84	3
Pickney other	10	2
Pickney farm	14	2
rock farm	97	3
Volis farm	51	3
Halsway manor	48	2.4
east combe farm	55	3
Townsend farm	68	3
Kilve village	21	1.6
Shopnoller farm	221	3.1
Crowcombe village	7	1.75
Hurley farm	56	2.54
lower halsway farm	16	1.6
home farm holiday centre	11	1
Enmore village	37	2.8
North west crowcombe	66	1.8
perry farm	101	1.5
higher combe farm	52	3.2
Campsite	29	2.4
Recreation grounds	0	0
bishops hull village	3	1.5
lydeard hill	5	1

YOUNG TREES

Young trees during the surveys were those which were stand alone hedgerow trees or in a taller more crowded hedgerow were clearly older than the general age of the specimens in the hedge but also not even close to semi mature.

Less than half of the hedgerows surveys contained young trees.

6 sites had no young trees at all. This includes Mills Farm which also had no mature trees, and a fairly uniform height and width across the site indicating that no trees are allowed to grow up in their hedgerows.

site	young trees
Bicknoller site	0
Rock farm	14
Stream farm	6
Tetton farm	0
Cothelstone estate	12
Lydeard farm	10
Triscombe farm	0
Durborough farm	8
New stowey farm	12
Mill farm	0
Kenley farm	14
Stoneage organic	9
Huntstile organic	40
Smokeham farm	7
Pickney sites	7
east combe farm	29
Volis farm	10
Halsway manor	13
Stowey recreation ground	0
Bishop's hull village	1
Broomfield village	12
Shopnoller farm	41
Hurley farm	15
Crowcombe village	2
North west crowcombe estate	12
Enmore village	7
home farm holiday centre	7
lower halsway farm	6
lydeard hill	2
Townsend farm	3
higher combe farm	10
Perry farm	57
Kilve village	1
Campsite	4
Stowet rocks farm	0
total	296