Three Crosses Biodiversity Audit

Survey and Report undertaken by The Wildlife Trust of South and West Wales



On Behalf of the Village of Three Crosses Common Good Trust

Survey Date: April - September 2014





Three Crosses Biodiversity Audit

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1. Introduction

1.1. About the Wildlife Trust of South and West Wales (WTSWW)

- 1.1.1. WTSWW is one of 47 independent local charities that co-operate across the whole of the UK and are known collectively as *the Wildlife Trusts*. In Wales, six Wildlife Trusts work together to form Wildlife Trusts Wales, enabling us to work at both a local and national level to deliver nature conservation for people and wildlife.
- 1.1.2. WTSWW has a vision of an environment rich in wildlife for everyone and aims to rebuild biodiversity by engaging people with their environment. To do this WTSWW has four main objectives, which it hopes to deliver with key partners. The objectives are:
 - 1. To stand up for wildlife and the environment
 - 2. To create and enhance wildlife havens
 - 3. To inspire people about the natural world
 - 4. To foster sustainable living

1.2. Project History

- 1.2.1 WTSWW was first approached by The Village of Three Crosses Common Good Trust (the Trust) in December 2013 to tender for undertaking ecological baseline surveys and community engagement work as part of the Trust's 'Biodiversity Audit of the Village of Three Crosses' grant application to Environment Wales (EW).
- 1.2.2. After a competitive tender process WTSWW was appointed by the Trust on success of the EW grant (31.03.2014). An initial meeting between the Trust and WTSWW determined that as well as fulfilling the obligations of the contract and grant, this project could form the basis of longer term involvement of WTSWW in the area, with particular regard to community engagement.

1.3. Study Area

The Trust had outlined five (A-E) linear routes through the Village of Three Crosses where the project was to take place (**Plate 3**). These routes followed the main roads in and out of the village and covered areas of hedgerow, verge, amenity grassland and marshy grassland.

All five routes fall within the Village of Three Crosses, which is located toward the east of Gower, south of Gowerton and west of Dunvant at grid reference SS568943 (Ordnance Survey: Explorer 164).

The village is bordered by a diverse range of broad habitat types, including agricultural pastures, woodland, hedgerow, marshy grassland and meadows, with common land to the south and southeast and. The topography of the site varies

throughout, but in general is gently sloping from the north to south at c.130m - 100m AOD, with predominantly southerly aspect.

As well as housing and associated land curtilage, the study areas support a number of semi-natural habitats including semi-natural broadleaved woodland, hedgerows (**Plate 1**), scrub meadow (**Plate 2**) and marshy grassland. In addition to these habitat types numerous green spaces exist, which are managed predominantly as amenity grasslands.

1.4. Survey Rationale

The rationale of the survey and report is to undertake an ecological survey of the various accessible and designated sections through the Village of Three Crosses, concentrating on vegetation, invertebrates, mammals, birds, reptiles and amphibians. The project has three main aims:

- 1. To provide baseline ecological data for the Village of Three Crosses
- 2. To provide recommendations and future management advice and proposals
- 3. To involve the community as much as possible with regard to surveys and future management proposals.

Although no specific budget has been identified to undertake proposed recommendations, each identified project has been devised under the constraint of a 'realistic' budget. Identified projects have taken into consideration other factors such as health & safety and community perception. Community perception is particularly important to the project as it is essential that local people embrace and appreciate the biodiversity improvements if they are to be maintained in the long-term.



Plate 1: Hedgerow and meadow habitat

The Plate shows semi-improved grassland habitat to the east of the Village of Three Crosses. The grasslands are managed through grazing and as meadows offering important habitat for vegetation, invertebrates, birds and mammals. Woodland habitat can be seen bordering the grassland, increasing the overall ecological value of the area.



Plate 2: Church meadow in spring

The plate above shows the spring meadow behind the church at Three Crosses. Part of its floristic diversity can be seen in the Pignut (*Conopodium majus*) and Bluebell (*Hyacinthoides non-scripta*). The meadow supports numerous invertebrates, birds and bat species.

2. Methodology

2.1. Breeding Bird Surveys

2.1.1. All surveys were carried out by experienced ecologists from WTSWW, under suitable weather conditions. 5 transects through the village were chosen and these were walked once a month during the main breeding season (April – June) and all bird species seen or heard along each transect was mapped. All surveys were carried out at dawn as this is the main period of activity and therefore allows detection of the maximum number of species. Notes were taken of breeding behaviour (mating, nest-building, territorial singing etc.).

2.2. Botanical Surveys

2.2.1. Vegetation surveys were all carried out by experienced botanists from WTSWW during times of peak floral diversity (Map and June). Three visits were made during May and June and a list of all plants identified was made (see Appendix 3e). A walkover botanical survey was undertaken of all the areas identified within the contract. Each individual road section was treated as a separate site, and significant habitat blocks were also treated individually.

The linear road features were walked, examining both verges, including verge banks, hedgerows, and any natural vegetation occurring on infrastructure features (such as retaining walls, gutters). A separate species list was compiled for each road section and total species list for the village was also compiled from the individual section lists. Maps were annotated to indicate areas of higher quality semi-natural habitat, or features of interest (such as badger runs, or interesting habitat patches). Locations of non-native species were also recorded to inform potential future control effort. Where possible Phase 1 habitat type was assigned to adjacent fields and this information recorded on the maps.

Other larger areas of amenity land with public access such as green space were recorded by walkover survey and creating a species list in combination with DAFOR recording based on percentage ground cover:

- D Dominant 50-100%
- A Abundant 30-50%
- F Frequent 15-30%
- O Occasional 5-15%
- R Rare < 5%

2.3. Reptile Surveys

2.3.1 An unimproved grassland field to the south-west of Three Crosses was identified as a potential site for reptile surveys and possible reptile walk events. In August 40 0.5m x 0.5m corrugated Onduline refugia were placed in suitable locations in the field. Reptiles use these refugia for shelter and for thermoregulation, making them an ideal survey tool. The sheets were subsequently checked by WTSWW staff to assess what reptiles were using the area.

2.4. Community Events

- 2.4.1. A number of community events were run by WTSWW staff in order to allow local residents to experience and learn about some of the wildlife that they share the village with. These included bat walks, moth trap events and butterfly walks.
- 2.4.2. Two bat walks were carried out in the village during May and June, during suitable weather. These consisted of an introductory talk from WTSWW's Conservation Manager and then a walk around the village with bat detectors in order to hear the range of bat species using the local area. The bat walks began just before dark to coincide with bats leaving their roosts for the night.
- 2.4.3. A moth trapping event was held in conjunction with the second bat walk. In order to introduce local people to the astonishing variety of moths that are present in the Three Crosses area, a powerful Robinson moth trap was run, powered by a portable generator, in the grounds of the chapel for a number of hours. A talk was given about moth ecology and moths were caught and identified as they were attracted to the trap.
- 2.4.4. During August a butterfly walk was held in which a WTSWW officer walked a transect with members of the public and all butterfly species seen were identified and methods of improving gardens for butterflies were discussed.
- 2.4.5. All species seen on these surveys were recorded and are listed in Appendix 3. The species lists were also sent to the local biological records centre (SEWBReC).

2.5. Community Wildlife Surveys

- 2.5.1. In the initial publicity (see Appendix 1) for this project we offered to set up remote camera traps in the gardens of any Three Crosses residents who were interested to find get video footage of the wildlife visiting during the night. We also offered to run moth traps in a number of gardens throughout the summer period.
- 2.5.2. If residents showed an interest in hosting a camera trap then a staff member from WTSWW visited in the evening in order to set up the camera in a suitable position and explained how to use the camera trap. The camera trap was then left for a number of nights (depending on demand) and then the camera was picked up and checked to see what had triggered it during the survey period. The resident was then provided with feedback on what species had been caught on camera and were given a disc with the footage/photos.
- 2.5.3. The moth trapping event in the village caught many people's imagination with the range of species that can be present even in a small garden. Following on from this a number of residents expressed an interest in having a moth trap run in their garden. A member of staff from WTSWW with extensive experience of moth trapping arranged survey visits throughout the summer in order to catch species which emerge at different times. Nights with suitable weather for moths (not too wet, windy or cold) were chosen and the resident was visited in the evening so that the trap could be set up. The trap was then visited again at first light (in order to collect moths that settled outside the trap before they were eaten by birds) and the catch was identified in the presence of the householder.

2.6. Garden Wildlife Survey

2.6.1. WTSWW have previously carried out Garden Wildlife Surveys in Cardiff and Swansea with the aim of learning more about the species present in people's gardens as well as increasing public awareness of the things they can do for wildlife in even a small garden. These have been quite successful and the survey form was modified for distribution around Three Crosses (an example is shown in Appendix 2).

The survey forms were distributed by a local resident along with the village newsletter and were also available online.

2.7. SEWBReC Species Record Search

2.7.1 In order to collect more information on species that have been recorded in the Three Crosses area in the past a data request was put into the local Biological Records Centre (SEWBReC). This search would not only supply historical records but also allow us to get records of species that we could not expect to see during the project (for example common winter visitors such as Redwings and Fieldfares. Using GIS (Geographical Information Systems) software, an area centred around the village was chosen and all historical species records from within that area were collated and provided for this report. The full list can be seen in Appendix 4.

3. Survey Results

3.1. Breeding Bird Surveys

3.1.1. Breeding Bird Surveys were carried out on the 29th of April, 28th of May and the 23rd of June. In total, 53 species of bird have been recorded (see Appendix 3a) including some that were probably just passing through (e.g. Curlew, Shelduck) but nesting behaviour was noted in a number of species including Tawny Owl, Swallow, House Martin and House Sparrow. **Plate 3** below shows the 5 transects that were walked during the Breeding Bird Surveys.



Plate 3. Locations of 5 Breeding Bird Survey transects.

3.1.2. A number of the bird species recorded during the survey are of conservation interest and are included on the Section 42 list of Species of Principal Importance for the Conservation of Biological Diversity in Wales. These are Linnet, Cuckoo, Herring Gull, Black-headed Gull, Bullfinch, Dunnock, House Sparrow, Starling and Song Thrush.

3.2. Botanical Surveys

3.2.1. Visits were made on the 15th and 26th May and 19th June. **Plate 4** shows the lengths of road verge and habitat areas assessed. Transect 01 (SE, orange) was recorded on 15 May. Transect 02 (SW, blue) was recorded on 26 May. Transect 03 (NW, purple), transect 04 (N, green) and transect 05 (NE, red) were recorded on 19 June.



Plate 4. Areas covered in botanical surveys (colours represent separate transects and blocks are accessible areas of botanical interest with target notes)

- 3.2.2. A total of 199 higher plant species were recorded throughout the village. These were relatively evenly distributed throughout the area (T01 63 species, T02 99 species, T03 111 species, T04 107 species, T05 110 species). In general the areas with fewer species were those with a greater level of adjacent developed land.
- 3.2.3 Overall the nature of most of the roadside verges was a woodland-type botanical community associated with hedgerows, and species like Red Campion, Bracken, Bramble, Greater Stitchwort, and Bluebell were common. The disturbed nature of many patches was reflected in the presence of weedy species like Rosebay Willowherb, Broad-leaved Dock, Creeping Thistle. Many areas appeared nutrient-rich and in these verges the dominant plants were species like Hogweed and Cow Parsley; these areas were generally less diverse.
- 3.2.4 The most interesting and diverse verge habitats tended to be those that were not suffering from gradual nutrient accumulation. These included steep banks such as that occur at the northern end of T03 (purple, NW transect) where arisings fall away after flailing due to the gradient, or areas where very regular cutting and strimming prevents nutrient enrichment such as the small area of amenity grassland at the village's north west junction. A particularly nice stretch of managed verge bank was recorded just to the north of the golf course entrance.
- 3.2.4 No particularly rare native species were recorded but large stretches of good quality vegetation communities and nice hedgerows that are not being excessively managed were recorded. Transect 02 (SW, blue) was particularly notable in this regard.
- 3.2.5 The nicest block of habitat with botanical interest was the meadow to the rear of the church. The majority of amenity grassland areas were relatively species-poor and would benefit from intervention to improve their wildlife interest.
- 3.2.6 The DAFOR results for the principal amenity area on transect 01 (SE, orange) were as follows, totalling only 15 species across 0.72 ha (21 species per ha) see **Table 1**.

Table 1. DAFOR results for principal amenity grassland area

Common name	Latin name	DAFOR
Annual meadow-grass	Poa annua	0
Black knapweed	Centaurea nigra	0
Common mouse-ear	Cerastium fontanum	0
Creeping buttercup	Ranunculus repens	0
Cuckoo flower	Cardamine pratensis	0
Daisy	Bellis perennis	F
Dandelion	Taraxacum officinale agg.	F
Greater plantain	Plantago major	0
Lesser trefoil	Trifolium dubium	0
Perennial ryegrass	Lolium perenne	Α
Ribwort plantain	Plantago lanceolata	0
Smooth sow thistle	Sonchus oleraceus	0
White clover	Trifolium repens	F
Yarrow	Achillea millefolium	0
Yorkshire fog	Holcus lanatus	D

3.2.7 By contrast the DAFOR results (**Table 2**) for the church meadow, which is slightly smaller, are shown below, totalling 66 species across 0.58 ha (approx. species richness of 114 species per hectare, 5-6 times more than the amenity grassland).

Table 2. DAFOR results for church meadow

Common name	Latin name	DAFOR
A flote-grass	Glyceria sp.	0
Annual meadow-grass	Poa annua	0
Ash	Fraxinus excelsior	0
Bird's-foot trefoil	Lotus corniculatus	0
Black knapweed	Centaurea nigra	R
Bluebell	Hyacinthoides non-scripta	А
Bramble	Rubus fruticosus agg.	0
Broad-leaved willowherb	Epilobium montanum	0
Bugle	Ajuga reptans	R
Cherry laurel	Prunus laurocerasus	R
Cocksfoot	Dactylis glomerata	Α
Common bent	Agrostis capillaris	Α
Common fumitory	Fumaria officinalis	R
Common mouse-ear	Cerastium fontanum	0
Common sorrel	Rumex acetosa	Α
Creeping buttercup	Ranunculus repens	0
Creeping cinquefoil	Potentilla reptans	R
Cuckoo flower	Cardamine pratensis	0
Cut-leaved crane's-bill	Geranium dissectum	R

Dandelion Taraxacum officinale agg. F False oat grass Arrhenatherum elatius A Field bindwed Convolvulus arvensis O Forget-me-not sp. Myosotis sp. R Goosefoot Chenopodium album agg. R Greater plantain Plantago major R Great willowherb Epilobium hirsutum R Great willowherb Cardamine hirsuta O Hawthorn Cardamine hirsuta O Hawthorn Crataegus monogyna O Hazel Corylus avellana O Hazel Corylus avellana O Havel Geranium robertianum O Holy Heracleum sphondylium O Holly Ilex aquifolium R Holly Ilex aquifolium R Hory Hedera helix O	Daisy	Bellis perennis	О
Field bindweed Convolvulus arvensis O Forget-me-not sp. Myosotis sp. R Goosefoot Chenopodium album agg. R Greater plantain Plantago major R Great willowherb Epilobium hirsutum R Grey willow Salix cinerea R Hairy bittercress Cardamine hirsuta O Hawthorn Crataegus monogyna O Hazel Corylus avellana O Herb robert Geranium robertianum O Hogweed Heracleum sphondylium O Holly Ilex aquifolium R Honeysuckle Lonicera periclymenum O Horsetail Equisetum arvense R Ivy Hedera helix O Japanese knotweed Fallopia japonica O Lesser celandine Ranunculus ficaria R Marsh bedstraw Galium palustre R Marsh thistle Cirsium palustre R Meadow buttercup Ranunculus acris R Meadow vetchling Lathyrus pratensis R Medover Trifolium pratense R Red clover Trifolium pratense R Red fescue Festuca rubra O Ragwort Senecio jacobaea R Red fescue Festuca rubra O Rough hawk's-beard Crepis biennis R ROugh hawk's-beard Crepis biennis R Rooth sow-thistle Juncus acrisi R Rooth sow-thistle Sonchus oleraceus R R Rooth sow-thistle R R Rooth sow-thistle Sonchus oleraceus R R Soft rush Juncus effusus O	Dandelion	- 	
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Greater plantain	Forget-me-not sp.	Myosotis sp.	R
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Wood avens Geum urbanum O		·	

Yellow pimpernel	Lysimachia nemorum	R
Yorkshire fog	Holcus lanatus	Α

- 3.2.8 Non-native species were recorded at a number of locations. Japanese Knotweed was frequent, especially in the south east corner of the village. Himalayan Balsam was also recorded but it was more restricted. An additional concern was the number of non-native garden varieties spreading in the semi-natural habitat as a result of a combination of natural escapes, deliberate planting, and the dumping of garden waste (the latter particularly in the wooded area at the south west corner of the village).
- 3.2.9 One notable species that was recorded was the non-native "Fringecups" (*Tellima grandiflora*). It was recorded at three disparate locations around the village in the verges. This species has been recorded from very few other locations around Gower (Barry Stewart, pers. comm).

3.3. Reptile Surveys

3.3.1. The reptile sheets were allowed to settle into place for a week and then checked on the 26th of August and the 5th and 30th of September. Slow Worms and a single Grass Snake were the only reptiles found under the sheets during that time but Grass Snakes and Common Lizards were also seen in the Village during the survey period. Other animals seen under the sheets included Field Vole, Common Shrew and Common Toad.



Plate 5. Location of reptile refugia (red squares) in Three Crosses.

3.4. Community Events

A total of three public events (**Table 3**) were run during the project period. The first was a community bat walk around the village and the second incorporated a moth-trap event halfway around the bat walk. The final event was a butterfly walk during August.

Table 3. Community Events and numbers of participants.

Event	Date	Approximate number of participants
Bat walk	23/05/2014	30
Bat walk and moth trap	06/06/2014	15
Butterfly walk	03/08/2014	4



Plate 6. Locations of cameras and moth traps

During the well-attended bat walks three bat species were identified as using the village for foraging. These were Noctule, Common Pipistrelle and Soprano Pipistrelle. These are three of the commoner species but like all bats in the UK are European Protected Species and the pipistrelles in particular are likely to be roosting within the village. Other bat species are likely to be present in the area but were not identified during the two bat walks.

The moth trap was placed within the churchyard which offered good habitat for moths and other invertebrates. The meadow area appeared to be treated as a hay meadow with there being more floral diversity than in usual amenity grassland areas. The meadow was also surrounded by mature trees and scrub, all of which offer foraging habitat for moths and their caterpillars. During the public event in June 36 moth species were caught and identified between 22:00 and 00:45.

During the butterfly walk a total of 6 butterfly species were seen: Small, Large and Green-veined Whites, Speckled Wood, Peacock and Small Coppers. In addition, 4 dragonfly species and 6 bee species were also identified and discussed with the residents who had taken part.

3.5. Community Wildlife Surveys

During the initial stages of the project we offered residents the chance to host either a moth trap or a trail camera in their garden and a number of people were keen to take part. **Tables 4 and 5** below show the details of who hosted a camera trap and who hosted a moth trap. The camera traps were generally left for at least a week so that the chance of seeing nocturnal species was as high as possible. For this reason fewer houses could host camera traps than moth traps. Highlights of the camera traps were footage of badgers and foxes as well as other interesting behaviour such as blackbirds feeding their young. **Plates 7 and 8** below show screenshots of species recorded on the cameras in the Village (please note camera date settings were not set correctly).

Table 4. Camera trap participants and dates.

Туре	Owner	Dates
Camera		
Trap	Joanne Rees-Thomas	06/06/14-13/06/14
Camera		
Trap	Shirley Bonney-James	16/06/14-07/07/14
Camera		
Trap	Colin Davies	13/06/14-07/07/14
Camera		
Trap	Linda Place	08/07/14-23/07/14



Plate 7. Badger captured on motion-sensitive camera.



Plate 8. Fox captured on motion-sensitive camera.

6 households hosted a moth trap during the project and the fact that traps were run from June to September meant that a wide range of species were caught. **Table 5** below lists the residents and dates of trapping.

Туре	Owner	Dates
Moth Trap	Colin Davies	25/06/14-26/06/14
Moth Trap	Clive Davies	01/07/14-02/07/14
Moth Trap	Nicolas Wilson	02/07/14-03/07/14
Moth Trap	Sophie Notts	22/07/14-23/07/14
Moth Trap	Lilian Martin	14/07/14-15/07/14
Moth Trap	Kevin White	04/09/14-03/09/14
Moth Trap	Tawny Clarke	09/09/14-10/09/14

Table 5. Moth trap participants and dates.

In total, over 125 species of moth were recorded during the course of the project including 106 new for the kilometre square SS5694 and 46 new to SS5794 with one moth (micro-moth *Epermenia falciformis*) never having been previously recorded in the 10km square SS59. Some of these moths are shown below:



Plate 9. Brimstone Moth and Chinese Character.

3.6. Garden Wildlife Survey

3.6.1 In total, 11 Garden Wildlife Survey Forms were returned by the end of October. It provided useful information including records of a number of species that weren't picked up in other surveys such as Water Rail, Comma and Hedgehog. It also provided information on other wildlife-friendly measures that some residents were taking in their gardens. These included:

- bird feeders
- nest boxes
- water baths
- bat boxes
- bee boxes
- wood piles

3.7. SEWBReC Species Record Search

The results of the SEWBReC species record search are shown in Appendix 4. The search returned records of 918 species in total, ranging from mosses to mammals. It is a large number but only represents the species that have been recorded to SEWBReC over the years, and will not be a complete list for the area. On the other hand it also includes extremely rare species which are unlikely to be seen (e.g. Cirl Bunting). It does, however, give an idea of just how much can be seen over time in even a small area and illustrates again what a good place Three Crosses and the surrounding area is for wildlife. Please note that, apart from the moths, none of the species recorded during this project have yet been submitted to SEWBReC so the total of 918 may now be higher.

3.8. Site Recommendations

The results of all the survey work and events throughout the summer has demonstrated that Three Crosses has a good and diverse range of species both breeding and using the area to feed. However there are undoubtedly improvements that can be made to ensure that the village is even more welcoming to wildlife. A visit was made by WTSWW staff to come up with some potential biodiversity improvements or modifications and these are described below and annotated on the map (**Plate 10**).



Plate 10. Locations of site recommendations.

3.8.1. Amenity Grassland Areas

The village has a number of small areas of amenity grassland and two more extensive areas (see **Plate 11** below) which are mowed regularly throughout the growing season with the sward being kept as low as possible. This has very little benefit for wildlife but we appreciate that large areas of the village green (see **Plate 12** below) need to be kept like this for the use of local residents. However we have come up with a list of 'ideal' options for areas of amenity grassland which could make small but significant differences for biodiversity without decreasing their amenity value to village residents. These options include:

Uncut Areas Leaving some areas of grass to go uncut each year. These areas would be managed on a rotational basis and would provide refuge for species such as Field Voles and Common Toads as well as potential foodplants for some of our common butterflies whose caterpillars feed on grasses.

Buffer Strips Avoid cutting the grass right up to the edge of areas of scrub. Leaving a 2-3m 'wavy' boundary of uncut grass provides a buffer between the good scrub habitat and the closely cut sward of amenity grassland. This buffer strip can be vital as a wildlife corridor for species such as Slow Worms and Hedgehogs as well as for a variety of invertebrate life.



Plate 11. Locations of main areas of amenity grassland in Three Crosses.



Plate 12. Village green comprising large area of amenity grassland.

3.8.2. Invasive Species

During the various surveys and events carried out by WTSWW in the village, a number of invasive non-native plant species were recorded. While at the time of surveying these weren't a major problem, if left untreated they could become a major issue for the area. The two main species noted were Japanese Knotweed and

Himalayan (or Indian) Balsam. The other species becoming widely naturalised was Three-cornered Garlic (or Leek) which was mostly confined to one area in the village. The main sites for these three species are shown in **Plate 13** below.

Japanese Knotweed It is apparent that most of the areas of Japanese Knotweed are already being chemically treated and this should continue and ensure that all patches are removed fully before they spread more extensively. This plant can be particularly damaging not only to native biodiversity, which it outcompetes, but also to buildings and roads which can be severely weakened by the plant's powerful root system. Regular checks should be carried out in order to ensure no patches are missed and any new plants dealt with.

Himalayan Balsam

Himalayan Balsam is the other main problem and while currently it has only been noted in a couple of locations it is a species which spreads very rapidly and can spread large numbers of highly viable seeds. The plant particularly likes damp grasslands and wetland areas where it can rapidly become the dominant species. It shades out native vegetation and then when it dies back in winter leaves bare areas of soil which can then be eroded rapidly, particularly when alongside rivers and lakes. The plant is best removed by manual pulling which can be labourintensive but is the most effective method. The plants should be pulled from May to August before the explosive seed pods start developing as at this stage pulling it only acts to further the spread of the plant.

Public Education

Three-cornered Garlic is a slightly lesser problem but it is one of a number of garden plant species which have been seen spreading into natural areas in the village. We would recommend a program of education for village residents to explain the problems that this can cause and to encourage them to try to stop fly-tipping garden waste; this is particularly a problem near where the road to Cilonnen leaves the village.



Plate 13. Locations of invasive non-native plant species in Three Crosses.

3.8.3. Chapel Area (A on Plate 10)

The meadow area behind the chapel is a haven for wildlife in the centre of the village. It appears to be managed as a hay meadow and consequently is more flower-rich than other grasslands in the village. It is also surrounded by mature trees which are in themselves excellent habitats for birds and invertebrates.

Mowing

We would recommend maintaining the current cutting regime, especially the removal of the arisings. Some of these arisings could be piled in 'sacrificial' corners where they would provide shelter and potential egg-laying sites for reptiles.

Footpath

To allow local people to enjoy the meadow area it is suggested that a footpath is cut through the meadow in a loop. The exact position of this could change every year to ensure that no areas suffer from excessive footfall or continued cutting.

Nest boxes

A number of the mature trees around the meadow would be ideal sites for placing a nest box for Barn Owls. There is plenty of foraging potential for the species locally but maybe a lack of nesting sites so a nest box would be very beneficial.

Education

Finally, this area would be a good site to carry out educational work with the school. Below is a list of suitable educational activities that can be organised and run at the Chapel meadow area. All suggested activities can be linked into the National Curriculum Foundation Phase plus Key Stages 1 & 2.

- Minibeast Hunting Become an explorer, use a range of equipment to collect and identify creatures from different habitats and explore how they live in their habitats. Compare the creatures found in hedgerow and open grass by collecting data from both areas and then analysing results.
- **Bird Watching** Challenge observation skills, see how many different birds can be identified when in flight or stationary. Observing differences between bird species i.e. feeding, bird song and flight.
- Nature Detective —Test observation skills to find objects, mammal tracks and other signs of small mammal and bird activity. All the senses will need to be used for this activity.
- **Biodiversity Survey** Take part in the OPAL Biodiversity Survey and uncover the diverse range of wildlife in our hedges. Hedges support many animals by providing food and shelter. Berries and seeds are food for birds, while holes beneath the hedge are often home to small mammals. You'll also discover many invertebrates living among the leaves.
- **Tree investigations** Learn how to age and measure the height of a tree without having to cut it down.
- What's on the menu today? Explore the area looking for different food sources for all the differing creatures. Create a food chain/web. This can be repeated each season looking for differences.
- **Big Butterfly Count** Become a mini ecologist and collect data to be added to national database, the Big Butterfly Count is a nationwide survey aimed at helping us assess the health of our environment.
- **Soil and Earthworm Survey** Discover the world of worms and the vital role they play in recycling plant nutrients and aerating the soil.



Plate 14. Chapel meadow.

3.8.4. Small building near chapel (B on Plate 10)

Adjacent to the Chapel there is a small, seemingly unused stone building with a tin roof (see **Plates 15 and 16** below). It is currently secured by a metal grate in the doorway. This building could be modified to act as an ideal home for a number of species while also being an excellent educational tool with it being directly opposite the school.

Reroof

We propose that the building is reroofed but otherwise left largely unchanged. It has already been used as a nesting site for swallows and these, along with bats, could continue to use the building with the gated entrance preventing human interference while allowing unobstructed access to birds and bats.

Install camera

In time, a camera system could even be installed with the footage available to view in the school which would provide an excellent learning tool and source of inspiration to local children.



Plate 15. Gated entrance to chapel hut.

Interpretation

The building also has an old display board (see **Plate 16** below) which could easily be modified or replaced in order to contain educational material about the species present within the building. It could also be used to display publicity about any future bat walks etc. that are held in the village.



Plate 16. Potential site for interpretation panel on chapel hut.

3.8.5. Common Area (**C** on Plate 10)

The large common area to the south of the village has a lot of potential for wildlife as the longer grass and scattered wildflowers offer more habitat for species such as Common Lizards and Slow Worms than the more heavily managed areas elsewhere. Some ongoing management should be continued as it is beneficial:

Japanese Knotweed See section **3.8.2.** for details.

Mowing

Collecting arisings after cutting grass. Collecting the arisings prevents excess nutrients entering the soil which leads to only the most competitive species surviving. **Plate 17** below shows how remaining cut vegetation can create a 'thatch' which prevents light reaching the vegetation beneath, causing it to die. Ideally as much of this thatching would be removed as possible.



Plate 17. Grass 'thatch' in cut areas of common.

There are ways of improving the area for wildlife however and these are described below:

Change Cutting Regime

Initiate a rotational cut system where only sections of the grassland are cut each year. This would leave areas of grass long as a refuge for species such as Slow Worms which would otherwise struggle for cover from predators in the immediate aftermath of cutting. Alternatively, 'islands' of uncut grass could be left, particularly around patches of scrub. Again, these

would be cut on a rotational basis so that they don't become to scrub-dominated.

Interpretation

Install interpretation panels in the common area to explain to members of the public what species can be seen here and also to explain the ongoing management and how that benefits wildlife.

Create pond

There is also a marshy area in the north-west corner of this common land (see **Plate 18** below) which is currently becoming dominated by willows and bramble. There is a small channel with flowing water which subsequently runs beneath the road. This whole triangular piece of land appears to hold water well and looks an ideal location for a pond. There are already areas of standing water with aquatic vegetation here which suggest that there might have been a pond here previously. We would recommend clearing some of the large willows which are shading and drying out the area and thinning some of the brambles. A pond could then be excavated with the material dug out used to create the banks. Care would have to be taken that there is no risk of altering the flow of water beneath the road but the area would act as a good store of water, slowing its journey into the stream.

Creating a pond is one of the best ways to improve biodiversity in an area as even a small body of water will provide habitats for numerous invertebrates such as dragonflies and damselflies as well as breeding sites for frogs and newts.

There is also a non-native tree here (Stag's Horn Sumach *Rhus typhina*) which, while attractive, should be removed. Care must be taken when attempting to remove it as it is a notoriously problematic species to eradicate as it sends up suckers if the main tree is cut down; indeed, there is evidence of this happening already. It should also be noted that the leaves and fruit of this plant are poisonous.



Plate 18. Potential pond site.

3.8.6. Community Hall (D & F on Plate 10)

The Community Hall appears to be a well-used centre with a range of events taking place there. However, it offers little for biodiversity currently and we would recommend a few small additions. It would be impractical to alter the grassy areas within the fence and indeed the grassed parking area is a very good example of how an area of hard-standing can be created which also allows water to drain through it. This could be promoted further (see **3.8.12**).

Nest boxes

Our recommendations would concentrate on the Community Hall itself and involve the installation of a number of artificial bat roosts and House Martin nests. During our bird surveys we noticed rather a lack of House Martin nests around the village and this could be part of a wider village project where local residents are encouraged to install artificial House Martin nests beneath their eaves.

Interpretation

An interpretation panel could also be installed in the Community Hall grounds describing some of the species that can be seen in and around the village, highlighting how good Three Crosses is for wildlife.

Wildflowers

The strip of grass to the south of the Community Hall (between the fence and the road) – see **Plate 19** – is currently managed as amenity grassland and offers little for wildlife. We would recommend sowing a strip of this grass as a wildflower area. As residents use the grass to walk along in order to avoid the dangerous road, we would propose leaving a ~1.5m strip of grass alongside the road to avoid forcing people to walk on the tarmac.

An appropriate seed mix of British (ideally Welsh) provenance should be used and the ground should be prepared to provide the mix the best chance of success. The grass should be killed off and the ground lightly rotivated. The seed mix should then be sown in in March or April and watered thoroughly. Exact instructions should be given by the seed provider however. It might be beneficial to use species like Yellow Rattle (*Rhinanthus minor*) which is semi-parasitic on grasses and will help subdue the vigorous growth of the grass species which could otherwise come to dominate; this is normally sown in the autumn to limit grass growth before the sowing of the other wildflowers. The wildflower area could then be managed as a hay meadow; i.e. cut in late summer once the flowers have set seed.



Plate 19. Potential area for wildflower 'meadow'.

3.8.7. Wildflower area (E on Plate 10)

Wildflower bed

There is a small triangular area of grass with a bench immediately to the west of the Community Hall. To add aesthetic interest as well as a source of nectar for invertebrates we would suggest sowing a small area with native wildflower seed. See above for further details on management.

3.8.8. Scrubby corner (G on Plate 10)

There is a small corner of scrubby vegetation near the football field which currently looks like it has issues with burning and scrub clearance which is making it particularly unsightly and the burning has caused scorching of the adjacent small trees. It is unclear whether the scrub clearance is being undertaken by the Council or local residents but it is creating an eyesore (see **Plate 20** below).

Scrub control While scrub is good for a range of species it is recommended not to let this corner scrub up due to the likelihood of this burning continuing as a consequence. We would recommend an annual cut (July/August) with the arisings collected. This management would allow some species to flower and seed through the spring and summer without it being another area of amenity grassland devoid of wildlife.



Plate 20. Area of cleared scrub near common.

3.8.10. Marshy grassland field (H on Plate 10)

The large field to the south-west of the village (where reptile refugia were placed) is currently marshy grassland with a lot of encroaching willow. It is no doubt an excellent refuge for wildlife from the agriculturally-improved fields elsewhere. However, if left completely unmanaged it will gradually succeed to woodland which, while also very good for wildlife, is a less rare habitat than marshy grassland.

Cattle Grazing

We would recommend initiating some low-intensity cattle grazing within the marshy grassland field as they will remove some of the rank grasses and young willows, allowing recovery of the marshy grassland field. Stocking levels should be initially kept low to avoid overgrazing and excessive poaching of the ground and monitored on an annual basis.

Scrub control

Manual removal of some of the encroaching willows will improve the quality and extent of the marshy grassland habitat. The cut willow could be stacked in neat piles in a 'sacrificial' corner where it could act as a 'habitat pile' which would benefit small mammals, invertebrates and reptiles. Himalayan Balsam also needs to be removed from this area as described in section **3.8.2.** as otherwise it will come to dominate the field.

3.8.11. Pictorial meadow area (I on Plate 10)

Sow wildflowers

The area shown in **Plate 21** below has been planted with a pictorial meadow mix and while this undoubtedly looks spectacular and is of benefit to nectar-feeding species such as bumblebees and butterflies it does seem to be a missed opportunity for planting native wildflowers.

We would advise that in future years a native wildflower species mix is used along with leaving a small area of long grasses (away from the bench) which is also beneficial to a range of wildlife. See section **3.8.6** for more information on wildflower meadow management. Due to the less spectacular nature of native wildflowers, some interpretation might be needed to explain the change and also the reasons for leaving an area of grass to grow long.



Plate 21. Pictorial meadow mix.

3.8.12. Article on drainage/water butts

There is a high presence of non-permeable surfaces throughout the village, with the vast majority of homes opting for paving, tarmac or concrete driveways and front gardens. These surfaces do not allow for absorption and storage of precipitation that a green space or otherwise permeable surface would provide, and as a result water will be entering the drainage system at a much faster rate than is desirable. During periods of heavy rainfall, this is likely to cause the overloading of sewerage systems which often results in the release of untreated sewage into a local waterway, or even cause localised flooding. It is important that community mitigation is encouraged in order to compensate for the loss of natural water storage, and we suggest that residents are urged to install water butts or garden ponds wherever possible. WTSWW will write a brief article for the Three Crosses Village newsletter about the issue. WTSWW has recently completed a water butt and pond project in Swansea, which has seen 200 ponds and water butts distributed for free to Swansea residents. It is suggested that Three Crosses Community Council may want to look into adopting a similar scheme.

It was noted that much of the car park area of the Community Hall was made of a solid yet permeable surface, allowing for herbaceous growth and thus adequate drainage of water during periods of heavy precipitation. The presence of a Sustainable Urban Drainage feature is commendable, and should be encouraged wherever possible, especially when new building work or renovation is taking place.

4. Appendices

4.1. Appendix 1: Initial Publicity



Wildlife Trust of South and West Wales: Three Crosses Wildlife Survey

Do you have Hedgehogs in your garden, Bats in your attic or newts in your pond?

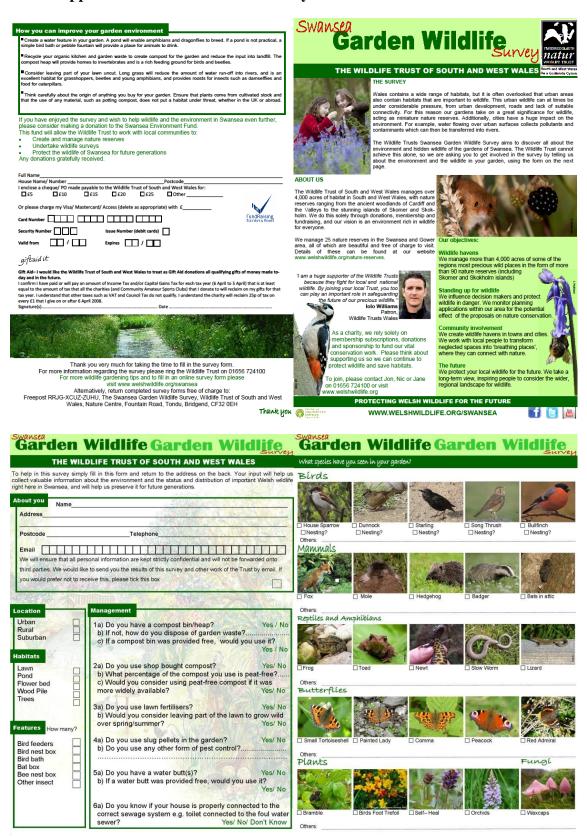
As part of a biodiversity-boosting Three initiative by Crosses Community Council, The Wildlife Trust of South and West Wales are looking for members of the local community to help us with a range wildlife surveys, including Breeding Bird Surveys, Bat detecting and Butterfly transects.



We are inviting community members to take part by filling out the 'Where's Swansea's Wildlife?' survey forms, and dropping them off at Three Crosses Community Centre.

Interested in getting involved? Contact Vaughn on v.matthews@welshwildlife.org for more information.

4.2. Appendix 2: Garden Wildlife Survey Form



4.3. Appendix 3: Species Lists

Appendix 3a: Birds

Common name	Scientific name
Goshawk	Accipiter gentilis
Sparrowhawk	Accipiter nisus
Long-tailed Tit	Aegithalos caudatus
Mallard	Anas platyrhynchos
Meadow Pipit	Anthus pratensis
Swift	Apus apus
Buzzard	Buteo buteo
Linnet	Carduelis cannabina
Goldfinch	Carduelis carduelis
Siskin	Carduelis spinus
Greenfinch	Chloris chloris
Black-headed Gull	Chroicocephalus ridibundus
Feral Pigeon	Columba livia
Woodpigeon	Columba palumbus
Raven	Corvus corax
Carrion Crow	Corvus corone
Jackdaw	Corvus monedula
Cuckoo	Cuculus canorum
Blue Tit	Cyanistes caeruleus
House Martin	Delichon urbicum
Great Spotted Woodpecker	Dendrocopos major
Robin	Erithacus rubecula
Chaffinch	Fringilla coelebs
Jay	Garrulus glandarius
Swallow	Hirundo rustica
Herring Gull	Larus argentatus
Lesser Black-backed Gull	Larus fuscus
Red Kite	Milvus milvus
Pied Wagtail	Motacilla alba
Curlew	Numenius arquata
Great Tit	Parus major
House sparrow	Passer domesticus
Coal Tit	Periparus ater
Pheasant	Phasianus colchicus
Chiffchaff	Phylloscopus collybita
Willow Warbler	Phylloscopus trochilus
Magpie	Pica pica
Green Woodpecker	Picus viridis
Marsh Tit	Poecile palustris
Dunnock	Prunella modularis

Bullfinch	Pyrrhula pyrrhula
Water rail	Rallus aquaticus
Goldcrest	Regulus regulus
Nuthatch	Sitta europaea
Collared Dove	Streptopelia decaocto
Tawny Owl	Strix aluco
Starling	Sturnus vulgaris
Blackcap	Sylvia atricapilla
Common Whitethroat	Sylvia communis
Shelduck	Tadorna tadorna
Wren	Troglodytes troglodytes
Blackbird	Turdus merula
Song Thrush	Turdus philomelos
Mistle Thrush	Turdus viscivorus

Appendix 3b: Mammals

Common name	Scientific name
Hedgehog	Erinaceus europaeus
Badger	Meles meles
Field vole	Microtus agrestis
Polecat	Mustela putoris
Noctule Bat	Nyctalus noctula
Common Pipistrelle	Pipistrellus pipistrellus
Soprano Pipistrelle	Pipistrellus pygmaeus
Grey Squirrel	Sciurus carolinensis
Common shrew	Sorex araneus
Mole	Talpa europaea
Red Fox	Vulpes vulpes

Appendix 3c: Amphibians and Reptiles

Common name	Scientific name
Slow worm	Anguis fragilis
Common toad	Bufo bufo
Grass snake	Natrix natrix
Common Frog	Rana temporaria
Common lizard	Zootoca vivipara

Appendix 3d: Invertebrates

Common name	Scientific name
Spectacle	Abrostola tripartita

	Aceleris laterana/A
Micromoth	comariana
Water Veneer	Acentria ephemerella
Garden Rose Tortrix	Acleris variegana
Grey Dagger	Acronicta psi
Grey/Dark Dagger	Acronicta sp.
Southern Hawker	Aeshna cyanea
Migrant Hawker	Aeshna mixta
Micromoth	Agapeta hamana
Micromoth	Agriphila straminella
Micromoth	Agriphilla tristella
Heart & Club	Agrotis clavis
Heart and dart	Agrotis exclamationis
Mottled Beauty	Alcis repandata
Twenty Plume Moth	Alucita hexadactyla
Green Arches	Anaplectoides prasina
Orange tip	Anthocharis cardamines
Light Arches	Apamea lithoxylaea
Dark Arches	Apamea monoglypha
Dusky Brocade	Apamea remissa
Ringlet	Aphantopus hyperantus
Bee moth	Aphomia sociella
Honey Bee	Apis mellifera
Cross orb-weaver spider	Araneus diadematus
4-spot orb-weaver spider	Araneus quadratus
Large Fruit Tree Tortrix	Archips podana
Garden Tiger	Arctia caja
Silver Y	Autographa gamma
Plain Golden Y	Autographa jota
Flame	Axylia putris
Micromoth	Bactra sp.
Peppered Moth	Biston betularia
Tree Bumblebee	Bombus hypnorum
Red-tailed bumblebee	Bombus lapidarius
White-tailed Bumblebee	Bombus leucorum
Common carder bee	Bombus pascuorum
Common Wave	Cabera exanthemata
Common White Wave	Cabera pusaria
Light Emerald	Campaea margaritata
Yellow Shell	Camptogramma bilineata
Micro Moth	Catopria pinella
Brown-lipped snail	Cemaea nemoralis
Antler Moth	Cerapteryx graminis
Treble lines	Charanyca trigrammica
Common marbled carpet	Chloroclysta truncata

V Pug	Chloroclystis v-ata
Froghopper	Cicadella viridis
Chinese character	Cilix glaucata
7-spot Ladybird	Coccinella 7-punctata
Green Carpet	Colostygia pectinataria
Garden snail	Cornu aspersum
Scalloped Oak	Crocallis elinguaria
Four Dotted Footman	Cybosia mesomella
Elephant Hawkmoth	Deilephila elpenor
Burnished Brass	Diachrysia chrysitis
Small square-spot	Diarsia rubi
Marbled brown	Drymonia dodonaea
Common Footman	Eilema lurideola
Birch Shieldbug	Elasmostethus interstinctus
White Shouldered House	
Moth	Endrosis sarcitrella
Canary Shouldered Thorn	Ennomos alniaria
August Thorn	Ennomos quercinaria
Micromoth	Epermenia falciformis
Micromoth	Epinotia Immundana
Light brown apple moth	Epiphyas postvittana
Spinach	Eulithis mellinata
Phoenix	Eulithis prunata
Small Angle Shades	Euplexia lucipara
Micromoth	Eupoecilia angustana
Yellow Tail	Euproctis similis
Small Magpie	Eurrhypara hortulata
Drinker	Euthrix potatoria
Sallow Kitten	Furcula furcula
Large Emerald	Geometra papilionaria
Buff Arches	Habrosyne pyritoides
Lychnis	Hadena bicruris
Common Emerald	Hemithea aestivaria
Ghost moth	Hepialus humuli
Common swift	Hepialus lupulinus
July Highflyer	Hydriomena furcata
Snout	Hypena proboscidalis
Riband Wave	Idaea aversata
Small fan footed wave	Idaea biselata
Bright Line Brown Eye	Lacanobia oleracea
Poplar Hawkmoth	Laothoe populi
Broad Bodied Chaser	Libellula depressa
Scorched Carpet	Ligdia adustata
Clouded Border	Lomaspilis marginata
Clouded Silver	Lomographa temerata

Small Copper	Lycaena phlaeas
True Lover's Knot	Lycophotia porphyrea
Sharp Angled Peacock	Macaria alternata
Hummingbird hawkmoth	Macroglossum stellatarum
Fox moth	Macrothylacia rubi
Lackey	Malacosoma neustria
Cabbage Moth	Mamestra brassicae
Meadow Brown	Maniola jurtina
Dot Moth	Melanchra persicariae
Common Rustic agg.	Mesapamea
Common Rustic	Mesapamea secalis
Rosy Footman	Miltochrista miniata
Smoky Wainscot	Mythimna impura
Double Line	Mythimna turca
Lesser Yellow Underwing	Noctua comes
Micromoth	Notocelia/Epiblema sp.
Iron prominent	Notodonta dromedarius
Pebble Prominent	Notodonta ziczac
Flame shoulder	Ochropleura plecta
Scalloped hazel	Odontopera bidentata
Middle-barred minor	Oligia fasciuncula
Marbled minor agg.	Oligia strigilis agg.
Brimstone Moth	Opisthographis luteolata
Swallow Tailed Moth	Ourapteryx sambucaria
Green shieldbug	Palomena prasina
Barred Fruit Tree Tortrix	Pandemis cerasana
Speckled Wood	Pararge aegeria
Micromoth	Parornix sp.
Willow Beauty	Peribatodes rhomboidaria
Grass rivulet	Perizoma albulata
Small Rivulet	Perizoma alchemillata
Buff Tip	Phalera bucephala
Large white	Pieris brassicae
Green Veined White	Pieris napi
Small white	Pieris rapae
Scorched Wing	Plagodis dolabraria
Mother of Pearl	Pleuroptya ruralis
Common Blue	Polyommatus icarus
Marbled White Spot	Protodeltote pygarga
	Pseudargyrotoza
Micromoth	conwagana
Green Silver-Lines	Pseudoips prasinana
Small seraphim	Pterapherapteryx sexalata
Pale Prominent	Pterostoma palpina
Coxcomb Prominent	Ptilodon capucina

Gatekeeper	Pyronia tithonus
Scallop Shell	Rheumaptera undulata
Straw dot	Rivula sericealis
Herald	Scoliopteryx libatrix
Cream Wave	Scopula floslactata
Eyed Hawkmoth	Smerinthus ocellata
Privet Hawkmoth	Sphinx ligustri
White ermine	Spilosoma lubricipeda
Buff Ermine	Spilosoma luteum
Lobster Moth	Stauropus fagi
Common Darter	Sympetrum striolatum
Peach Blossom	Thyatira batis
Blood Vein	Timandra comae
Cinnabar	Tyria jacobaeae
Micromoth	Udea olivalis
Red Admiral	Vanessa atalanta
Common Wasp	Vespula Vulgaris
Flame carpet	Xanthorhoe designata
Silver-ground carpet	Xanthorhoe montanata
Setaceous hebrew character	Xestia c-nigrum
Triple Spotted Clay	Xestia ditrapezium
Double Square Spot	Xestia triangulum
Fan Foot	Zanclognatha tarsipennalis
5-spot Burnet	Zygaenia trifolii

Appendix 3e: Plants

Botanical species list (complete)	
"Wargrave pink" type geranium	Geranium sp. cf. x oxonianum
A flote-grass	Glyceria sp.
Annual meadow grass	Poa annua
Ash	Fraxinus excelsior
Barren brome	Bromus sterilis
Barren strawberry	Potentilla sterilis
Beech	Fagus sylvatica
Betony	Stachys officinalis
Bird's-foot trefoil	Lotus corniculatus
Bistort	Persicaria bistorta
Black bryony	Dioscorea communis
Black knapweed	Centaurea nigra
Black medick	Medicago lupulina
Blackthorn	Prunus spinosa
Bluebell	Hyaconthoides non-scripta
Box	Buxus sempervirens

Bracken	Pteridium aquilinum
Bramble	Rubus fruticosus agg.
Broad-leaved dock	Rumex obtusifolius
Broad-leaved willowherb	Epilobium montanum
Brooklime	Veronica beccabunga
Bugle	Ajuga reptans
Campanula sp.	Campanula cf. persicifolia
Cherry laurel	Prunus laurocerasus
Cleavers	Galium aparine
Cocksfoot	Dactylis glomerata
Coltsfoot	Tussilago farfara
Columbine	Aquilegia vulgaris
Comfrey	Symphytum officinale
Common bent	Agrostis capillaris
Common catsear	Hypochaeris radicata
Common chickweed	Stellaria media
Common figwort	Scrophularia nodosa
Common fumitory	Fumaria officinalis
Common mouse-ear	Cerastium fontanum
Common orache	Atriplex patula
Common sedge	Carex nigra
Common sorrel	Rumex acetosa
Common toadflax	Linaria vulgaris
Common valerian	Valeriana officinalis
Common vetch	Vicia sativa
Cow parsley	Anthriscus sylvestris
Creeping bent	Agrostis stolonifera
Creeping buttercup	Ranunculus repens
Creeping cinquefoil	Potentilla reptans
Creeping soft grass	Holcus mollis
Creeping thistle	Cirsium arvense
Crested dog's tail	Cynosurus cristatus
Crocosmia	Montbretia sp.
Cuckoo flower	Cardamine pratensis
Curled dock	Rumex crispus
Cut-leaved crane's-bill	Geranium dissectum
Daisy	Bellis perennis
Dandelion	Taraxacum officinale agg.
Dog rose	Rosa canina
Dog violet	Viola riviniana
Dog's mercury	Mercurialis perennis
Dove's foot crane's-bill	Geranium molle
Eared willow	Salix aurita
Elder	Sambucus nigra
Enchanters nightshade	Circaea lutetiana

European gorse	Ulex europaea
False oat grass	Arrhenatherum elatius
Field bindweed	Convolvulus arvensis
Field maple	Acer campestris
Field rose	Rosa arvensis
Field wood-rush	Luzula campestris
Figwort	Scrophularia nodosa
Fool's water cress	Apium nodiflorum
Forget-me-not sp.	<i>Myosotis</i> sp.
Fox and cubs	Pilosella aurantiaca
Foxglove	Digitalis purpurea
Fringecups	Tellima grandiflora
Fuchsia	Fuchsiasp.
Garlic mustard	Alliaria petiolata
Germander speedwell	Veronica chamaedrys
Goosefoot	Chenopodium album agg.
Great willowherb	Epilobium hirsutum
Greater periwinkle	Vinca major
Greater plantain	Plantago major
Greater stitchwort	Stellaria holostea
Grey willow	Salix cinerea
Ground ivy	Glechoma hederacea
Groundsel	Senecio vulgaris
Hairy bitter-cress	Cardamine hirsuta
Hairy brome	Bromopsis ramosa
Hard fern	Blechnum spicant
Hart's tongue fern	Phyllitis scolopendrium
Hawthorn	Crategus monogyna
Hazel	Corylus avellana
Heath bedstraw	Galium saxatile
Hedge bindweed	Calystegia sepium
Hedge mustard	Sisymbrium officinale
Hedge woundwort	Stachys sylvatica
Hemlock water dropwort	Oenanthe crocata
Herb robert	Geranium robertianum
Himalayan balsam	Impatiens glandulifera
Hoary willowherb	Epilobium parviflorum
Hogweed	Heracleum sphondylium
Holly	llex aquifolium
Honeysuckle	Lonicera periclymenum
Horse chestnut	Aesculus hippocastanum
Horsetail	Equisetum arvense
Imperforate St John's wort	Hypericum maculatum
Ivy	Hedera helix
Ivy-leaved speedwell	Veronica hederifolia

Ivy-leaved toadflax	Cymbalaria muralis
Japanese knotweed	Fallopia japonica
Japanese rose	Rosa rugosa
Knotgrass	Polygonum aviculare agg.
Lady fern	Athyrium felix-femina
Lady's mantle	Alchemilla vulgaris agg.
Lesser burdock	Arctium minus
Lesser celandine	Ranunculus ficaria
Lesser stitchwort	Stellaria graminea
Lesser trefoil	Trifolium dubium
Lilac	Syringa vulgaris
Lords and ladies	Arum maculatum
Maidenhair spleenwort	Asplenium trichomanes
Male fern	Drypoteris filix-mas
Marsh bedstraw	Galium palustre
Marsh orchid sp.	Dactylorhiza sp.
Marsh thistle	Cirsium palustre
Meadow buttercup	Ranunculus acris
Meadow cranesbill	Geranium pratense
Meadow vetchling	Lathyrus pratensis
Meadowsweet	Filipendula ulmaria
Mouse-eared hawkweed	Pilosella officinarum
Nipplewort	Lapsana communis
Oak	Quercus robur
Oil seed rape	Brassica napus
Opium poppy	Papaver somniferum
Ox-eye daisy	Leucanthemum vulgare
Perennial ryegrass	Lolium perenne
Perforate St John's wort	Hypericum perforatum
Petty spurge	Euphorbia peplus
Pignut	Conopodium majus
Pineappleweed	Matricaria discoidea
Polypody fern	Polypodium vulgare
Prickly sow-thistle	Sonchus asper
Primrose	Primula vulgaris
Privet	Ligustrum ovalifolium
Procumbent pearlwort	Sagina procumbens
Purple toadflax	Linaria purpurea
Ragwort	Senecio jacobaea
Red campion	Silene dioica
Red clover	Trifolium pratense
Red fescue	Festuca rubra
Red valerian	Centranthus ruber
Ribwort plantain	Plantago lanceolata
Rosebay willowherb	Chamerion angustifolium

Rough hawk's-beard	Crepis biennis
Rough meadow-grass	Poa trivialis
Rowan	Sorbus aucuparia
Rusty-back fern	Ceterach officinarum
Scarlet pimpernel	Anagallis arvensis
Sedge sp.	Carex sp.
Selfheal	Prunella vulgaris
Sharp-flowered rush	Juncus acutiflorus
Silver birch	Betula pendula
Silverweed	Potentilla anserina
Slender St John's wort	Hypericum pulchrum
Smooth brome	Bromus racemosus
Smooth sow-thistle	Sonchus oleraceus
Snow-in-summer	Cerastium tomentosum
Soft rush	Juncus effusus
Spanish bluebell	Hyacinthoides hispanica
Spear thistle	Cirsium vulgare
Stinging nettle	Urtica dioica
Sweet vernal grass	Anthoxanthum odoratum
Sycamore	Acer pseudoplatanus
Teasel	Dipsacus fullonum
Three-cornered leek	Allium triquetrum
Timothy-grass	Phleum pratense
Toad rush	Juncus bufonius
Tormentil	Potentilla erecta
Tufted vetch	Vicia cracca
Tutsan	Hypericm androsaemum
Wall pennywort	Umbilicus rupestris
Wallflower	Erysmium cheiri
Wall-rue	Asplenium ruta-muraria
Wavy bitter-cress	Cardamine flexuosa
Wavy hair-grass	Deschampsia flexuosa
Welsh poppy	Meconopsis cambrica
White clover	Trifolium repens
White melilot	Melilotus albus
White stonecrop	Sedum anglicum
Wild angelica	Angelica sylvestris
Wild garlic	Allium sativum
Wild strawberry	Fragaria vesca
Wood avens	Geum urbanum
Wood dock	Rumex sanguineus
Wood melick	Melica uniflora
Wood sage	Teurcrium scorodonia
Wood speedwell	Veronica montana
Yarrow	Achillea millefolium

	Yellow loosestrife	Lysimachia vulgaris
Yellow pimpernel		Lysimachia nemorum
	Yorkshire fog	Holcus lanatus

4.4. Appendix 4: SEWBReC Data Search Results

PRIORITY AND PROTECTED SPECIES

Scientific Name	Common Name	Number of Records	Last Date Recorded
Caprimulgus europaeus	European Nightjar	1	1983
Chiroptera	Unspecified Bat	1	2004
Chroicocephalus ridibundus	Black-headed Gull	4	2013
Cuculus canorus	Common Cuckoo	1	2014
Emberiza cirlus	Cirl Bunting	2	1967
Emberiza citrinella	Yellowhammer	2	2010
Emberiza schoeniclus	Reed Bunting	2	2013
Erynnis tages	Dingy Skipper	1	1997
Euphydryas aurinia	Marsh Fritillary	17	2000
Falco peregrinus	Peregrine Falcon	1	2014
Falco tinnunculus	Common Kestrel	7	2010
Fringilla montifringilla	Brambling	2	2009
Hyacinthoides non-scripta	Bluebell	5	2001
Lepus europaeus	Brown Hare	1	2008
Linaria cannabina	Linnet	4	2013
Locustella naevia	Common Grasshopper Warbler	3	2011
Milvus milvus	Red Kite	18	2014
Natrix natrix	Grass Snake	1	2010
Nyctalus noctula	Noctule Bat	1	2014
Passer domesticus	House Sparrow	15	2010
Perizoma albulata	Grass Rivulet	1	2014
Pipistrellus	Pipistrelle	1	1992
Pipistrellus pipistrellus	Common Pipistrelle	1	2014
Pipistrellus pygmaeus	Soprano Pipistrelle	1	2014
Plecotus auritus	Brown Long-eared Bat	1	1992
Pluvialis apricaria	European Golden Plover	1	2008
Poecile palustris	Marsh Tit	6	2010
Prunella modularis	Hedge Accentor	18	2013
Pyrrhula pyrrhula	Common Bullfinch	4	2008
Sturnus vulgaris	Common Starling	20	2010
Turdus iliacus	Redwing	11	2013
Turdus philomelos	Song Thrush	16	2013
Turdus pilaris	Fieldfare	3	2010
Vanellus vanellus	Northern Lapwing	4	2010

OTHER SPECIES OF CONSERVATION CONCERN

Scientific Name	Common Name	Number of Records	Last Date Recorded
Aegithalos caudatus	Long-tailed Tit	3	2009
Anas platyrhynchos	Mallard	1	2012
Anthus pratensis	Meadow Pipit	4	2013
Apus apus	Common Swift	3	2009
Bryum pallescens	Tall-clustered Thread-moss	1	2013

Scientific Name	Common Name	Number of Records	Last Date Recorded
Didymodon nicholsonii	Nicholson's Beard-moss	2	2013
Formica rufa	Southern Wood Ant	1	1968
Gallinago gallinago	Common Snipe	1	2013
Hirundo rustica	Barn Swallow	11	2010
Lampropteryx otregiata	Devon Carpet	1	1996
Larus canus	Mew Gull	4	2013
Motacilla cinerea	Grey Wagtail	3	2013
Mythimna turca	Double-line	5	2014
Oenanthe oenanthe	Northern Wheatear	1	2010
Oscinella capreolus	Oscinella capreolus	1	1996
Pellia epiphylla	Overleaf Pellia	3	2013
Periparus ater	Coal Tit	7	2010
Phalacrocorax carbo	Great Cormorant	1	2002
Phalonidia manniana	Water-mint Conch	2	1998
Phlyctaenia stachydalis		1	1998
Phylloscopus trochilus	Willow Warbler	3	2012
Picus viridis	Green Woodpecker	3	2012
Pinus sylvestris	Scots Pine	3	2013
Regulus regulus	Goldcrest	4	2009
Scathophaga scybalaria		1	1908
Scolopax rusticola	Eurasian Woodcock	5	2013
Stenus (Hemistenus) palustris		1	2008
Sylvia communis	Common Whitethroat	3	2010
Turdus viscivorus	Mistle Thrush	5	2010
Weissia controversa var. densifolia		1	2013

SPECIES OF LOCAL CONSERVATION CONCERN

Scientific Name	Common Name	Number of Records	Last Date Recorded
Abrostola tripartita	Spectacle	4	2014
Acasis viretata	Yellow-barred Brindle	1	1998
Accipiter nisus	Eurasian Sparrowhawk	5	2009
Achillea ptarmica	Sneezewort	1	1988
Anemone nemorosa	Wood Anemone	1	1986
Ardea cinerea	Grey Heron	1	2009
Bactra furfurana	Mottled Marble	1	1998
Bryum argenteum	Silver-moss	3	2013
Buteo buteo	Common Buzzard	8	2008
Caltha palustris	Marsh-marigold	1	1986
Carduelis carduelis	European Goldfinch	10	2010
Carex caryophyllea	Spring-sedge	1	1988
Carex panicea	Carnation Sedge	2	1998
Carex pulicaris	Flea Sedge	1	1986
Carex rostrata	Bottle Sedge	1	1986
Carex sylvatica	Wood-sedge	2	2001
Carex viridula subsp. oedocarpa	Common Yellow-sedge	2	1991
Carum verticillatum	Whorled Caraway	5	1998
Catoptria pinella	Pearl Grass-veneer	1	2014
Celastrina argiolus	Holly Blue	1	1997
Certhia familiaris	Eurasian Treecreeper	2	2009
Chloris chloris	European Greenfinch	6	2010
Cirsium dissectum	Meadow Thistle	1	1986
Conopodium majus	Pignut	3	1991
Cyanistes caeruleus	Blue Tit	18	2013

Scientific Name	Common Name	Number of Records	Last Date Recorded
Cystopteris fragilis	Brittle Bladder-fern	1	1957
Dactylorhiza praetermissa	Southern Marsh-orchid	3	1986
Dendrocopos major	Great Spotted Woodpecker	4	2010
Dichodontium pellucidum	Transparent Fork-moss	1	2013
Drosera rotundifolia	Round-leaved Sundew	1	1986
Ebulea crocealis	Ochreous Pearl	1	1998
Eleocharis palustris	Common Spike-rush	1	1986
'	·	1	1998
Epirrhoe rivata	Wood Usersteil		
Equisetum sylvaticum	Wood Horsetail	1	1991
Erica tetralix	Cross-leaved Heath	4	2013
Eriophorum angustifolium	Common Cottongrass	3	2013
Euchoeca nebulata	Dingy Shell	1	1998
Eurhynchium praelongum	Common Feather-moss	6	2013
Frangula alnus	Alder Buckthorn	1	1991
Hieracium umbellatum		1	1957
Hydrocotyle vulgaris	Marsh Pennywort	1	1986
Hygrocybe chlorophana	Golden Waxcap	6	2005
Hygrocybe reidii	Honey Waxcap	1	2003
Iris foetidissima	Stinking Iris	1	2009
Lithophane ornitopus subsp. lactipennis	Grey Shoulder-knot	1	1998
Luzula multiflora	Heath Wood-rush	3	1988
Luzula pilosa	Hairy Wood-rush	1	1957
Lychnis flos-cuculi	Ragged-Robin	2	1991
Lymantria monacha	Black Arches	2	1998
Lysimachia nemorum	Yellow Pimpernel	1	1957
Melampyrum pratense	Common Cow-wheat	1	1991
Mentha aquatica	Water Mint	2	1998
Moehringia trinervia	Three-nerved Sandwort	1	1986
Motacilla alba	Pied Wagtail	1	2008
Motacilla alba subsp. yarrellii	Pied Wagtail	6	2010
Narthecium ossifragum	Bog Asphodel	1	1986
Orthotrichum pulchellum	Elegant Bristle-moss	1	2013
Osmunda regalis	Royal Fern	3	1991
Oxalis acetosella	Wood-sorrel	3	1991
Parus maior	Great Tit	14	2013
Pedicularis sylvatica	Lousewort	2	2013
Phylloscopus collybita	Common Chiffchaff	5	2010
Pohlia wahlenbergii	Pale Glaucous Thread-moss	1	2013
Polygala serpyllifolia	Heath Milkwort	1	1986
Polygonia c-album	Comma	1	2010
Polyommatus icarus	Common Blue	3	1998
Polystichum setiferum	Soft Shield-fern	1	2013
		2	1986
Populus tremula	Aspen Pag Pandwood		1986
Potamogeton polygonifolius	Bog Pondweed	1	
Pterapherapteryx sexalata	Small Seraphim	4	2014
Pyrrhosoma nymphula	Large Red Damselfly	1	1997
Ranunculus hederaceus	Ivy-leaved Crowfoot	1	1986
Ranunculus omiophyllus	Round-leaved Crowfoot	1	1986
Rheumaptera undulata	Scallop Shell	2	2014
Rhinanthus minor	Yellow-rattle	1	1988
Salix repens	Creeping Willow	1	1991
Samolus valerandi	Brookweed	1	1978
Schrankia costaestrigalis	Pinion-streaked Snout	2	1998
Scopula immutata	Lesser Cream Wave	2	1998
Sitta europaea	Wood Nuthatch	6	2013

Scientific Name	Common Name	Number of Records	Last Date Recorded
Solidago virgaurea	Goldenrod	1	1957
Spinus spinus	Siskin	6	2010
Stachys palustris	Marsh Woundwort	1	2009
Straminergon stramineum	Straw Spear-moss	1	2013
Strix aluco	Tawny Owl	3	2010
Succisa pratensis	Devil's-bit Scabious	6	2013
Sylvia atricapilla	Blackcap	1	2008
Turdus merula	Common Blackbird	30	2013
Ulex gallii	Western Gorse	3	2013
Vaccinium myrtillus	Bilberry	1	2001
Veronica montana	Wood Speedwell	1	1991
Viburnum opulus	Guelder-rose	2	2001
Viola palustris	Marsh Violet	2	1986
Zygodon conoideus	Lesser Yoke-moss	1	2013

OTHER SPECIES

Scientific Name	Common Name	Number of Records	Last Date Recorded
Abies nordmanniana	Caucasian Fir	1	2013
Abies procera	Noble Fir	1	2013
Abraxas grossulariata	Magpie	2	1998
Acer pseudoplatanus	Sycamore	5	2013
Achillea millefolium	Yarrow	2	1986
Acleris		1	1998
Acleris laterana/comariana		1	2014
Acleris notana	Rusty Birch Button	1	1998
Acleris variegana	Garden Rose Button	2	2014
Acronicta psi/tridens		2	2014
Acronicta rumicis	Knot Grass	2	1998
Aesculus hippocastanum	Horse-chestnut	1	2001
Agapeta hamana	Common Yellow Conch	3	1998
Agapeta zoegana	Knapweed Conch	1	1998
Agaricus arvensis	Horse Mushroom	1	2004
Agaricus campestris var. campestris		1	1996
Agaricus silvicola var. silvicola		1	2002
Aglais urticae	Small Tortoiseshell	2	1998
Agonopterix arenella	Brindled Flat-body	1	2014
Agonopterix heracliana	Common Flat-body	1	1998
Agonopterix kaekeritziana	Straw Flat-body	2	1998
Agriopis marginaria	Dotted Border	1	1996
Agriphila straminella	Straw Grass-veneer	1	1998
Agriphila tristella	Common Grass-veneer	1	2014
Agrochola helvola	Flounced Chestnut	1	1998
Agrochola lota	Red-line Quaker	1	1998
Agrostis canina	Velvet Bent	4	1998
Agrostis capillaris	Common Bent	5	2001
Agrostis stolonifera	Creeping Bent	5	1991
Agrotis clavis	Heart & Club	1	2014
Agrotis exclamationis	Heart & Dart	5	2014
Agrotis ipsilon	Dark Sword-grass	2	1996
Agrotis segetum	Turnip Moth	1	1998
Aira praecox	Early Hair-grass	1	1986
Ajuga reptans	Bugle	1	1986
Alcis repandata	Mottled Beauty	4	2014

Scientific Name	Common Name	Number of Records	Last Date Recorded
Alectoris rufa	Red-legged Partridge	1	2008
Alliaria petiolata	Garlic Mustard	1	1986
Alnus glutinosa	Alder	4	2009
Alopecurus geniculatus	Marsh Foxtail	2	1986
Alucita hexadactyla	Twenty-plumed Moth	1	2014
Amanita fulva	Tawny Grisette	1	2007
Amanita muscaria var. muscaria	Tawny Grisette	2	1995
	Blusher	2	2000
Ambhatagium garnana yar, garnana	Diustiei	3	2013
Amblystegium serpens var. serpens	Connectindensing	2	
Amphipyra pyramidea	Copper Underwing		1998
Anaplectoides prasina	Green Arches	2	2014
Anaspis (Anaspis) frontalis	NACT LA II	1	2008
Angelica sylvestris	Wild Angelica	5	2009
Anotylus rugosus		3	2001
Anthocharis cardamines	Orange-tip	2	2010
Anthoxanthum odoratum	Sweet Vernal-grass	5	1988
Anthriscus sylvestris	Cow Parsley	1	1986
Apamea crenata	Clouded-bordered Brindle	1	1998
Apamea lithoxylaea	Light Arches	3	2014
Apamea monoglypha	Dark Arches	5	2014
Apamea remissa	Dusky Brocade	1	2014
Apamea scolopacina	Slender Brindle	2	1998
Apamea sordens	Rustic Shoulder-knot	1	1996
Aphantopus hyperantus	Ringlet	3	2010
Aphodius (Melinopterus) sphacelatus		3	2001
Aphomia sociella	Bee Moth	2	2014
Apium nodiflorum	Fool's-water-cress	1	2009
Aporophyla nigra	Black Rustic	1	1998
Apotomis betuletana	Birch Marble	1	1998
Archips rosana	Rose Twist	1	2014
Argyresthia goedartella	Golden Argent	1	1998
Armillaria		4	2002
Armillaria mellea	Honey Fungus	7	2009
Arrhenatherum elatius	False Oat-grass	2	2009
Asplenium adiantum-nigrum	Black Spleenwort	1	1986
Asplenium trichomanes subsp. guadrivalens	Black opiocimen	1	2013
Atethmia centrago	Centre-barred Sallow	2	2014
Athyrium filix-femina	Lady-fern	2	2013
Atrichum undulatum	Common Smoothcap	2	2013
Atriplex patula	Common Orache	1	1986
Aulacomnium palustre	Bog Groove-moss	1	2013
Auricularia auricula-judae	Jelly Ear	2	1998
•	Silver Y	11	2014
Autographa jata			
Audio public	Plain Golden Y	1	2014
Axylia putris	Flame	4	2014
Bactra	B. I. M. II.	1	2014
Bactra lancealana	Rush Marble	4	1998
Barbula convoluta	Lesser Bird's-claw Beard-moss	2	2013
Barbula unguiculata	Bird's-claw Beard-moss	3	2013
Bellis perennis	Daisy	3	1991
Bembidion (Metallina) lampros		3	2001
Bembidion (Ocydromus) tetracolum		3	2001
Bembidion (Philochthus) mannerheimii		3	2001
Bena bicolorana	Scarce Silver-lines	1	1998
Betula pubescens	Downy Birch	4	2009

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Biston betularia	Peppered Moth	5	2014
Blechnum spicant	Hard-fern	3	1991
Boletus badius	Bay Bolete	1	1995
Boletus chrysenteron	Red Cracking Bolete	1	2005
Boletus edulis	Сер	2	2004
Boletus erythropus		2	1996
Brachytheciastrum velutinum	Velvet Feather-moss	1	2013
Brachythecium rivulare	River Feather-moss	4	2013
Brachythecium rutabulum	Rough-stalked Feather-moss	6	2013
Branta canadensis	Greater Canada Goose	1	2008
Bryum capillare	Capillary Thread-moss	3	2013
Bryum dichotomum	Gapinary Thread moss	3	2013
Bryum rubens	Crimson-tuber Thread-moss	1	2013
Cabera exanthemata	Common Wave	4	2014
Cabera pusaria	Common White Wave	5	2014
Calliergonella cuspidata	Pointed Spear-moss	4	2013
Calluna vulgaris	Heather	5	2013
Caliuria vuigaris Calocera viscosa	Yellow Stagshorn	1	1997
		4	2000
Caloptilia stigmatella	White-triangle Slender	1	2000
Calypogeia arguta	Notched Pouchwort		
Calypogeia fissa	Common Pouchwort	1	2013
Calypogeia muelleriana	Mueller's Pouchwort	1	2013
Calystegia sepium	Hedge Bindweed	2	2009
Campaea margaritata	Light Emerald	4	2014
Camptogramma bilineata	Yellow Shell	3	2014
Campylopus flexuosus	Rusty Swan-neck Moss	1	2013
Cantharellus tubaeformis	Trumpet Chanterelle	1	1997
Capsella bursa-pastoris	Shepherd's-purse	1	1986
Carcina quercana	Long-horned Flat-body	1	1998
Cardamine flexuosa	Wavy Bitter-cress	3	2009
Cardamine hirsuta	Hairy Bitter-cress	1	2009
Cardamine pratensis	Cuckooflower	7	2013
Carex echinata	Star Sedge	1	1998
Carex hirta	Hairy Sedge	1	2001
Carex nigra	Common Sedge	2	1998
Carex ovalis	Oval Sedge	3	1998
Carex remota	Remote Sedge	2	2013
Cartodere (Aridius) nodifer		3	2001
Celypha lacunana	Common Marble	1	1997
Centaurea nigra	Common Knapweed	5	1988
Cephalozia bicuspidata	Two-horned Pincerwort	1	2013
Cerapteryx graminis	Antler Moth	1	1998
Cerastis rubricosa	Red Chestnut	1	1996
Cerastium fontanum	Common Mouse-ear	2	1986
Cerastium glomeratum	Sticky Mouse-ear	1	1986
Ceratodon purpureus	Redshank	2	2013
Ceterach officinarum	Rustyback	1	1986
Chaerophyllum temulum	Rough Chervil	1	1986
Chaetocnema hortensis		3	2001
Chamerion angustifolium	Rosebay Willowherb	2	2013
Charanyca trigrammica	Treble Lines	5	2014
Chartoscirta cocksii		1	2001
Chloris chloris	Greenfinch	3	2005
Chlorociboria aeruginascens	Green Elfcup	5	2007
Chloroclysta siterata	Red-green Carpet	1	1998

Scientific Name	Common Name	Number of Records	Last Date Recorded
Chloroclysta truncata	Common Marbled Carpet	5	2014
Chrysosplenium oppositifolium	Opposite-leaved Golden-saxifrage	1	2001
Cilix glaucata	Chinese Character	1	2014
Circaea lutetiana	Enchanter's-nightshade	3	2001
Cirsium arvense	Creeping Thistle	4	2009
Cirsium palustre	Marsh Thistle	4	2009
Cirsium vulgare	Spear Thistle	3	2013
Clavulinopsis corniculata	Meadow Coral	2	1997
Clitocybe geotropa	Trooping Funnel	1	1996
Clitocybe infundibuliformis		1	1997
Clitocybe nebularis	Clouded Funnel	3	2003
Clitopilus prunulus	The Miller	1	1991
Cnephasia stephensiana	Great Grey Shade	2	1998
Coccinella septempunctata	7-spot Ladybird	1	2013
Coenobia rufa	Small Rufous	1	1998
Coenonympha pamphilus	Small Heath	2	1997
Colias croceus	Clouded Yellow	1	1996
	Butter Cap	5	2003
Collybia butyracea var. butyracea	<u> </u>	1	1996
Collybia confluens	Clustered Toughshank	3	2004
Collybia dryophila	Russet Toughshank		
Colostygia pectinataria	Green Carpet	5	2014
Columba livia feral	Feral Pigeon	5	2010
Columba palumbus	Common Wood Pigeon	3	2008
Conocephalum conicum	Great Scented Liverwort	1	2013
Coprinellus disseminatus		1	2005
Coprinellus micaceus		2	1998
Cornu aspersum	Common Garden Snail	1	2003
Cortinarius decipiens var. decipiens		1	1997
Cortinarius torvus	Stocking Webcap	1	1997
Cortinarius trivialis	Girdled Webcap	1	2000
Corvus corone	Carrion Crow	21	2011
Corvus frugilegus	Rook	2	2009
Corvus monedula	Eurasian Jackdaw	19	2013
Corylus avellana	Hazel	4	2009
Cosmorhoe ocellata	Purple Bar	1	1996
Crambus pascuella	Inlaid Grass-veneer	3	1998
Crambus perlella	Satin Grass-veneer	1	1998
Crassula helmsii	New Zealand Pigmyweed	1	2013
Crataegus monogyna	Hawthorn	5	2013
Crepidotus mollis	Peeling Oysterling	2	2009
Crocallis elinguaria	Scalloped Oak	2	2014
Cryphaea heteromalla	Lateral Cryphaea	1	2013
Cybosia mesomella	Four-dotted Footman	1	2014
Cydia splendana	Marbled Piercer	1	1998
Cydia ulicetana		1	1997
Cynosurus cristatus	Crested Dog's-tail	5	2001
Dacrymyces stillatus	Common Jellyspot	1	1998
Dactylis glomerata	Cock's-foot	8	2013
Daedalea quercina	Oak Mazegill	1	2004
Daedaleopsis confragosa	Blushing Bracket	6	1998
Daldinia concentrica	King Alfred's Cakes	8	2009
Deilephila elpenor	Elephant Hawk-moth	4	2014
Deraeocoris (Knightocapsus) lutescens	Ziophani Hawi IIIoti	1	2014
Deschampsia cespitosa		4	2013
Descriarripsia Gespilosa		2	2014

Scientific Name	Common Name	Number of Records	Last Date Recorded
Diaphora mendica	Muslin Moth	1	1996
Diarsia mendica	Ingrailed Clay	2	1998
Diarsia rubi	Small Square-spot	7	2014
Dichonia aprilina	Merveille Du Jour	1	1998
Dicranella heteromalla	Silky Forklet-moss	2	2013
Dicranella schreberiana	Schreber's Forklet-moss	1	2013
	Field Forklet-moss	1	2013
Dicranella staphylina		1	2013
Dicranum scoparium	Broom Fork-moss	· ·	
Didymodon insulanus	Cylindric Beard-moss	1	2013
Didymodon rigidulus	Rigid Beard-moss	1	2013
Didymodon tophaceus	Olive Beard-moss	1	2013
Digitalis purpurea	Foxglove	3	1986
Dioscorea communis	Black Bryony	1	1986
Dipleurina lacustrata	Little Grey	2	1998
Drepana falcataria	Pebble Hook-tip	1	1998
Drymonia dodonaea	Marbled Brown	1	2014
Dryobotodes eremita	Brindled Green	1	1998
Dryopteris affinis	Scaly Male-fern	5	2009
Dryopteris dilatata	Broad Buckler-fern	7	2013
Dryopteris filix-mas	Male-fern	6	2013
Ecliptopera silaceata	Small Phoenix	1	1998
Ectoedemia albifasciella	White-banded Pigmy	3	2000
Ectoedemia atricollis	Pinch-barred Pigmy	1	2000
Eilema griseola	Dingy Footman	2	1998
Eilema lurideola	Common Footman	1	2014
Elasmostethus interstinctus		1	2014
Elodea nuttallii	Nuttall's Waterweed	1	2013
Elytrigia repens	Common Couch	1	1986
Ematurga atomaria	Common Heath	1	1997
Emmelina monodactyla	Common Plume	2	1998
Emmetia marginea	Bordered Carl	1	2000
Endothenia marginana	Bordered Marble	1	1998
Endrosis sarcitrella	White-shouldered Moth	2	2014
Ennomos alniaria	Canary-shouldered Thorn	2	2014
Ennomos fuscantaria	Dusky Thorn	1	2014
	-	2	2014
Ennomos quercinaria	August Thorn	1	1997
Entoloma chalybeum var. lazulinum	Entoloma chalybeum var. lazulinum	3	
Entoloma porphyrophaeum	Lilac Pinkgill		2003
Epermenia falciformis	Large Lance-wing	1	2014
Epilobium ciliatum	American Willowherb	1	2013
Epilobium hirsutum	Great Willowherb	4	2013
Epilobium montanum	Broad-leaved Willowherb	4	2009
Epinotia immundana	Common Birch Bell	1	2014
Epiphyas postvittana	Light Brown Apple-moth	4	2014
Epirrhoe alternata	Common Carpet	3	1998
Episyrphus balteatus		1	1993
Equisetum arvense	Field Horsetail	2	2009
Equisetum fluviatile	Water Horsetail	1	1986
Equisetum palustre	Marsh Horsetail	1	1986
Erithacus rubecula	European Robin	23	2013
Euclidia glyphica	Burnet Companion	2	1998
Eucosma cana	Hoary Belle	2	1998
Eudonia mercurella	Small Grey	2	1998
Eugnorisma glareosa	Autumnal Rustic	1	2014
	Spinach	2	2014

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Eulithis prunata	Phoenix	2	2014
Eupeodes corollae		1	1993
Eupithecia tripunctaria	White-spotted Pug	1	1998
Eupithecia vulgata	Common Pug	1	1998
Euplexia lucipara	Small Angle Shades	3	2014
Eupoecilia angustana	Marbled Conch	1	2014
Euproctis similis	Yellow-tail	3	2014
Eurhynchium striatum	Common Striated Feather-moss	1	2013
Eurrhypara hortulata	Small Magpie	3	2014
Euthrix potatoria	Drinker	3	2014
Exapion (Ulapion) ulicis	Dillino	5	2008
Fagus sylvatica	Beech	3	2009
Fallopia japonica	Japanese Knotweed	3	2013
Festuca gigantea	Giant Fescue	2	1991
Festuca ovina	Sheep's-fescue	1	1986
	Sileep s-lescue	1	1998
Festuca ovina agg.	Red Fescue	2	1988
Festuca rubra	Red Fescue		
Festuca rubra agg.	Longer Desirat mass	1 2	1986 2013
Fissidens bryoides	Lesser Pocket-moss	1	
Fissidens taxifolius	Common Pocket-moss	1	2009
Fissidens taxifolius var. taxifolius		2	2013
Fistulina hepatica	Beefsteak Fungus	1	2007
Fragaria vesca	Wild Strawberry	1	1986
Fraxinus excelsior	Ash	4	2013
Fringilla coelebs	Chaffinch	20	2013
Frullania dilatata	Dilated Scalewort	4	2013
Funaria hygrometrica	Common Cord-moss	1	2013
Furcula furcula	Sallow Kitten	1	2014
Gabrius breviventer		3	2001
Galeopsis tetrahit	Common Hemp-nettle	2	1986
Galeopsis tetrahit agg.	Common Hemp-Nettle agg.	1	2009
Galium aparine	Cleavers	4	2013
Galium palustre	Marsh-bedstraw	5	2013
Galium palustre subsp. palustre	Common Marsh-bedstraw	2	1986
Galium saxatile	Heath Bedstraw	1	1986
Gallinula chloropus	Common Moorhen	1	2012
Garrulus glandarius	Eurasian Jay	5	2013
Geometra papilionaria	Large Emerald	1	2014
Geotrupes spiniger		3	2001
Geotrupes stercorarius	Dor Beetle	3	2001
Geranium dissectum	Cut-leaved Crane's-bill	1	2013
Geranium robertianum	Herb-Robert	7	2013
Geum urbanum	Wood Avens	1	1991
Glechoma hederacea	Ground-ivy	1	1986
Glyceria declinata	Small Sweet-grass	1	2009
Glyceria fluitans	Floating Sweet-grass	3	1986
Glyphipterix thrasonella	Speckled Fanner	1	1998
Gonepteryx rhamni	Brimstone	2	1997
Gortyna flavago	Frosted Orange	1	2014
Grimmia pulvinata	Grey-cushioned Grimmia	2	2013
Gymnopilus penetrans	Common Rustgill	1	2002
Gymnoscelis rufifasciata	Double-striped Pug	1	1998
Habrosyne pyritoides	Buff Arches	5	2014
Hada plebeja	Shears	1	1996
riada propoja	Onloars	1	2014

Scientific Name	Common Name	Number of Records	Last Date Recorded
Hadena rivularis	Campion	1	1998
Hadrognathus longipalpis		4	1996
Hedera helix	lvy	5	2009
Hedera hibernica	Atlantic Ivy	1	2013
Helophilus pendulus	,	1	1993
Hemithea aestivaria	Common Emerald	2	2014
Hepialus humuli	Ghost Moth	1	1998
Hepialus lupulinus	Common Swift	2	2014
Heracleum sphondylium	Hogweed	5	2009
Herminia grisealis	Small Fan-foot	1	1998
Holcus lanatus	Yorkshire-fog	8	2013
Holcus mollis	Creeping Soft-grass	5	1991
Homalothecium sericeum	Silky Wall Feather-moss	1	2013
	<u> </u>	2	1998
Hoplodrina alsines	Uncertain	2	
Hoplodrina blanda	Rustic		1998
Hydraecia micacea	Rosy Rustic	1	2014
Hydrelia flammeolaria	Small Yellow Wave	1	1998
Hydriomena furcata	July Highflyer	3	2014
Hygrocybe pratensis var. pratensis		2	2002
Hygrocybe psittacina var. psittacina		1	1997
Hygrocybe virginea var. virginea		1	1996
Hylocomium splendens	Glittering Wood-moss	1	2009
Hymenochaete corrugata	Glue Crust	1	1998
Hymenochaete rubiginosa	Oak Curtain Crust	1	1997
Hypena proboscidalis	Snout	4	2014
Hypera (Hypera) venusta		3	2001
Hypericum androsaemum	Tutsan	1	1957
Hypericum tetrapterum	Square-stalked St John's-wort	1	2013
Hypholoma fasciculare var. fasciculare		7	2003
Hypnum andoi	Mamillate Plait-moss	2	2013
Hypnum cupressiforme	Cypress-leaved Plait-moss	3	2013
Hypnum cupressiforme var. resupinatum	Supine Plait-moss	2	2013
Hypnum jutlandicum	Heath Plait-moss	1	2013
Hypochaeris radicata	Cat's-ear	3	1988
Hypoxylon fragiforme	Beech Woodwart	2	1998
Hypoxylon fuscum	Hazel Woodwart	3	2009
Hypoxylon multiforme	Birch Woodwart	1	2007
Hypsopygia costalis	Gold Triangle	2	1998
Idaea aversata	Riband Wave	4	2014
Idaea biselata	Small Fan-footed Wave	5	2014
Idaea dimidiata	Single-dotted Wave	2	1998
Ilex aquifolium	Holly	5	2013
Inachis io	Peacock	5	1998
Inonotus radiatus	Alder Bracket	3	1998
Iris pseudacorus	Yellow Iris	2	2009
Isothecium alopecuroides	Larger Mouse-tail Moss	1	2013
Isothecium myosuroides	Slender Mouse-tail Moss	2	2013
Juncus acutiflorus	Sharp-flowered Rush	3	1991
Juncus articulatus	Jointed Rush	2	1991
Juncus bufonius	Toad Rush	1	1986
Juncus bulonius Juncus bulbosus	Bulbous Rush	2	2013
		4	2013
Juncus conglomeratus	Compact Rush		
Juncus effusus	Soft-rush	8	2013
Juncus inflexus	Hard Rush	2	2009
Juncus squarrosus	Heath Rush	2	2013

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Kateretes rufilabris		1	2008
Kuehneromyces mutabilis	Sheathed Woodtuft	3	1998
Lacanobia oleracea	Bright-Line Brown-Eye	5	2014
Laccaria amethystina	Amethyst Deceiver	3	1997
Laccaria laccata	Deceiver	1	1997
Lactarius camphoratus	Curry Milkcap	1	2000
Lactarius camprioratus Lactarius vellereus	Fleecy Milkcap	1	1990
Lactarius venereus Laetiporus sulphureus	Chicken of the Woods	1	2007
		1	1957
Lamiastrum galeobdolon	Yellow Archangel	3	
Laothoe populi	Poplar Hawk-moth		2014
Lapsana communis	Nipplewort	1	1986
Larus argentatus	Herring Gull	5	2010
Lathrobium (Tetartopeus) terminatum		3	2001
Lathyrus pratensis	Meadow Vetchling	4	1988
Leccinum quercinum	Orange Oak Bolete	1	2000
Leccinum variicolor	Mottled Bolete	1	1995
Leontodon autumnalis	Autumn Hawkbit	1	1988
Lepista luscina		1	1997
Lesteva sicula subsp. heeri		3	2001
Ligdia adustata	Scorched Carpet	1	2014
Lolium perenne	Perennial Rye-grass	1	1986
Lomaspilis marginata	Clouded Border	4	2014
Lomographa temerata	Clouded Silver	4	2014
Lonicera nitida	Wilson's Honeysuckle	1	2001
Lonicera periclymenum	Honeysuckle	4	2013
Loricera pilicornis		3	2001
Lotus corniculatus	Common Bird's-foot-trefoil	3	1991
Lotus pedunculatus	Greater Bird's-foot-trefoil	7	2001
Luperina testacea	Flounced Rustic	1	2014
Luzula campestris	Field Wood-rush	5	1991
Lycaena phlaeas	Small Copper	1	1996
Lycia hirtaria	Brindled Beauty	1	1996
Lycoperdon perlatum	Common Puffball	3	1997
Lycoperdon pyriforme	Stump Puffball	2	1997
Macaria alternata	Sharp-angled Peacock	2	2014
Macrolepiota procera var. procera	onarp angrea : sacon	1	1996
Malus sylvestris	Crab Apple	3	2001
Mamestra brassicae	Cabbage Moth	2	2014
Maniola jurtina	Meadow Brown	4	1998
Matricaria discoidea	Pineappleweed	2	1986
Medicago lupulina	Black Medick	1	1986
Megacollybia platyphylla	Whitelaced Shank	1	1997
Melanchra persicariae	Dot Moth	3	2014
Melanchra pisi	Broom Moth	1	1996
Melanogaster hirtella	Horae Mint	1	1993
Mentha longifolia	Horse Mint	1	1957
Mercurialis perennis	Dog's Mercury	1	1986
Meripilus giganteus	Giant Polypore	1	1996
Mesapamea secalis	Common Rustic	2	1998
Mesapamea secalis agg.	Common Rustic	5	2014
Metzgeria consanguinea	Whiskered Veilwort	1	2013
Metzgeria furcata	Forked Veilwort	4	2013
Micrambe ulicis	Micrambe ulicis	6	2008
Microlejeunea ulicina	Fairy Beads	3	2013
Micropterix calthella	Plain Gold	1	2010

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Miltochrista miniata	Rosy Footman	3	2014
Mitrula paludosa	Bog Beacon	1	2008
Mnium hornum	Swan's-neck Thyme-moss	3	2013
Molinia caerulea	Purple Moor-grass	7	2013
Monotoma (Gyrocecis) conicicollis	1 diplo Moor graco	3	1996
Mycena aetites	Drab Bonnet	1	1997
Mycena filopes	Iodine Bonnet	1	1997
	Common Bonnet	1	1997
Mycena galericulata	Burgundydrop Bonnet	1	1997
Mycena haematopus	<u> </u>	1	
Mycena inclinata	Clustered Bonnet		1997
Mycena polygramma	Grooved Bonnet	1	1997
Mythimna ferrago	Clay	2	1998
Mythimna impura	Smoky Wainscot	3	2014
Mythimna pallens	Common Wainscot	1	1998
Mythimna unipuncta	American Wainscot	1	1998
Nabis (Nabis) rugosus		1	2001
Nardus stricta	Mat-grass	4	1998
Nebria (Nebria) brevicollis		3	2001
Nectria cinnabarina	Coral Spot	5	2007
Nemophora degeerella	Yellow-barred Long-horn	1	1997
Neoascia tenur		1	1993
Noctua comes	Lesser Yellow Underwing	5	2014
Noctua fimbriata	Broad-bordered Yellow Underwing	1	1998
Noctua janthe	Lesser Broad-bordered Yellow Underwing	1	1998
Noctua pronuba	Large Yellow Underwing	8	2014
Nomophila noctuella	Rush Veneer	5	1998
Notodonta dromedarius	Iron Prominent	2	2014
Notodonta ziczac	Pebble Prominent	2	2014
Notothecta flavipes		3	1996
Nymphaea marliacea	Water-Lily	1	2013
Ochlodes sylvanus	Large Skipper	1	1998
Ochropleura plecta	Flame Shoulder	9	2014
Ochthephilum fracticorne		3	2001
Ocys harpaloides		3	2001
Odontopera bidentata	Scalloped Hazel	2	2014
Oenanthe crocata	Hemlock Water-dropwort	3	1991
Oligia fasciuncula	Middle-barred Minor	2	2014
Oligia latruncula	Tawny Marbled Minor	1	1998
Oligia strigilis	Marbled Minor	1	1996
	Marbled Minor agg.	1	2014
Oligia strigilis agg.	Rufous Minor	1	1998
Oligia versicolor Omocestus viridulus		1	1996
	Common Green Grasshopper		
Operophtera brumata	Winter Moth	2	1999
Opisthograptis luteolata	Brimstone Moth	10	2014
Orthosia cerasi	Common Quaker	1	1996
Orthosia cruda	Small Quaker	1	1996
Orthosia gothica	Hebrew Character	2	1996
Orthosia gracilis	Powdered Quaker	1	1996
Orthosia incerta	Clouded Drab	1	1996
Orthosia munda	Twin-spotted Quaker	1	1996
Orthotrichum affine	Wood Bristle-moss	3	2013
Orthotrichum diaphanum	White-tipped Bristle-moss	1	2013
Oryctolagus cuniculus	European Rabbit	1	1969
Othius subuliformis		3	2001
Oulema obscura		3	2001

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Ourapteryx sambucaria	Swallow-tailed Moth	2	2014
Oxyrrhynchium hians	Swartz's Feather-moss	4	2013
Oxytelus laqueatus		4	2008
Pammene fasciana	Acorn Piercer	1	1998
Pandemis cerasana	Barred Twist	3	2014
Pandemis heparana	Dark Twist	1	1998
Paradrina clavipalpis	Pale Mottled Willow	1	2014
Paradromius linearis	Tale Medica Philot	3	2001
Paranchus albipes		3	2001
Pararge aegeria	Speckled Wood	6	2010
Parasola plicatilis	Opeckied Wood	1	1996
<u> </u>	Hawthorn Slender	2	2000
Parornix anglicella	Brown Birch Slender	1	1998
Parornix betulae		3	
Parornix devoniella	Hazel Slender		2000
Paxillus involutus	Brown Rollrim	2	1996
Pellia endiviifolia	Endive Pellia	2	2013
Peribatodes rhomboidaria	Willow Beauty	1	2014
Perinephela lancealis	Long-winged Pearl	1	1998
Perizoma affinitata	Rivulet	1	1998
Perizoma albulata subsp. albulata	Grass Rivulet	2	1998
Perizoma alchemillata	Small Rivulet	2	2014
Persicaria hydropiper	Water-pepper	1	1986
Petrophora chlorosata	Brown Silver-line	3	1997
Phalaris arundinacea var. picta		1	2009
Phalera bucephala	Buff-tip	6	2014
Phasianus colchicus	Common Pheasant	6	2010
Phellinus ferreus	Cinnamon Porecrust	2	1998
Pheosia gnoma	Lesser Swallow Prominent	2	1996
Philonotis fontana	Fountain Apple-moss	1	2013
Philonthus albipes		3	2001
Philonthus carbonarius		3	2001
Philonthus cognatus		3	1996
Philonthus decorus		3	2001
Philonthus marginatus		3	2001
Philonthus varians		3	2001
Philorhizus melanocephalus		3	2001
Phlogophora meticulosa	Angle Shades	5	1998
Phragmatobia fuliginosa	Ruby Tiger	1	1998
Phyllitis scolopendrium	Hart's-tongue	2	2013
Phyllonorycter coryli	Nut-leaf Blister Moth	3	2000
Phyllonorycter geniculella	Sycamore Midget	2	2000
Phyllonorycter harrisella	White Oak Midget	3	2000
Phyllonorycter hilarella	Sallow Midget	2	2000
Phyllonorycter oxyacanthae	Common Thorn Midget	3	2000
Phyllonorycter quercifoliella	Common Oak Midget	3	2000
Phyllonorycter rajella	Common Alder Midget	2	2000
Phyllonorycter salicicolella	Long-streak Midget	1	2000
Phyllonorycter spinicolella	Sloe Midget	2	2000
Pica pica	Black-billed Magpie	10	2010
Picea abies	Norway Spruce	1	2013
	, ,	3	1998
Pieris brassicae	Large White	2	1998
Pieris napi	Green-veined White		
Pieris rapae	Small White	3	2010
Piptoporus betulinus	Birch Polypore	11	2009
Pirapion immune		3	2001

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Plagiomnium undulatum	Hart's-tongue Thyme-moss	1	2013
Plagiothecium nemorale	Woodsy Silk-moss	1	2013
Plagodis dolabraria	Scorched Wing	1	2014
Plantago lanceolata	Ribwort Plantain	9	2009
Plantago major	Greater Plantain	2	1986
Platycheirus albimanus	Greater Françain	2	1993
Platycheirus peltatus agg.		1	1993
Plemyria rubiginata subsp. rubiginata	Blue-bordered Carpet	1	1893
, , , ,	Mother of Pearl	2	2014
Pleuroptya ruralis		1	
Pleurotus ostreatus	Oyster Mushroom		2009
Plutella xylostella	Diamond-back Moth	3	1998
Pluteus cervinus	Deer Shield	5	2007
Pluteus salicinus	Willow Shield	1	1998
Poa annua	Annual Meadow-grass	4	2013
Poa pratensis	Smooth Meadow-Grass	1	1986
Poa trivialis	Rough Meadow-grass	5	2009
Polygonum aviculare	Knotgrass	1	1986
Polypodium interjectum	Intermediate Polypody	2	1991
Polyporus brumalis	Winter Polypore	1	1994
Polytrichum commune	Common Haircap	2	2013
Polytrichum formosum	Bank Haircap	1	2013
Potentilla anglica	Trailing Tormentil	2	1991
Potentilla anserina	Silverweed	4	1988
Potentilla erecta	Tormentil	5	2013
Potentilla reptans	Creeping Cinquefoil	2	1986
Potentilla sterilis	Barren Strawberry	3	2013
Primula vulgaris	Primrose	1	1991
Proteinus brachypterus		3	2001
Protodeltote pygarga	Marbled White Spot	5	2014
Protopirapion atratulum	The state of the s	3	2001
Prunella vulgaris	Selfheal	1	1957
Prunus avium	Wild Cherry	1	1986
Prunus spinosa	Blackthorn	4	2013
Psathyrella piluliformis	Common Stump Brittlestem	1	1996
Pseudargyrotoza conwagana	Yellow-spot Twist	2	2014
Pseudephemerum nitidum	Delicate Earth-moss	1	2013
Pseudoboletus parasiticus	Parasitic Bolete	2	1991
<u> </u>		1	2014
Pseudoips prasinana	Green Silver-lines		
Pseudotaxiphyllum elegans	Elegant Silk-moss	1	2013
Pteridium aquilinum	Bracken	4	2001
Pterostichus (Argutor) diligens		3	2001
Pterostichus (Lagarus) vernalis	D. D. i. i.	3	2001
Pterostoma palpina	Pale Prominent	3	2014
Ptilodon capucina	Coxcomb Prominent	2	2014
Pulicaria dysenterica	Common Fleabane	2	2009
Pyronia tithonus	Hedge Brown	2	2005
Quedius (Quedius) molochinus		1	2008
Quedius (Raphirus) semiaeneus		1	2008
Quercus cerris	Turkey Oak	1	2001
Quercus petraea	Sessile Oak	4	2001
Quercus robur	Pedunculate Oak	3	2013
Quercus rubra	Red Oak	1	2009
Ranunculus acris	Meadow Buttercup	5	2009
Ranunculus ficaria subsp. ficaria		3	1991
Ranunculus flammula	Lesser Spearwort	5	2009

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Ranunculus repens	Creeping Buttercup	6	2013
Reticularia lycoperdon		1	1996
Rhagonycha fulva	Common Red Soldier Beetle	1	2008
Rhizomnium punctatum	Dotted Thyme-moss	2	2013
Rhododendron ponticum	Rhododendron	2	2009
Rhynchostegiella tenella	Tender Feather-moss	2	2013
Rhynchostegium confertum	Clustered Feather-moss	4	2013
Rhynchostegium riparioides	Long-beaked Water Feather-moss	1	2013
Rhytidiadelphus squarrosus	Springy Turf-moss	2	2013
Rhytisma acerinum	Sycamore Tarspot	2	2003
Ribes nigrum	Black Currant	1	1991
Ribes rubrum	Red Currant	1	1986
		1	2013
Riccardia chamedryfolia	Jagged Germanderwort	_	
Rivula sericealis	Straw Dot	6	2014
Rosa arvensis	Field-rose	4	2013
Rosa canina agg.		1	1986
Rubus fruticosus agg.	Bramble	9	2013
Rubus idaeus	Raspberry	1	2001
Rumex acetosa	Common Sorrel	3	2009
Rumex acetosella	Sheep's Sorrel	3	1986
Rumex crispus	Curled Dock	1	1986
Rumex obtusifolius	Broad-leaved Dock	6	2013
Rumex sanguineus	Wood Dock	2	2009
Rusina ferruginea	Brown Rustic	2	1998
Russula betularum	Birch Brittlegill	1	1997
Russula nigricans	Blackening Brittlegill	1	1997
Russula ochroleuca	Ochre Brittlegill	9	2009
Russula rosea	Rosy Brittlegill	1	1997
Sagina procumbens	Procumbent Pearlwort	2	1986
Salix aurita	Eared Willow	2	1991
Salix caprea	Goat Willow	2	2001
Salix cinerea subsp. oleifolia	Rusty Willow	8	2013
Salix viminalis	Osier	1	1986
Sambucus nigra	Elder	3	2013
Schistidium crassipilum	Thickpoint Grimmia	2	2013
Schizophyllum commune	Common Porecrust	1	2000
Schizopora paradoxa	Split Porecrust	3	2009
Sciurus carolinensis	Eastern Grey Squirrel	1	2001
Scleroderma citrinum	Common Earthball	10	2007
Scleropodium purum	Neat Feather-moss	1	2013
Scoliopteryx libatrix	Herald	3	2014
Scopula floslactata	Cream Wave	4	2014
Scotopteryx mucronata subsp. umbrifera	Lead Belle	1	1997
Scrophularia nodosa	Common Figwort	1	1986
'	•	1	
Scutellinia scutellata	Common Eyelash Early Thorn	3	1988
Selenia dentaria	Early Thorn		1998
Selenia tetralunaria	Purple Thorn	1	1996
Senecio aquaticus	Marsh Ragwort	4	2013
Senecio jacobaea	Common Ragwort	6	2013
Senecio vulgaris	Groundsel	1	2013
Sericomyia silentis		1	1993
Sericus brunneus		3	2001
Silene dioica	Red Campion	6	2013
Sitona (Sitona) regensteinensis		4	2008
Sitona (Sitona) striatellus		4	2008

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Skeletocutis nivea	Hazel Bracket	2	2007
Solanum dulcamara	Bittersweet	4	2009
Sonchus asper	Prickly Sow-thistle	2	2013
Sonchus oleraceus	Smooth Sow-thistle	1	2013
Sorbus aucuparia	Rowan	3	1991
Sparganium erectum	Branched Bur-reed	1	2013
Sphaerophoria scripta	Brandined But 100d	1	1993
Sphagnum denticulatum	Cow-horn Bog-moss	1	2013
Sphagnum fallax	Flat-topped Bog-moss	1	2013
Sphagnum fimbriatum	Fringed Bog-moss	1	2013
Sphagnum palustre	Blunt-leaved Bog-moss	1	2013
Sphagnum papillosum	Papillose Bog-moss	1	2013
Sphagnum subnitens	Lustrous Bog-moss	1	2013
_ · · ·	Privet Hawk-moth	1	2013
Sphinx ligustri		1	-
Spilonota ocellana	Bud Moth		1998
Spilosoma lubricipeda	White Ermine	4	2014
Spilosoma luteum	Buff Ermine	4	2014
Stachys sylvatica	Hedge Woundwort	5	2009
Stellaria alsine	Bog Stitchwort	2	1986
Stellaria holostea	Greater Stitchwort	3	1991
Stellaria media	Common Chickweed	2	1986
Stenichnus collaris		3	2001
Stenotus binotatus		1	2008
Stenus (Hemistenus) impressus		3	2001
Stenus (Hypostenus) fulvicornis		3	2001
Stenus (Metatesnus) flavipes		3	2001
Stenus (Metatesnus) picipes		3	2001
Stenus (Stenus) bimaculatus		3	2001
Stenus (Tesnus) brunnipes		3	2001
Stereum gausapatum	Bleeding Oak Crust	1	1996
Stereum hirsutum	Hairy Curtain Crust	9	2009
Stereum rugosum	Bleeding Broadleaf Crust	1	1988
Stigmella alnetella	Silver-barred Alder Pigmy	1	2000
Stigmella aurella	Golden Pigmy	3	2000
Stigmella crataegella	Common Thorn Pigmy	3	2000
Stigmella floslactella	Coarse Hazel Pigmy	3	2000
Stigmella microtheriella	Nut-tree Pigmy	3	2000
Stigmella oxyacanthella	Common Fruit-tree Pigmy	1	2000
Stigmella perpygmaeella	Least Thorn Pigmy	2	2000
Stigmella roborella	Common Oak Pigmy	3	2000
Stigmella salicis	Sallow Pigmy	3	2000
Stigmella splendidissimella	Glossy Bramble Pigmy	1	2000
Streptopelia decaocto	Eurasian Collared Dove	5	2008
Stygnocoris sabulosus		1	2001
Syntrichia intermedia	Intermediate Screw-moss	2	2013
Syntrichia ruralis	Great Hairy Screw-moss	2	2013
Tachinus marginellus		3	2001
Tachyporus atriceps		3	2001
Tachyporus chrysomelinus		3	2001
Talpa europaea	European Mole	1	2009
Taraxacum		1	2001
Taraxacum aggregate		3	2009
Taraxacum officinale agg.		2	1988
Tellima grandiflora	Fringecups	3	2014
Teucrium scorodonia	Wood Sage	4	1998

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Thalpophila matura	Straw Underwing	1	1998
Thiasophila angulata	, and the second	3	1996
Tholera decimalis	Feathered Gothic	1	1998
Thuidium tamariscinum	Common Tamarisk-moss	2	2013
Thyatira batis	Peach Blossom	5	2014
Thymelicus sylvestris	Small Skipper	2	1996
Timandra comae	Blood-Vein	4	2014
Torilis japonica	Upright Hedge-parsley	1	1986
Tortula muralis	Wall Screw-moss	3	2013
Tortula truncata	Common Pottia	1	2013
Trachycera advenella	Grey Knot-horn	1	1998
Trametes hirsuta	Hairy Bracket	1	1998
Trametes versicolor	Turkeytail	7	2009
Tremella foliacea	Leafy Brain	1	1997
Tremella mesenterica	Yellow Brain	1	1994
Trifolium dubium	Lesser Trefoil	1	1986
Trifolium pratense	Red Clover	4	1988
•	White Clover	4	1998
Tripleuragersmum inaderum		1	2013
Tripleurospermum inodorum Trochulus (Trochulus) striolatus	Scentless Mayweed	1	2003
	Minter Mron		
Troglodytes troglodytes	Winter Wren	10	2013
Tyria jacobaeae	Cinnabar	2	2014
Udea ferrugalis	Rusty Dot	3	1998
Udea olivalis	Olive Pearl	5	2014
Udea prunalis	Dusky Pearl	1	1998
Ulex europaeus	Gorse	6	2013
Ulmus procera	English Elm	2	1986
Ulota bruchii	Bruch's Pincushion	2	2013
Ulota crispa		1	2013
Ulota phyllantha	Frizzled Pincushion	3	2013
Umbilicus rupestris	Navelwort	1	1986
Urtica dioica	Common Nettle	4	2009
Vanessa atalanta	Red Admiral	4	2007
Vanessa cardui	Painted Lady	3	1996
Veronica arvensis	Wall Speedwell	1	1986
Veronica beccabunga	Brooklime	2	1986
Veronica chamaedrys	Germander Speedwell	1	1986
Veronica persica	Common Field-speedwell	1	2013
Veronica serpyllifolia	Thyme-leaved Speedwell	1	1986
Vespula (Paravespula) vulgaris		3	2014
Vicia cracca	Tufted Vetch	2	1986
Viola palustris subsp. palustris		1	1986
Viola riviniana	Common Dog-violet	2	1991
Vulpes vulpes	Red Fox	2	2007
Watsonalla binaria	Oak Hook-tip	1	1998
Xanthia icteritia	Sallow	1	1998
Xanthia togata	Pink-barred Sallow	1	1998
Xantholinus (Xantholinus) linearis		3	2001
Xanthorhoe designata	Flame Carpet	2	2014
Xanthorhoe ferrugata	Dark-barred Twin-spot Carpet	1	1998
Xanthorhoe fluctuata	Garden Carpet	2	2014
Xanthorhoe fluctuata subsp. fluctuata	Garden Carpet	1	1998
Xanthorhoe montanata	Silver-ground Carpet	1	2014
Xestia c-nigrum	Setaceous Hebrew Character	5	2014
Xestia ditrapezium	Triple-spotted Clay	3	2014

Three Crosses Biodiversity Audit

Scientific Name	Common Name	Number of Records	Last Date Recorded
Xestia triangulum	Double-square Spot	5	2014
Xestia xanthographa	Square-spot Rustic	3	2014
Xylaria hypoxylon	Candlesnuff Fungus	9	2002
Xylaria polymorpha	Dead Man's Fingers	3	2007
Xylocampa areola	Early Grey	1	1996
Zanclognatha tarsipennalis	Fan-foot	2	2014
Zygaena trifolii	Five-spot Burnet	1	1996
Zygodon viridissimus var. viridissimus	Green Yoke-moss	1	2013