



***CARAVAN CLUB ECOLOGICAL
SITE APPRAISAL***

West Ayton Caravan Club Site
Cockrah Road
West Ayton
Scarborough
North Yorkshire



General Information

Site Name and County: West Ayton, North Yorkshire

Grid Reference: SE 986 853

Area: 8.5 hectares

Survey Date: 05/08/09

Recorder: James Godbeer, JUST ECOLOGY

Weather Conditions: Overcast with heavy showers, light breeze, 17.5 °C

Site Description

The West Ayton Caravan Club site is situated on the north edge of West Ayton. The site was formerly a quarry until approximately 25 years ago when it became the present caravan site. The site comprises 164 caravan pitches, both hard standing and grass, with narrow strips of woodland surrounding the site and providing screens between the different areas. The eastern third of the site is occupied by a recreation field with a games pavilion, dog walking area, and a caravan storage compound.

Context

With the exception of West Ayton to the south, the local area surrounding the site consists mostly of arable farmland and pasture. There are some fingers of woodland present on the east border of the site, and 500m to the west. The woodland to the east is included within the Raincliffe and Forge Valley Woods SSSI and is also designated as a National Nature Reserve. The caravan park itself falls within the boundary of the North Yorkshire Moors, which is designated as an Important Bird Area.



Habitat Information

Broad Habitats Present: Amenity grassland, improved grassland, hedgerow, broad-leaved plantation, tall ruderal

National BAP Priority Habitats Present: Hedgerow

Caravan Club BAP Features: Broad-leaved woodland

Subsidiary Habitats Present: Species-poor hedgerows.

Grassland communities:

The grassland areas within the caravan park are managed amenity grassland. They are dominated by Perennial Rye-grass *Lolium perenne* with frequent White Clover *Trifolium repens* and occasional Dandelion *Taraxacum officinale* agg., Daisy *Bellis perennis* and Creeping Buttercup *Ranunculus repens*. In some areas adjacent to the woodland other species have begun to encroach; these include Hogweed *Heracleum sphondylium*, Ivy *Hedera helix*, Tufted Hair-grass *Deschampsia cespitosa* subsp. *cespitosa*, Bramble *Rubus fruticosus* agg., Common Nettle *Urtica dioica* and Common Ragwort *Senecio jacobea*.

The recreation field and dog walking area are less intensively managed than the caravan pitches. Whilst similar in composition, a number of additional species were recorded such as Yorkshire Fog *Holcus lanatus*, Red Clover *Trifolium pratense*, Selfheal *Prunella vulgaris* and Common Chickweed *Stellaria media*.

The most interesting area of grassland on the site is located along the track leading to the caravan storage area. Although small, it showed a greater diversity of species compared to the other areas. It was dominated by Yorkshire Fog with abundant Creeping Bent *Agrostis stolonifera*, frequent Dandelion, Sorrel *Rumex acetosa* subsp. *acetosa*, Ground Ivy, Hogweed and Broad-leaved Dock *Rumex obtusifolius*.

Hedgerows:

The stretches of hedgerow on site are confined mainly to the area around the site office. The majority of the woody species on site are in the woodland and those present in the hedgerows are limited. There is a short section of Leyland Cypress X *Cuprocyparis leylandii* hedge providing a screen between the parking area and office building, and there is another short section of hedge on the edge of a woodland area comprising closely cropped Dogwood *Cornus sanguinea*, Hornbeam *Carpinus betulus* and Hazel *Corylus avellana*. There was little understory vegetation, the hedge grading straight down into amenity grassland.

Broad-leaved plantation:

Broad-leaved plantation is present in abundance both surrounding and crossing the site. The warden indicated that the majority of the woodland had been planted approximately 25 years ago when the caravan park was formed. This is apparent in the woodland's composition, which lacks veteran trees and a developed ground flora layer. The diversity of the trees planted is particularly high, with a number different species growing in close proximity, again indicating the woodland has been artificially created. No one species is dominant but Alder *Alnus glutinosa* and Silver Birch *Betula pendula* were noted as being particularly abundant with high numbers of Pedunculate Oak *Quercus robur* and Ash *Fraxinus excelsior*. Other species noted both within the canopy and forming the understory were Hazel, Elder *Sambucus nigra*, Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa* Crack-willow *Salix fragilis*, Sycamore *Acer pseudoplatanus* and Dogwood. The ground flora was sparse; species recorded included Hogweed, Common Nettle, Common Ragwort, Bramble, Tufted Hair-grass and Ivy.

A few small patches of planted Rowan *Sorbus aucuparia* trees were also present across the site.

Tall ruderal:

Three separate areas of tall ruderal exist on the site, and all three are on soil bunds that were created when the caravan park was formed. They vary slightly in floral composition but all have a greater number of species than the surrounding grassland. Species such as Creeping Thistle *Cirsium arvense*, Hogweed and Common Nettle tend to dominate but a number of other species were recorded, such as Hedge Bindweed *Calystegia sepium*, Elder, Yorkshire Fog, Timothy *Phleum pratense*, Ribwort Plantain *Plantago lanceolata*, Creeping Bent, Cock's-foot *Dactylis glomerata*, Common Ragwort and Creeping Buttercup.



Figure 1: View of one of the three unmanaged soil bunds



Habitat Evaluation

The amenity grassland and improved grassland are limited in botanical diversity, being dominated by vigorous grass species. Many of the commonest plant species found here are typical of grasslands that are intensively managed, in this case by mowing. Species such as White Clover and Daisy are also indicative of these types of swards. Grassland which has been closely cropped is of limited value to most animal species, with the exception of species such as Badger and Mole, which benefit from the increased earth worm content of the soil. No evidence of these species was observed.

The hedgerows on the site have less than five woody species per 30 m section. However, the lack of hedgerows, particularly species-rich hedgerows, is compensated by the broad-leaf plantation, which has a rich variety of native woody species and in many places is dense and only marginally too wide to be classified as a hedge.

The areas of tall ruderal have little value in botanical terms and are isolated within areas of amenity grassland. However, they are still likely to be of some value to animal species, particularly invertebrates.



Species Information

National BAP Species: Song Thrush *Turdus philomelos*, Yellowhammer *Emberiza citronella*.

Caravan Club BAP Species: Song Thrush *Turdus philomelos*, Swallow *Hirundo rustica*, House Martin *Delichon urbica*.

National BAP Species Potential: Various bat and bird species, some potential for reptiles (e.g. Slow-worm *Anguis fragilis* and Viviparous Lizard *Zootoca vivipara*).

Caravan Club BAP Species Potential: Bullfinch *Pyrrhula pyrrhula*, Swift *Apus apus*, Kestrel *Falco tinnunculus*, Slow-worm *Anguis fragilis*.

Other Noteworthy Species: None observed.

Avifauna:

The site had numerous individual birds of several species. They are likely to be feeding on the supplies of invertebrates, fruit, seeds, and buds present, as well as bird feeders. Species either seen or heard on site during the survey were Blackbird *Turdus merula*, Robin *Erithacus rubecula*, Blue Tit *Cyanistes caeruleus*, Wren *Troglodytes troglodytes*, Swallow *Hirundo rustica*, House Martin *Delichon urbica*, Great Tit *Parus major*, Yellowhammer *Emberiza citronella*, Song Thrush *Turdus philomelos*, Woodpigeon *Columba palumbus*.

A single bird box was present on the wall of the assistant warden's building, which the owner informed had been used by nesting Blue Tits. A number of Swallow nests were identified within a storage shed, both toilet blocks and the games pavilion. Some of the nests were still being used, more than likely for second broods given the time year.

The habitats present may well be used by other bird species not encountered on the day of the survey.

Invertebrates:

The heavy rain was not ideal for surveying invertebrates, but the relatively low botanical diversity comprising common plant species makes the presence of rare species and high invertebrate diversity unlikely. Despite the relative youth of the woodland on site, it is likely to provide the best opportunities for invertebrates especially where deadwood has been allowed to accumulate. The three, tall vegetation-covered soil banks also provide additional habitat for invertebrates.

Herpetofauna:

No evidence of reptiles or amphibians was observed on the day of the survey. Lightly vegetated banks behind the caravan storage area and running along the northeast edge of the recreation field may support reptiles as there is a good mix of open basking areas and cover. Although these areas are off site there is potential for reptiles to move onto the immediately adjacent areas of the site that are not as intensively managed such as that adjacent to the caravan storage area.

No ponds are present on site or apparent in the surrounding landscape, limiting its value for amphibians. However, the woodland has the potential to support amphibians in the terrestrial phase of their lifecycle.

Mammals:

The Warden of the site confirmed its use by bats although the species are unknown. Bats may be roosting within the permanent buildings on site, such as the office and toilet blocks, but the roosting potential of the woodland is regarded as low as there were no trees with visible cracks or splits that may be used by roosting bats. No evidence of any other mammals, other than a few rabbit droppings, was observed on the day of the survey. This does not mean that mammals are not using the site, but given the habitats present they are likely to be restricted to common small species and possibly Badgers and/or Foxes, although no evidence of their present was noted. The woodland is unlikely to support rarer species, such as Dormice, due to its young age and isolation within the surrounding landscape.

Fungi:

No fungi were seen. The trees on site are not mature enough to have developed any interesting fungi, although the accumulated deadwood at ground level may be host to species of fungi that fruit at other times of the year.



Species Evaluation

The site has limited botanical value, partly due to the young age of the woodland. However, despite the lack of plant diversity, the site still provides opportunities for various animals, particularly birds a number of which have conservation designations, either for their rarity, declining populations or distribution.

The most notable of the bird species are Song Thrush and Yellowhammer, which are both UK BAP species. In addition, Song Thrush, House Martin and Swallow are Caravan Club BAP species.

The woodland and grassland areas provide invertebrates, fruit and seeds for smaller birds. The availability of these invertebrates could be greatly increased by reducing the management of some areas of grassland. This would be particularly beneficial to the Swallow and House Martin, both of which are Caravan Club BAP species.

It is likely that the site also provides habitat for invertebrates and small mammals. The warden confirmed the presence of bats on the site. None of the trees within woodland look old enough to support roosting sites (no crevices, holes or cracks were observed), but the site should provide good foraging areas particularly along the woodland edge, which provides cover and invertebrate prey. A nocturnal survey with bat detectors would be necessary to identify species. Many bat species are listed on the UK BAP, and all are European protected species.

Management Recommendations

It should be noted that the present survey was conducted on one day in August and therefore cannot be regarded as a complete evaluation of the site. Further species are likely to be recorded on the site at different times of year, and through further survey and/or casual observations.

Recommendations are made below for retaining, and enhancing as much ecological value as possible from the site's use as a caravan site. These are intended as suggestions; and due to the practicalities of operating a caravan site, not all of these may be possible.

- The woodland on site represents the most valuable habitat resource and the current management is minimal. This policy should be continued particularly with regard to the deadwood and leaf litter, which is better to be left in situ rather than 'tidied up'. Consideration should be given to the removal of non-native species such as Sycamore, the numbers of which are minimal, in order to promote the growth of native species. Selective thinning could also be used to remove weaker trees and allow larger mature trees to develop, avoiding the tall leggy appearance of trees in this type of woodland. Mature trees are more likely to develop cracks and rot holes that can be used by a variety of animals, as well as being home to invertebrate species and fungi.
- Areas of grassland around the caravan pitches should not be overly managed or 'tidied up'. Borders could be left unmown, particularly adjacent to the woodland, to allow the diversity of plants to increase and promote the invertebrate populations on site. Consideration should be given to leaving a similar margin along the southeast and northeast edge of the recreation field and/or the dog walking area.
- The grass will need to be cut occasionally to prevent succession to scrub. A cut would be best timed in late July onwards, when the breeding seasons of any ground nesting birds and mammals have been completed. Over time, this will also benefit plant species, allowing them to set seed first, and hopefully a higher botanical diversity to develop.
- The Caravan Club CBAP states that herbicide and pesticide use on sites should be eliminated. If pesticides are used, elimination would boost invertebrate populations, which in turn would benefit the species which feed on them.
- Wardens should take care not to disturb active nests during any site management activities. All nesting wild birds are legally protected against disturbance under The Wildlife and Countryside Act 1981 (as amended). Any woodland or hedgerow management must be done outside the bird breeding season, which typically runs from March – August.

Further Suggestions to Enhance the Wildlife Value of the Site

- Consideration should be given to the seeding of any new areas of unmanaged grassland and the woodland using appropriate wildflower mixes. Where possible these seeds should be locally sourced using the *Flora Locale* code of practice, to support the genetic integrity of local wild plant populations.
- The site is somewhat isolated by surrounding farmland, except to the east where the site meets the Raincliffe and Forge Valley Woods SSSI. The woodland on site is not well connected to the SSSI but this could be rectified by the planting of a hedgerow along the boundary behind the caravan storage area. This would provide a corridor for the dispersal of wildlife from the SSSI onto the site. The hedging should use native species such as Hawthorn, Hazel, Spindle, Dogwood, Dog Rose and Privet. They should be broad, to at least 3m wide, with an average height of 3m. All hedging should be maintained to create tall, bushy structures with a broad base. Early management of the hedge should involve pruning to encourage bushy side growth. This may be achieved by lightly trimming the sides of the hedge annually until the required size and depth is reached, followed by cutting the hedge every 5 years on rotation, ideally at the end of winter avoiding periods of hard frost and after the berries have been eaten by birds and small mammals. This will create a variety of heights and side growth to encourage a diversity of flowers, fruits and berries and consequently greater feeding, nesting and sheltering opportunities for wildlife.
- Bird feeding stations are already present on site near the office but additional feeders could be added at one or two places across the site. These would support small birds, especially during the winter when the other sources of invertebrates, fruit and seeds already present on site become limited.
- Three raised feeders and one ground feeder could be placed at each feeding station. The raised feeders could be filled with husked sunflower seed and general purpose food plus fat balls. The ground feeder could catch spillages from above, and provide various kitchen scraps, bread and apples.
- In general, ground feeders and other food put out at ground level should be placed a safe distance away from hedgerows and bushes, so that birds are not tempted into striking distance of cats. However, a few apples can be placed near cover for Song Thrush, which prefer to feed in quiet corners.
- The feed provided at aerial and ground feeders should be tailored to suit the most notable bird species present (although in doing so they will also benefit many other birds). The Yellowhammer (UK BAP) is a ground feeder which prefers to eat grain and sunflower hearts, although it will also occasionally use bird tables. The Song Thrush (UK and Caravan Club BAP) likes to eat fat, sultanas, apples and various kitchen scraps at ground level.

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- A single bird box is present on the assistant warden's building and has been used by Blue Tit. Given the lack of mature trees with rot holes within the woodland on site, the provision of additional bird boxes will provide much needed additional nesting opportunities.
 - The site offers good foraging habitat for bats and the some of the buildings on site may be used for roosting, although there is currently no evidence of this. However, the woodland lacks suitable old trees meaning the number of bats on site is likely to be restricted by the lack of roosting opportunities. Bat boxes could therefore be erected to provide roosting sites. The choice of bat box can depend on the species present, but the Schwegler 2F bat box is a good general design that will attract many species. If bat boxes are erected, it is best to position three around a pole, trunk or wall. Bats are very particular about the internal conditions of bat boxes, so providing several bat boxes with different aspects creates differences in temperature, humidity etc. thereby increasing the chance of colonisation.
 - Ideally, only native plant species should be planted on site. Native tree and shrub species are most beneficial to invertebrates, and many also produce seeds, nuts and berries that are food for native mammals and birds. Planting of non-native plant species should be limited to those that are not invasive, and should prioritise those that provide a good source of nectar for invertebrates *e.g.* Butterfly-bush, Jasmine.

Species list

A current list of species confirmed as present on site is provided below. Please note this may be expanded by further survey.

Birds:

<u>Latin name</u>	<u>English name</u>
<i>Columba palumbus</i>	Woodpigeon
<i>Delichon urbica</i>	House Martin
<i>Emberiza citrinella</i>	Yellowhammer
<i>Erithacus rubecula</i>	Robin
<i>Hirundo rustica</i>	Swallow
<i>Parus caerulea</i>	Blue Tit
<i>Parus major</i>	Great Tit
<i>Troglodytes troglodytes</i>	Wren
<i>Turdus merula</i>	Blackbird
<i>Turdus philomelos</i>	Song Thrush

Plants:

<u>Latin</u>	<u>English</u>
<i>Acer pseudoplatanus</i>	Sycamore
<i>Agrostis stolonifera</i>	Creeping Bent
<i>Alnus glutinosa</i>	Alder
<i>Bellis perennis</i>	Daisy
<i>Betula pendula</i>	Silver Birch
<i>Calystegia sepium</i>	Hedge Bindweed
<i>Carpinus betulus</i>	Hornbeam
<i>Cirsium arvense</i>	Creeping Thistle
<i>Cornus sanguinea</i>	Dogwood
<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn
<i>Dactylis glomerata</i>	Cock's-foot
<i>Deschampsia cespitosa</i> <i>subsp. cespitosa</i>	Tufted Hair-grass
<i>Fraxinus excelsior</i>	Ash
<i>Glechoma hederacea</i>	Ground-ivy
<i>Hedera helix</i>	Ivy
<i>Heracleum sphondylium</i>	Hogweed
<i>Holcus lanatus</i>	Yorkshire Fog
<i>Lolium perenne</i>	Perennial Rye-grass
<i>Phleum pratense</i>	Timothy
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Prunella vulgaris</i>	Selfheal
<i>Prunus spinosa</i>	Blackthorn
<i>Quercus robur</i>	Pedunculate Oak
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Rubus fruticosus agg.</i>	Bramble
<i>Rumex acetosa subsp.</i>	Sorrel

<u>Latin</u>	<u>English</u>
<i>acetosa</i>	
<i>Rumex obtusifolius</i>	Broad-leaved Dock
<i>Salix fragilis</i>	Crack-willow
<i>Sambucus nigra</i>	Elder
<i>Senecio jacobea</i>	Common Ragwort
<i>Sorbus aucuparia</i>	Rowan
<i>Stellaria media</i>	Common Chickweed
<i>Taraxacum officinale</i> agg.	Dandelion
<i>Trifolium pratense</i>	Red Clover
<i>Trifolium repens</i>	White Clover
<i>Urtica dioica</i>	Common Nettle
<i>X Cuprocyparis leylandii</i>	Leyland Cypress