



***CARAVAN CLUB ECOLOGICAL
SITE APPRAISAL***

Lower Clough Foot
Caravan Club Site
Cragg Vale
Hebden Bridge
HX7 5RU



General Information

Site Name and County: Lower Clough Foot Caravan Club Site, West Yorkshire

Grid Reference: SE 007 248

Area: 1.01 hectares

Date: 07/06/07

Recorder: Mike Lush, JUST ECOLOGY

Weather Conditions: Cloudy, but warm

Site Description

Lower Clough Foot is a very small site, with only 45 pitches. It is wedged into a corner where the B6138 (the eastern boundary) and Cragg Brook (the western and northern boundary) meet, with farmland immediately to the south. The site is situated on top of a disused refuse tip, as evidenced from the old bottles and other debris that could be found on the steep slope leading down to the river. It is well manicured, consisting of short-mown lawns and well maintained flower beds, with hard standing pitches linked by tarmac and gravel roads. A strip of woodland ran along the river.

Context

The site lies in the Cragg Brook valley in the Southern Pennines. The Southern Pennines are an upland area of heather moorland, blanket bog and acid grassland that has been affected by pollution from past industry and current overgrazing. The area supports important populations of birds such as grouse Tetraonidae, Curlew *Numenius arquata*, Merlin *Falco columbarius*, Golden Plover *Pluvialis apricaria*, Dunlin *Calidris alpina* and Short-eared Owl *Asio flammeus*, as well as other wildfowl and waders. Where the rivers and streams form steep sided valleys woodlands of Oak *Quercus* sp., Ash *Fraxinus excelsior*, Birch *Betula* sp. and Rowan *Sorbus aucuparia* occur. One kilometre to the west of the site is Broadhead Clough SSSI, which consists of good quality heathland, bog and woodland. Plantation Beech *Fagus sylvatica* and lowland mixed deciduous woodlands occur nearby.



Habitat Information

Broad Habitats Present: Broadleaved woodland, improved grassland

National BAP Priority Habitats Present: None

Caravan Club cBAP features: Broadleaved woodland, scrub, rivers and streams

Subsidiary Habitats Present: Flowerbeds

Grassland Communities:

The grassland at Lower Clough Foot was composed entirely of short mown improved grassland. The sward consisted of few species, mainly Perennial Rye-grass *Lolium perenne*, White Clover *Trifolium repens*, Annual Meadow-grass *Poa annua* and Creeping Buttercup *Ranunculus repens*, with some Dandelion *Taraxacum officinale*, Greater Plantain *Plantago major*, Daisy *Bellis perennis*, Yorkshire Fog *Holcus lanatus* and Cock's-foot *Dactylis glomerata*.

Woodland:

A strip of semi-natural woodland occurred on the steep slope along the river, with further plantation woodland in the northern corner of the site near the entrance.

The semi natural woodland had a canopy of Ash *Fraxinus excelsior*, Sycamore *Acer pseudoplatanus*, Sessile Oak *Quercus petraea* and Alder *Alnus glutinosa*, with an understorey of Goat Willow *Salix caprea*, Elder *Sambucus nigra*, Holly *Ilex aquifolium* and Wych Elm *Ulmus glabra*. The slope was very steep and, because of soil disturbance, the top was most bare ground. The lower slopes and river edge were well vegetated, but were too dangerous to access safely. As a result, the ground flora

species recorded were those that grew near the top of the slope or could be identified from a distance. These included Cleavers *Galium aparine*, Broad-leaved Willowherb *Epilobium montanum*, Rough Meadow-grass *Poa trivialis*, Bramble *Rubus fruticosus*, Male-fern *Dryopteris filix-mas*, Ground Elder *Aegopodium podagraria*, Comfrey *Symphytum officinale*, Hogweed *Heracleum sphondylium*, Wood Avens *Geum urbanum*, Fen Nettle *Urtica galeopsifolia* and Bluebell *Hyacinthoides non-scripta*. The two invasive riverside aliens Himalayan Balsam *Impatiens glandulifera* and Giant Hogweed *Heracleum sphondylium* were also present, the former in some abundance. Another alien species was also present here: American Willowherb *Epilobium ciliatum*, though this species has established itself within the UK without causing detriment to the native flora.

The plantation woodland in the northern corner consisted of a range of broadleaved trees. These included Sycamore, Red Oak *Quercus rubra*, Rowan *Sorbus aucuparia*, a whitebeam *Sorbus* sp., Silver Birch *Betula pendula*, Ash, Pedunculate Oak *Quercus robur*, Beech and Hazel *Corylus avellana*. The ground flora was mostly long grass, mainly Rough Meadow-grass and Yorkshire Fog, with forbs including Hogweed, Broad-leaved Willowherb, Fen Nettle, Dandelion, Bramble, Common Sorrel *Rumex acetosa* and Himalayan Balsam.

Scrub:

Along the eastern edge, beside the road, was a slope with planted scrub and trees. Species here include Wayfaring Tree *Viburnum lanata*, Grey Willow *Salix cinerea*, Sycamore, a rose *Rosa* sp., Hornbeam *Carpinus betulus* and a poplar *Populus* sp. These cast a dense shade, so the bank underneath was generally unvegetated.

Other planted scrub species occurred in flowerbeds and hedges across the site, and are discussed below.

Other:

A hedge and fence formed the southern boundary. This was species poor and Leyland Cypress X *Cupressocyparis leylandii* dominated, but also included Hawthorn *Crataegus monogyna*, Wayfaring Tree, and Elder.

Another hedge occurred along the road leading into the site, near to the entrance, but this consisted of just one ornamental species.

Trees had been planted throughout the site. There was a clump in the centre of the eastern half of the site that comprised of Silver Birch, Downy Birch *Betula pendula* and Hornbeam. More Hornbeam and Silver Birch, with Goat Willow, Italian Alder *Alnus cordata*, Apple *Malus pumila* and Plum *Prunus domestica* had been planted around the site.

Flowerbeds occurred throughout the site, though less frequently in the western half. These had been planted with a range of cultivated species, such as Blackcurrant *Ribes nigrum*, London Pride *Saxifraga x urbium*, Balm *Melissa officinalis*, Garden Polyanthus *Primula x polyantha*, Foxglove *Digitalis purpurea*, Goldenrod *Solidago virgaurea*, Cotoneaster *Cotoneaster* sp., Wood Forget-me-not *Myosotis sylvaticus*, Cherry Laurel *Prunus laurocerasus*, Shrubby Cinquefoil *Potentilla fruticosa*, Gladioli *Gladiolus* sp., a cultivated broom *Cytisus* sp., a rock-rose *Helianthemum* sp.,

Honeysuckle *Lonicera periclymenum*, Gooseberry *Ribes uva-crispa*, a cultivated gorse *Ulex* sp. and Redcurrant *Ribes rubrum*.



Habitat Evaluation

The most important habitat on site was probably the river, though since this could not be accessed safely the quality could not be assessed. Otherwise, the most important habitat was the strip of semi-natural woodland along the river. Despite the highly modified nature of the site it appeared as though this strip of woodland had persisted whilst the area was being used as landfill. The main indication of this was the Sessile Oak, which is an upland species not generally planted. However, this woodland was under threat from invasive non-native plants, Himalayan Balsam in particular, which may come to dominate the ground flora completely and hinder natural regeneration of the trees.

The plantation woodland was currently rather too young to be too valuable to wildlife, but may become so in the future. However, some of the species present, such as Sycamore, Beech, Whitebeam and Red Oak, are not native to the area and add less to biodiversity than native species would. The grassy ground flora may have been beneficial to small mammals, as this was the only area of rough grass on the site and was fairly undisturbed.

Some of the denser areas of scrub may have benefited common garden birds, which could nest, roost and forage in these areas.

Otherwise the site was of fairly low biodiversity value, being too 'tidy'. The improved grassland offered little to biodiversity, as it was too species poor and too well maintained. Most of the planted trees were too young to be providing the sort of deadwood habitat that older trees provide, though they did support a wide range of epiphytic invertebrate species. Some of the species in the flowerbeds and shrub species were providing a useful nectar source.



Species Information

National BAP Species Seen: None

Caravan Club cBAP species: None

BAP Species Potential: The site may support BAP species often found in gardens, such as Song Thrush *Turdus philomelos*, as well as bats, including the Pipistrelle *Pipistrellus pipistrellus*

Other Noteworthy Species: Fen Nettle

Flora:

Fen Nettle was the most interesting native plant found. The site also contained a range of non-native species, many of which had been planted, but some of which thrive outside of gardens in the UK, including Sycamore, American Willowherb, Wood Forget-me-not, and the pest species Himalayan Balsam and Giant Hogweed. Cultivated species accounted for a large proportion of the plants on the site, including

common garden plants such as cotoneaster, Balm, Shrubby Cinquefoil, Garden Polyanthus, London Pride, Goldenrod and Leyland Cypress. Fruit trees and bushes were frequent, including Apple, Plum, Redcurrant, Blackcurrant and Gooseberry.

Avifauna:

Very few bird species were recorded on the site and those that were recorded were relatively common. These included Carrion Crow *Corvus corone*, Mallard *Anas platyrhynchos*, Chiffchaff *Phylloscopus collybita*, Chaffinch *Fringilla coelebs* and Greenfinch *Carduelis chloris*. The site may support other garden birds, including the Song Thrush *Turdus philomelos*.

Invertebrates:

One of the most noticeable things about Lower Clough Foot was the abundance of epiphytic invertebrates on many of the trees, especially the planted ones. This mainly comprised insects from the order Hemiptera, including aphids and scale insects Stenorrhyncha, hoppers Auchenorrhyncha and true bugs Heteroptera. A leaf beetle Chrysomelidae was also noted.

Other invertebrates on site included the common garden red ant *Myrmica rubra*, the ‘longhorn’ moth *Nemophora degeerella* and bumblebees *Bombus* sp.

Herptofauna:

No species of reptile or amphibian was recorded on the site at the time of survey. It was possible that reptiles occurred in the surrounding area, but given the lack of suitable habitat on site and the near isolated position (with the road and river forming all but the southern boundary) it was unlikely to support a significant reptile population.

The river may have had still pools and may have supported amphibians, such as Common Frog *Rana temporaria* and newts *Triturus* spp. The surrounding woodland also provided suitable foraging habitat and potential hibernation sites.

Mammals:

No evidence of mammals was recorded on site. Because of the near isolated location of the site it is unlikely that many of the larger species occur regularly on the site, though doubtless Grey Squirrel *Sciurus carolinensis* occurs in the trees and woodland.

Bats, especially Pipistrelle Bats *Pipistrellus pipistrellus*, are likely to use the site, as the woodland areas and river provide excellent foraging and potential roosting habitat. See Appendix 1 for further information on these species.



Species Evaluation

Many of the introduced plant species on the site are not problematic species, being non-invasive, and many will add to the biodiversity value of the site, by providing a nectar source, for example. However, two of the species are likely to become detrimental to the flora and thus fauna of the site: Himalayan Balsam and Giant Hogweed. These species are highly invasive and may come to dominate large areas, to

the exclusion of native plants. These should be controlled to prevent them having this effect.

Fen Nettle is a native plant with an interesting history. It has been widely regarded as a separate species in Europe, but had not started to be accepted as valid in the UK until quite recently. It is unusual for a nettle in that it does not possess, or does not have many stinging hairs (though the hairs that it does have can sometimes get caught in the skin and cause irritation hours later). It is still not widely recorded, but it is well known from sites in Cambridgeshire and Worcestershire, and stingless nettles have been reported from Scotland. It is generally restricted to wet habitats, the edges of watercourses and the interiors of woodlands, rather than being found as a weed as Common Nettle *Urtica dioica* is.

Though the garden birds recorded were all common, the site provides potential for the Song Thrush, a national BAP species.

No rare or uncommon invertebrate species were recorded, but the abundance of epiphytic species on the site is interesting. A large number of different hemipteran species were seen, though these could not be identified. These species will provide an important resource for predatory species, including other invertebrates and especially birds.

The river may prove to be important for supporting a range of invertebrate and vertebrate species. This probably includes amphibians and fish, and might include crayfish.

Bat species likely to be present in the area include the Pipistrelle. This is a UK BAP species, owing to significant declines in abundance (see Appendix 1). This and other species may be roosting and foraging in the woodland and over the river, feeding on invertebrates supported by the site.

Management Recommendations

- Manage the grassland without fertiliser or pesticide inputs and either gradually reduce the regularity of the mowing regime or increase the cut-height to allow some plants to flower. The cuttings should be removed to prevent the build up of nutrients. This should allow an increase in plant diversity that will benefit many other species.
- Where possible, create and maintain wide margins of longer sward at the currently mowed edges to a width of about one metre. This will promote a greater diversity of habitat structure and enable flowering hedgerow plants to flourish, providing a vital nectar resource for bees, butterflies and other insects.
- The woodland trees along the river should be left unmanaged, especially since the slope is too steep for any management to take place. The other woodland area should be monitored as the trees mature, as thinning may be required. In

the event that thinning takes place the non native tree species present, Sycamore, Red Oak, whitebeam and Beech, should be preferentially removed.

- Leave at least some fallen and standing deadwood *in situ*, this provides habitat for dead wood invertebrates, which, in turn provides a valuable food resource for insectivorous woodland birds such as woodpeckers and warblers. Outside of the breeding season in spring, fallen dead wood also provides shelter for amphibians such as Great-crested Newts *Triturus cristatus* and Common Toad *Bufo bufo*.
- Other standard native trees should not be removed and should be managed only to ensure safety, to benefit dead wood species in the future.
- Herbicide use on the site, especially around the base of trees, should be avoided, as all herbicides reduce the ability non-target animal species, including invertebrates and amphibians, to respire and can therefore kill them.
- The Leyland Cypress should be removed and replaced with native species.

Further Suggestions to Enhance the Wildlife Value of the Site

- New planting on site should use native species, ideally of a local provenance. Generally the commonest tree and shrub species are most beneficial to invertebrates and many produce autumn nuts and berries that are food for mammals and birds. Oak, Ash, Birch, Rowan, Blackthorn, Field Maple, Hawthorn and Hazel are suitable species. In the case of any new hedgerow planting a mix of the above should be used with occasional standards and climbers such as wild roses, Hedges should be trimmed every other year at most to allow greater fruiting of shrubs for animals and invertebrates.
- Continue to use nectar-rich flowers in the flowerbeds to provide a useful source of food for flying invertebrates.
- Provide bird and bat boxes to encourage woodland birds and bats to nest and roost on the site. The bird nest boxes can be both open-fronted and conventional single hole (32mm diam.) could be added to selective trees in the secluded areas of the site. Nestboxes need cleaning out each autumn.
- Bird feeding stations could be added at three or four places throughout the site. Two or three feeders at each station could hold a variety of food. One with niger seed; one with husked sunflower seed and a third with general purpose food plus fat balls. Large plastic dishes are available to place beneath feeders to catch most of the fallen debris, which attract birds unable to use hanging feeders, these can be cleaned periodically.
- Consider positioning bug boxes in sheltered locations around the site. Boxes containing short lengths of bamboo or blocks of wood with holes of varying sizes can be used by insects such as solitary bees and wasps, which use the

bamboo tubes and holes for nesting. These can be fixed onto trees and other structures in sheltered locations around the site.

Further Survey or Information Requirements

- Hold a wildlife records book and/or board for casual observations and sightings. Each record should include the species, date, location, habitat and who recorded it. This will aid monitoring of wildlife on site, promote the role of the Caravan Club members in building biodiversity on site and enthuse visitors about wildlife. These records should be passed on to West Yorkshire Ecology.

Species list

Birds:

<u>Latin name</u>	<u>English name</u>
<i>Anas platyrhynchos</i>	Mallard
<i>Carduelis chloris</i>	Greenfinch
<i>Corvus corone</i>	Carrion Crow
<i>Fringilla coelebs</i>	Chaffinch
<i>Phylloscopus collybita</i>	Chiffchaff

Invertebrates:

<u>Latin name</u>	<u>English name</u>
<i>Nemophora degeerella</i>	A micro moth
<i>Bombus</i> sp.	A bumblebee
<i>Myrmica rubra</i>	A red ant
Chrysomelidae	A leaf beetle

Plants (non-native or probable introduced species are denoted with ♦):

<u>Latin name</u>	<u>English name</u>
<i>Acer pseudoplatanus</i> ♦	Sycamore
<i>Aegopodium podagraria</i>	Ground Elder
<i>Alnus cordata</i> ♦	Italian Alder
<i>Alnus glutinosa</i>	Alder
<i>Bellis perennis</i>	Daisy
<i>Betula pendula</i> ♦	Silver Birch
<i>Betula pubescens</i>	Downy Birch
<i>Carpinus betulus</i> ♦	Hornbeam
<i>Corylus avellana</i>	Hazel
<i>Cotoneaster</i> sp. ♦	A cotoneaster
<i>Cytisus</i> sp. ♦	A broom
<i>Dactylis glomerata</i>	Cock's-foot
<i>Digitalis purpurea</i> ♦	Foxglove
<i>Dryopteris filix-mas</i>	Male Fern
<i>Epilobium ciliatum</i> ♦	American Willowherb
<i>Epilobium montanum</i>	Broad-leaved Willowherb

<u>Latin name</u>	<u>English name</u>
<i>Fagus sylvatica</i> ♦	Beech
<i>Fraxinus excelsior</i>	Ash
<i>Galium aparine</i>	Cleavers
<i>Geum urbanum</i>	Wood Avens
<i>Gladiolus</i> sp. ♦	A gladiolus
<i>Helianthemum</i> sp. ♦	A rockrose
<i>Heracleum mantegazzianum</i> ♦	Giant Hogweed
<i>Heracleum sphondylium</i>	Hogweed
<i>Holcus lanatus</i>	Yorkshire Fog
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Ilex aquifolium</i>	Ivy
<i>Impatiens glandulifera</i> ♦	Himalayan Balsam
<i>Lolium perenne</i>	Perennial Rye-grass
<i>Lonicera periclymenum</i> ♦	Honeysuckle
<i>Malus pumila</i> ♦	Apple
<i>Melissa officinalis</i> ♦	Balm
<i>Myosotis sylvatica</i> ♦	Wood Forget-me-not
<i>Plantago major</i>	Greater Plantain
<i>Poa annua</i>	Annual Meadow-grass
<i>Poa trivialis</i>	Rough Meadow-grass
<i>Populus</i> sp. ♦	A poplar
<i>Potentilla fruticosa</i> ♦	Shrubby Cinquefoil
<i>Primula x polyantha</i> ♦	Garden Polyanthus
<i>Prunus domestica</i> ♦	Plum
<i>Prunus laurocerasus</i> ♦	Cherry Laurel
<i>Quercus petraea</i>	Sessile Oak
<i>Quercus robur</i>	Pedunculate Oak
<i>Quercus rubra</i> ♦	Red Oak
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Ribes nigrum</i> ♦	Blackcurrant
<i>Ribes rubrum</i> ♦	Redcurrant
<i>Ribes uva-crispa</i> ♦	Gooseberry
<i>Rosa</i> sp.	A rose
<i>Rubus fruticosus</i> agg.	Bramble
<i>Rumex acetosa</i>	Common Sorrel
<i>Salix caprea</i>	Goat Willow
<i>Salix cinerea</i>	Grey Willow
<i>Sambucus nigra</i>	Elder
<i>Saxifraga x urbium</i> ♦	London Pride
<i>Solidago virgaurea</i> ♦	Goldenrod
<i>Sorbus aucuparia</i>	Rowan
<i>Sorbus</i> sp. ♦	A whitebeam
<i>Symphytum officinale</i>	Common Comfrey
<i>Taraxacum officinalis</i> agg.	Dandelion
<i>Trifolium repens</i>	White Clover
<i>Ulex</i> sp. ♦	A cultivated gorse
<i>Ulmus glabra</i>	Wych Elm
<i>Urtica dioica</i>	Common Nettle
<i>Urtica galeopsifolia</i>	Fen Nettle

<u>Latin name</u>	<u>English name</u>
<i>Viburnum lanata</i>	Wayfaring-tree
X <i>Cupressocyparis leylandii</i> ♦	Leyland Cypress

Appendix 1 - Bats

Certain species of bats may use the site for foraging (flying insects) and some may roost in convenient trees on the site or nearby. These will probably be pipistrelle bats *Pipistrellus sp.*

Although it remains the most abundant and widespread bat species in the UK, the pipistrelle is thought to have undergone a significant decline in numbers this century. Estimates from the National Bat Colony Survey suggest a population decline of approximately 70% between 1978 and 1993. The current pre-breeding population estimate for the UK stands at approximately 2,000,000.

Females form maternity roosts of up to several hundred adults from May, often in house roofs but also in woodland. They give birth to a single live young in July. Males are much more solitary. Hibernation takes place from November to March. Pipistrelles forage for small insects in varied habitats but woodland edges, hedgerows and waterways are particularly important.

The pipistrelle bat is listed on Appendix III of the Bern Convention, Annex IV of the EC Habitats Directive and Appendix II of the Bonn Convention (and is included under the Agreement on the Conservation of Bats in Europe). It is protected under Schedule 2 of the Conservation (Natural Habitats, etc.) Regulations, 1994 (Regulation 38) and Schedules 5 and 6 of the WCA 1981.

Appendix 2 - Birds

In Britain all wild birds are granted legal protection under the Wildlife & Countryside Act 1981, the Bern Convention and the EC Birds Directive. This legislation protects the birds, their eggs and nests whilst being built or in use. Such protection makes it an offence to intentionally kill, injure, take or have in possession any wild bird or egg. It is also an offence to intentionally damage or destroy the nest of any wild bird whilst it is being built or in use. Any vegetation clearance and tree works should preferably take place outside of the bird-nesting season to minimise disturbance. The nesting season varies from year to year, according to the weather conditions but generally begins in March, peaks during May and June and continues until August.