

CARAVAN CLUB ECOLOGICAL SITE APPRAISAL



Abbeywood Golden Jubilee Caravan Club Site Federation Road Abbeywood London SE2 0LS England



General Information

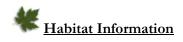
Site Name and County: Abbeywood, South East London Grid Reference: TQ473785 Area: 3.64 ha Date: 19/07/04 Recorder: Rodney West and Harriet Whittle, Ecologists with Just Ecology Environmental Consultancy. Weather Conditions: Warm and sunny.

Site Description

Tarmac roads lead to gravel pitches, which are surrounded by mown grass. The site is surrounded by oak woodland with scattered large parkland trees, mainly Sweet Chestnut. In places the groups of pitches are interspersed with small areas of lowgrowing ornamental and native shrubs.

<u>Context</u>

This sub-urban site just south of the river Thames at Woolwich, is surrounded by mature broadleaf woodland on three sides. Woodland on site forms part of a sizable tract of semi-natural woodland, the largest expanse of woodland within a 8km radius. Approximately 5km away is Lesnes Abbey Wood, a SSSI designated for its geological interest and an area of ancient broadleaved woodland. Although it lies in an urban area, the scattered mature trees give a parkland feel to the site. Central London can be reached by tube in 35 minutes.



Broad Habitats Present: Amenity grassland, broadleaved woodland **BAP Priority Habitats Present:** Parkland **Subsidiary Habitats Present:** Dead wood and tree stumps

Plant Communities Present:

Grassland Communities:

The grassland between pitches is species poor with perennial rye grass (Lolium perenne) being the dominant species with occasional annual meadow grass (Poa annua) and white clover (Trifolium repens) also present. Vegetation adjacent to the boundary fence is kept low for security reasons and although the grass is not long, there is slightly more diversity here than in the closely mown grassland between pitches. Species noted along the boundary of the site were representative of a woodland edge flora, the eastern boundary being typical. Dandelion (Taraxicum officinale agg.), greater plantain (Plantago major), white clover (Trifolium repens), daisy (Bellis perennis), nipplewort (Lapsana communis), ragwort (Senecio jacobaea), scarlet pimpernel (Anagallis arvensis), wood avens (Geum urbanum), knotgrass (Polygonum aviculare), nettle (Urtica doica) and meadow thistle (Circium dissectum) were all noted.

Directly along the fence line small patches of bramble scrub (*Rubus fruiticosus* agg.) and ivy (*Hedera helix*) occurred with occasional young hazel (*Corylus avellana*), sycamore (*Acer pseudoplatanus*) and elder (*Sambucus nigra*). Cow parsley (*Anthriscus sylvestris*), rosebay willowherb (*Chamerion angustifolium*) and smooth sow-thistle (*Sonchus oleraceus*) were also present.

Mature trees were scattered throughout the site and these cast a dense shade. The grass beneath became patchy and was almost entirely a sparse sward of perennial rye grass. Along the south-eastern boundary of the site recent shrub planting was interspersed with narrow strips of weedy grass where common bent (*Agrostis capillaris*) and tall fescue (*Festuca arundinacea*) were noted, with broad-leaved willow-herb (*Epilobium montanum*), bramble (*Rubus fruiticosus* agg.), field rose (*Rosa arvensis*), nettle and greater plantain (*Plantago major*) also present. Dried flower spikes of bluebell (*Hyacinthoides non-scripta*) were noted close to the woodland edge.

At the end of the shrub planting was a small clump of sycamore and oak trees with bramble scrub at the base. Within the scrub elm (*Ulmus glabra*), nettle, annual meadow-grass (*Poa annua*), elder (*Sambucus nigra*) and garlic mustard (*Alliaria petiolata*) were noted.

Woodland:

Beyond the perimeter security fence the site was surrounded by mature broad-leaved woodland on all sides except the northern edge. Abbey Wood is part of a large tract of semi-natural woodland. This is the largest expanse of broadleaved semi-natural woodland within an 8km radius of the site. The woodland canopy was predominantly oak (*Quercus petraea*), with scattered silver birch (*Betula pendula*), sweet chestnut (*Castinea sativa*), sycamore and occasional rowan. Trees were mature, forming a canopy with over 70% cover and an understorey of dense bramble, holly and ivy, with occasional rowan and young tree saplings.

Parkland Trees:

The eastern side of the site contained numerous large parkland trees, giving the site a pleasant parkland feel with shady areas. Trees here were mainly sweet chestnut, but frequent oak, ash and sycamore were noted. In height and girth some of these trees are close to 'veteran tree' status (girth over 5.2m) and are one of the most valuable wildlife assets of the Abbey Wood site. All should be retained wherever safety is not an issue.

Scattered tree stumps have also been left in-situ in this area. As well as providing pleasant sitting places, these stumps provide excellent nesting areas for small mammals, and are also an important habitat for invertebrates.

Shrubs and linear planting:

Most of the shrub planting on site is low-growing and fairly young, often along fence lines. Native shrub species (some of continental rather than local provenance) such as silver birch, rowan, hazel, hawthorn, elder and field rose (*Rosa arvensis*) have been used in places around the site boundary. Wood piles in this area provide excellent invertebrate habitat, particularly where they have begun to rot slightly, and these should be left in-situ.

Much of the planting within the site uses ornamental shrubs such as escalonia, cotoneaster, hebe, spiraea and ornamental cherry. Berries of these shrubs will provide valuable winter food sources for birds. Two beds had a border of greater wood-rush (*Luzula sylvatica*), which were certainly planted rather than natural.

Wetland:

There were no wetland habitats on site.



Meadow brown butterfly



Mature Sweet Chestnut trees



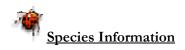
In general, habitat diversity on site was rather limited. This is largely due to security issues, meaning the perimeter fence has to be kept clear for visibility and as a deterrent to intruders. Habitat diversification using areas of taller grasses and shrubs is limited to small parts of the site.

Large parkland trees on site offer excellent habitat for nesting birds and are also used by grey squirrels and possibly bats. Time did not permit a night time bat survey but this is likely to yield some interesting results. The older trees in particular are likely to contain suitable crevices for bats and also areas for nesting birds, owls, woodpeckers and squirrels. Tree stumps left in-situ throughout the site provide a habitat for small mammals such as mice and voles and also some specialist invertebrates. Stag beetles in particular, favour rotting tree stumps in which to lay their eggs as these provide a food source for their larvae. Although stag beetles were not recorded on the day of the visit, they are likely to be present as the habitat here is ideal and the area is a known hotspot for the species. The stag beetle is listed as a priority species in the UK and the London Biodiversity Action Plans. Log piles within the shrub planting area also provide valuable invertebrate.

Where flowering shrubs and occasional wildflowers were present, the numbers of day flying moths, hoverflies and bumble bees increased although numbers were generally

low. The grassland areas were all species-poor and contained few flowering plants. The shade and protection afforded by shrubs will be beneficial to ground-dwelling invertebrates.

The woodland beyond the perimeter fence (part of which is owned by the Caravan Club site) is undisturbed as access (pedestrian/vehicle) is not permitted. Thus it should harbour nesting birds including owls, bats and other mammals such as grey squirrel, which were seen on the day of the survey, and foxes and badgers of which there is anecdotal evidence.



BAP Species Seen: None

BAP Species Potential: Various species of bats have action plans in the London LBAP, and given the surrounding semi-natural woodland and scattered parkland trees it is highly likely that bats, particularly the pipistrelle bat, are present. This area is a hotspot for stag beetles and given the dead wood and tree stumps it is likely they are present here.

Other Notable Species: Green woodpecker is on the Amber list of Birds of Conservation Concern.

Flora:

The grassland areas have species indicative of improved and re-seeded grassland such as perennial rye-grass, white clover and dandelion. There is little opportunity to increase habitat diversity (for example with areas of longer grass) except perhaps at the southern edge of the site. Woodland surrounding the site has great biodiversity potential, particularly as it is mature, has a good shrub layer and is largely un-disturbed.

Shrub planting, although not all native, is beneficial to birds and flying insects. There is potential to increase the nectar sources with further inter-planting.

Avifauna:

On the day of the survey 16 species of birds were recorded using the site. These are typical woodland bird species. Other woodland species probably also use the site, for example tawny owl (*Strix aluco*) and there are local records of lesser-spotted woodpecker (*Dendrocopus minor*) and wood warbler (*Phylloscopus sibilatrix*) within a kilometre of the site. Woodpecker holes were noted in trees at north-eastern edge of site. During winter the small areas of short turf would probably attract winter visitors such as; Redwing, Fieldfare and Scandinavian blackbirds.

The scrub area beyond the electric fence at the far south-east end of the site has good potential as nesting sites for some bird species and also as roost sites especially during the winter months. The mature trees on site also provide sites for some nesting birds.

Bird species recorded during the survey visit were;

Blackbird (Turdus merula) - breeding

Blue Tit (Parus caeruleus) - breeding Carrion Crow (Corvus corone) Chaffinch (Fringilla coelebs) Chiffchaff (Phylloscopus collybita) Jay (Garrulus glandarius) Magpie (Pica pica) Robin (Erithacus rubecula) Wren (Troglodytes troglodytes) Dunnock (Prunella modularis) Green Woodpecker (Picus viridis) Greater-spotted Woodpecker (Dendrocopus major) Wood Pigeon (Columba palumbus)

Two species identified as using the site are of particular note:

Green woodpecker – is still on the Amber List of Birds of Conservation Concern, although populations have increased steadily since 1966, except for a period of stability or shallow decline centred on the late 1970s. The BBS indicates that the increases are continuing across most of the UK.

Another species – the **Lesser-spotted woodpecker**, although not seen at the site is recorded from nearby Lesnes Abbey area and may visit the Abbey Wood site. The Lesser-spotted woodpecker has declined significantly and very rapidly since around 1980 and has also contracted in range. It now qualifies for Red listing*. Reductions in the area of mature broadleaved woodland, losses of non-woodland trees such as elms, reductions in the volume of dead wood in woodland and increasing woodland isolation are likely causes for the decline. *See Appendix 1.

Invertebrates:

On the day of the survey meadow brown (*Maniola jurtina*) and small white (*Pieris rapae*) were seen but several other butterfly species probably also occur. Various day flying moth species were recorded and the buff-tailed bumble bee (*Bombus terrestris*) was seen nectar gathering. Several species of hoverfly were also noted on the escalonia shrubs in the west of the site, although these were not identified. The dead wood under the woodland areas provides suitable habitat for invertebrates, particularly detritivores and possibly the stag beetle (*Lucanus cervus*) larvae (see Appendix 2).

Invertebrates during the survey; Meadow brown (*Maniola jurtina*) Small white (*Pieris rapae*) Buff-tailed bumble bee (*Bombus terrestris*) Various day flying moths

Two-spot ladybird *(Adalia bipunctata)* Earwig *(Armadillum spp.)* Wasp (Vespula vulgaris)

Herptofauna:

No species of herpetofauna (Reptiles, Amphibians) were recorded during the survey.

Mammals:

Only grey squirrel was recorded during the survey visit. Other more terrestrial species probably find the electric fence which surrounds the site a barrier to their movements though sedentary small mammals like long-tailed fieldmouse (*Apodemus sylvatica*) and field vole (*Microtus agrestis*) probably use the site. There is anecdotal evidence that common fox (*Vulpes vulpes*) also visits the site. Given the surrounding woodland and also mature trees on site, it is likely that bats, particularly pipistrelle (*Pipistrellus pipistrellus*) visit the site. Time did not permit a bat survey during the visit. The pipistrelle bat has been recorded locally and is a UK and London Biodiversity Action Plan species. Natterer's bat (*Myotis nattereri*) is a woodland edge species and although less common, may also be present. See Appendix 3 for further information on the pipistrelle bat.

Mammal species recorded during the survey were: Grey squirrel (*Sciurus carolinensis*)



A good variety of bird species were recorded during the visit although it is likely that further species would have been recorded during a longer visit, and also if access to the wooded parts of the site beyond the perimeter fence had been possible.

Numbers of butterflies and other flying insects were low. This was most likely due to a lack of suitable grassland habitat and associated wild flowers to provide a nectar source. Where shrubs such as escalonia were flowering, particularly where weedy species such as dandelion (*Taraxicum officinale* agg.) and common cat's ear (*Hypochoeris radicata*) had crept in, there was an increase in flying insects. Diversity could be improved by further shrub planting and some diversification of grassland habitats wherever possible.

Mammal use of the site is low, mainly due to the security fence, although the warden indicated that mammals such as foxes have access to the site through one place in the fence. Although bats were not recorded during the survey, it is highly likely that one or two species are present within the surrounding woodland.

Management Recommendations

- **Nestboxes** both open-fronted and conventional single hole (32mm diam.) could be added to selective trees in the secluded areas of the site and possibly extended into some of the surrounding woodland. One or two owl boxes could also be added. Nestboxes need cleaning out once each autumn.
- **Bird feeding stations** –Feeding stations could be added at three or four points 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, these can be cleaned periodically.

- **Bats and trees -** If any mature trees are marked for cutting down it is advisable to get them checked by a bat expert.
- Diversification of grassland although grassland habitats are rather limited in extent, and security issues prevail, there may be some opportunity to diversify grassland habitats on the banks on the southern and western edge of the site. Some shrub planting has already taken place here, as this grows up, thought could be given to leaving a 1-2m grassy margin cut twice per year (April and September). Although fairly shady, species such bluebell, foxglove and red campion would be suited to these conditions and provide nectar sources for various flying insects. These could be sown or may come in naturally if a suitable cutting regime is followed.
- Nectar sources for butterflies and flying insects Amongst the more formal planting around the fences and borders on site, species such as buddleia and honeysuckle could be added. These will attract butterflies and moths and also smell pleasant in the evenings whilst people are sitting outside. Stone-crop (*Sedum telephium*) is an attractive plant that provides excellent cover, and is a favourite of butterflies such as small tortoiseshell, red admiral, painted lady, and peacock. Planting of wildflowers in tubs or baskets would also add to the insect diversity of the site.
- **Tree stumps and log piles -** left in-situ these will provide excellent stag beetle habitat. They will also be beneficial to other invertebrates, particularly if left in a sunny spot. Although not recorded during the survey, stag beetles are quite likely to be using the site as this area is a known hotspot for them. They can be encouraged by providing further log piles, ideally with some logs buried part way into the ground for larvae, which eat rotting wood.
- Veteran trees should be retained wherever it is safe to do so. The general principle is that veteran trees are identified, recorded and checked at regular intervals. Ideally a management plan will be drawn up, which involves assessing the site, deciding on priorities, implementation, monitoring and review. Active management should only be carried out if necessary for public safety.
- Veteran trees are exceptionally hazardous to work on, and pollarding, removal of overhanging branches or other practical work should only be undertaken by trained and experienced operators. When assessing a veteran tree, both the individual tree and its surroundings need consideration.

Threats to veteran trees

- Veteran trees may be cut back or removed altogether where there are worries about safety or tidiness. Old hollow trees with reduced crowns are in fact often safer than mature ones with a full crown.
- Compaction from car parking or trampling around the tree can damage the root system.

- Inappropriate management such as filling cavities with concrete, or unskilled tree surgery. Pulling away ivy, removing dead wood and other 'tidying up' is misdirected management.
- Changes in the water table can cause stress to the tree.
- Changes in the surrounding vegetation. Lack of grazing or new planting can cause the veteran to become shaded by other tree growth. Conversely, opening up a previously shaded veteran by removal of surrounding trees can also be damaging.
- As the number of veteran trees reduces, the remainder become more isolated, and the ability of organisms to spread to other veterans is therefore lessened.

Further surveys:

Veteran trees – guidance on surveys can be found on the internet or through the local Borough Council.

Bats -there is anecdotal evidence of them using site

Stag beetles

Woodland habitats – a survey of the woodland areas outside of the security fence would be beneficial due to the semi-natural and undisturbed nature of the habitat. Particular attention should be paid to birds, bats and invertebrates.

Appendix 1 - The Population status of the UK's Birds

The leading governmental and non-governmental conservation organisations in the UK have reviewed the population status of the birds that are regularly found in the UK.

A total of 247 species have been assessed and each placed onto one of three lists – red, amber or green. Forty species are **red-listed**, 121 are **amber-listed** and 86 are **green-listed**.

The lists update earlier assessments, *Birds of conservation concern* and *Birds of conservation importance*, which were published in 1996. The population status of birds is reviewed every five years to keep track of changes in abundance and range.

The Criteria

Seven quantitative criteria were used to assess the population status of each species and place it onto the red, amber or green list. These criteria are listed below. The review excluded species that are not native to the UK and those that occur irregularly as vagrants or scarce migrants.



Lesser spotted woodpecker: one of three woodland species new to the red list

- **Red list** species are those that are Globally Threatened according to IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery.
- Amber list species are those with an unfavourable conservation status in Europe, those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations.
- Species that fulfil none of the criteria are green-listed.

The green woodpecker which was recorded at the Abbey Wood site is on the Amber list of Birds. The lesser spotted woodpecker, which has been recorded locally is on the Red list of Birds.

Appendix 2 - Stag beetles

The stag beetle is the largest land living beetle in Britain - males can be up to 70mm (2.5inches) long including their jaws - and is so-called because the male's huge jaws look just like a stag's antlers. Stag beetles are quite harmless, but the female may give you a nip if you put your fingers in the wrong place!

You are most likely to see males in flight on warm, summer evenings between May and August, while they are searching for mates. The female lays her eggs underground in decaying wood. These eggs hatch into larvae, large white grubs with stubby legs and orange-brown heads.

The larvae have to eat large quantities of decaying wood because it is poor in the nutrients they need. It can take up to four years or even longer for larvae to reach the next stage of their development, the pupa, a resting phase during which they take on their adult form.

At least four years after the eggs were laid, the adults emerge from the soil in May or June. The cycle then starts all over again as the males fly at dusk in search of mates.

Their lives as adults are short-lived however, as most die by the autumn.

Stag beetles occasionally fly through open windows at night, attracted by lights. Their flight is often quite erratic as they are not good at manoeuvring and crash landings are common. Please do not interpret this as aggressive behaviour, just pick them up (with some card if necessary) and put them back in the garden.

Although stag beetles have no legal protection in the UK they are listed in the UK, London and Bexley Biodiversity Action Plans. This means they are recognised as important species both nationally and locally, mainly because their habitats are under threat.



Appendix 3 - Pipistrelle 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 pipistrellus*).

The common pipistrelle is the smallest British bat with a wingspan of about 20cms and weighing around six grams. It is the most abundant and widespread bat in London and throughout the UK and have suffered large losses in numbers over the last twenty years.

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. It is also a priority species listed in the UK, London and Bexley Biodiversity Action Plans.

Current threats to Bats:

- Exclusion from roosts by human intervention
- Destruction or damage to roosts as a result of building work/development
- Barn conversions and modifications to buildings such as security lights
- Toxic effects of remedial timber treatment in roofs and other parts of buildings
- Loss and damage to natural habitats such as woodlands and older trees with crevices and cavities.

Other bat species like natterer's bat *Myotis natteri* may use the woodland edge habitat surrounding the Abbey Wood site.

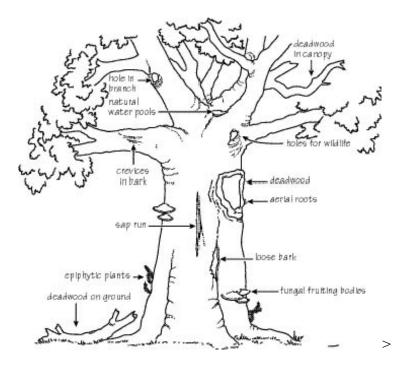
Appendix 4 -Veteran Trees

Veteran trees are valuable for many reasons:

- They support a rich invertebrate fauna, both of general and specialist species.
- The nooks and crevices provide nesting sites for birds and small mammals.
- They support a rich flora of lichens and mosses, both of general and specialist species.
- They are living remnants of past land use and management.
- Many veteran trees are remarkable and beautiful.

English Nature have created a rough rule of thumb which can be adopted to assess the value of a tree, for example an oak, in relation to size:

- Trees with a diameter at breast height of more than 1.0m (girth 3.2m) are potentially interesting.
- Trees with a diameter of more than 1.5m (girth 4.7m) are valuable in terms of conservation.
- Trees with a diameter of more than 2.0m (girth 6.25m) are truly ancient.



A rule of thumb is that 25mm of girth at breast height is equivalent to one year's growth for a free standing tree, and 13mm of girth at breast height is equivalent to one year's growth for a tree in woodland. This can be applied to uncut trees such as oak in middle age, but is of limited value for older trees.

Absolute age is not necessarily a good indicator of ancient status, as different species have different life spans. Thus willow and birch are short lived and specimens over 100 years old are valuable, whereas beech and oak only start to mature at 200 years. Sweet chestnut is now accepted as having been part of the British flora for at least 2000 years and is therefore a native by proxy!