



***CARAVAN CLUB ECOLOGICAL
SITE APPRAISAL***

New Forest
Caravan Club Site
Forest Road
Christchurch
BH23 8EB



General Information

Site Name and County: New Forest, Christchurch, Dorset BH23 8EB

Grid Reference: SZ 21010 98270

Area: 24 acres

Date: 16/04/2008

Recorder: Jenna Buss, JUST ECOLOGY

Weather Conditions: Sunny and breezy with 10% cloud cover

Site Description

The New Forest Caravan Club site, recently opened in summer 2007, is situated on a disused air strip outside of Christchurch, on the Dorset/Hampshire border. The site is large, with 263 pitches covering 24 acres. The site is surrounded by predominantly pastoral agricultural land. It is well manicured, consisting of short-mown lawns and recent planting, with hard standing pitches linked by tarmac roads. An area to the north-west has been fenced off as a wildlife sanctuary and at present is grazed by wild New Forest Ponies. This area, coupled with the play area and dog walking area, are situated on a north-west facing slope towards a small stream that flows along the northern site boundary. The main site including the buildings and pitches is level and open, due to the historical use of the site. Mature hedgerows surrounding the site, separate from the farmland beyond.

Context

The site lies west of the New Forest National Park on the Dorset/Hampshire border just outside of the village of Bransgore. The New Forest is an important area of heathland and forest near the south coast. It was established as the King's hunting forest shortly after the Norman Conquest in 1066. Being an unusually extensive, open, semi-natural area in an agricultural and developed part of the country it is now of high value for recreation, conservation, wildlife, grazing of ponies and forestry. The area supports important populations of reptiles such as the Smooth Snake *Coronella austriaca*. The New Forest National Park is situated one kilometre to the east of the site. This park has a number of designations awarded to it including Ramsar status, SSSI status, Special Area of Conservation and Special Protection Area.



Habitat Information

Broad Habitats Present: Broadleaved, mixed and yew woodland, improved grassland, neutral grassland, boundary and linear features, built up areas and gardens, rivers and streams, fen, marsh and swamp

National BAP Priority Habitats Present: Hedgerows, lowland mixed deciduous woodland

Caravan Club cBAP features: Broadleaved woodland, rivers and streams

Subsidiary Habitats Present: Planted areas, improved/amenity grassland, rushy grassland

Grassland Communities:

The grassland at New Forest was composed entirely of short mown improved grassland within the caravan site area. The sward consisted of few species, mainly Perennial Rye-grass *Lolium perenne*, White Clover *Trifolium repens*, Creeping Buttercup *Ranunculus repens*, Dandelion *Taraxacum officinalis* agg., Greater Plantain *Plantago major*, Daisy *Bellis perennis*, Yorkshire Fog *Holcus lanatus* and Cock's-foot *Dactylis glomerata* with some Common Ragwort *Senecio jacobaea* in places.

The newly sown grassland area along the access driveway consisted of a number of species including Common Ramping-fumitory *Fumaria muralis*, Sun Spurge *Euphorbia helioscopia*, Betony *Stachys officinalis*, Self-heal *Prunella vulgaris*,

Common Mouse-ear *Cerastium fontanum*, Wavy Bitter-cress *Cardamine flexuosa*, Yarrow *Achillea millefolium*, Daisy, Perennial Rye-grass, Dandelion and Creeping Cinquefoil *Potentilla reptans*. Towards the edges of this area where parts of the runway still exist English Stonecrop *Sedum anglicum* was also noted along with some Bramble *Rubus sp.* and Common Ragwort.

The grassland and rushy area within the wildlife sanctuary included the following species: Creeping Buttercup, Common Mouse-ear, White Clover, Cock's-foot, Perennial Rye-grass, Dandelion, Yorkshire Fog, Soft Rush *Juncus effusus*, Jointed Rush *Juncus articulatus*, Broad-leaved Dock *Rumex obtusifolius*, Red Fescue *Festuca rubra*, Gorse *Ulex europaeus*, Crested Dog's-tail *Cynosurus cristatus*, Common Bent *Agrostis capillaris*, Ribwort Plantain *Plantago lanceolata*, Greater Plantain, Meadow Buttercup *Ranunculus acris*, Creeping Cinquefoil, Hairy Sedge *Carex hirta* and Spear Thistle *Cirsium vulgare*.

The fen area consisted of plants including Water Mint *Mentha aquatica*, Reedmace *Typha latifolia*, Hemlock Water Dropwort *Oenanthe crocata* and possibly Yellow Iris *Iris pseudacorus*, though this and the Reedmace are hard to tell apart when not in flower.

Woodland:

A strip of semi-natural woodland occurred within the fenced area of the wildlife sanctuary along the northern boundary of the site, as well as along the western side of the sanctuary. It followed the small stream through the site and included a number of large, mature trees.

The semi-natural woodland had a canopy of Beech *Fagus sylvatica*, Horse Chestnut *Aesculus hippocastanum*, Goat Willow *Salix caprea*, Silver Birch *Betula pendula*, Holly *Ilex aquifolium*, Ash *Fraxinus excelsior*, Alder *Alnus glutinosa* and Pedunculate Oak *Quercus robur*. A number of these trees were mature, with associated lichens and ferns including Common Polypody *Polypodium vulgare*. Rhododendron *Rhododendron sp.*, an introduced species, was also found within the woodland area.

The ground flora vegetation was less well developed with some Bramble *Rubus fruticosus* agg., Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa*, Ivy *Hedera helix* and remaining leaf litter.

Hedgerows:

A number of hedgerows within and surrounding the site were mature and contained a species such as Holly, Elder *Sambucus nigra*, Hawthorn, Bramble, Wild Privet *Ligustrum vulgare*, Ivy, Hazel *Corylus avellana*, a rose *Rosa sp.*, Beech and Field Maple *Acer campestre*.

Ground flora plants included, Primrose *Primula vulgaris*, Cleavers *Galium aparine*, Broad-leaved Dock, Ground-ivy *Glechoma hederacea*, Bush Vetch *Vicia sepium*, White Clover, Yarrow and Bluebell *Hyacinthoides non-scripta*.

Planted beds:

Areas within the main site area and around the boundaries had recently been planted with a mix of native shrubs and trees including Dwarf Gorse *Ulex minor*, Hawthorn,

Blackthorn, Wild Privet, Field Maple, Alder, Silver Birch, Ash, Bird Cherry *Prunus padus*, Pedunculate Oak, Holly, Hazel and Common Dogwood *Cornus sanguinea*.

Other:

Wooden and metal fencing was used to create dedicated areas such as the play area, and dog walking area. A large fence had also been installed in order to divide the wildlife sanctuary from the rest of the caravan site. This allowed the outer boundaries of the wildlife sanctuary to remain open allowing a variety of species access, for example the New Forest Ponies.

Some species poor Leyland Cypress X *Cupressocyparis leylandii* hedgerows existed on site along the driveway and southern boundary. New native species hedgerows had been planted parallel to these hedgerows with the intention of removing the Leyland Cypress hedgerows as the native species hedgerows mature.



Habitat Evaluation

Key habitats on site included the small stream, mature hedgerows, small woodland area and rush pasture. Other habitats included improved grassland areas and planted native species beds covered with bark chippings.

The main areas of biological diversity within the site were those around the fringes and within the wildlife area, with the main area in the centre of the site providing little suitable habitat to support a diversity of species due to the manicured nature of the site. This however could be improved in time, as the planted areas mature.

The limited number of animals identified on site may have been the result of the recent development, and the limited food and shelter the new planting can provide. Once native plants and hedgerow species have had time to establish, this may positively impact the avifauna and invertebrate species currently using the site.

Grassland areas within the main campsite area were highly modified and may become less diverse if fertilizers are added over the following years.

The mature hedgerows on site supported a number of bird species and a number of forbs including Bluebell, Primrose and Bush Vetch.

The wildlife sanctuary on site provides a positive step towards enhancing the sites biodiversity. The stream and wetland area supported a number of aquatic plants and the grazed rushy meadow supported mammals including New Forest Ponies (Figure 1) and deer.



Figure 1: Wildlife sanctuary with meadow and rush pasture and broadleaved woodland.

Whilst all Rhododendrons are non-native, *R. ponticum* is also considered to be a detrimental invasive species. The Rhododendron within the woodland area is suspected as being *R. ponticum*, and could therefore have a significant negative impact on the surrounding ground flora.

The small area of woodland presently contains a number of mature trees including ash and oak. However there is little in the way of mature understorey vegetation. Some deadwood exists and it appeared as though management of this area was minimal.



Species Information

National BAP Species Seen: None

Caravan Club cBAP species: Song Thrush *Turdus philomelos*

BAP Species Potential: Kestrel *Falco tinnunculus*, Swallow *Hirundo rustica*, Swift *Apus apus*, House Martin *Delichon urbica*, Smooth Snake *Coronella austriaca*, Slow Worm *Anguis fragilis*, bats

Other Noteworthy Species: New Forest Pony, Black Headed Gull *Larus ridibundus*

Flora:

A number of common native species of plant were identified within the wildlife sanctuary and meadow along the driveway.

Rhododendron, an introduced and invasive species, was found within the woodland area.

A number of forbs found within the native hedgerow included Bluebell, Bush Vetch and Primrose, these species would provide a nectar source for a number of invertebrate species.

Avifauna:

Few bird species were recorded on the site. Of note is the Song Thrush *Turdus philomelos*, a UK and Caravan Club BAP species. Others recorded were relatively common; these included Carrion Crow *Corvus corone*, Blackbird *Turdus merula*, Great Tit *Parus major*, Blue Tit *Cyanistes caeruleus*, Pied Wagtail *Motacilla alba* and Black-headed Gull *Larus ridibundus*.

Invertebrates:

Only bumblebees *Bombus* sp and spiders Aranae, were identified on site at the time of survey.

Herpetofauna:

No species of reptile or amphibian was recorded on the site at the time of survey.

Mammals:

Feral New Forest Ponies were noted on site during the survey along with a number of Rabbits *Oryctolagus cuniculus* and Grey Squirrel *Sciurus carolinensis*. These ponies have access to the wildlife sanctuary area and at the time of survey were grazing in this area.

**Species Evaluation**

The native plants identified will add to the biodiversity value of the site by providing a food source or shelter for a number of different species. Due to the management and heavy grazing of the wildlife area, there was a limit to the abundance of flowering plants which provide nectar to a number of invertebrate species.

Song Thrush were identified on site and are a national BAP species and a Caravan Club BAP species. Song Thrush were once common in gardens and on farmland but have rapidly declined in recent years. Typical habitat includes parks and gardens and in hedgerows close to habitation.

The wildlife area and stream on site may provide an important area for invertebrates such as butterflies.

Bat species likely to be present in the area include the Pipistrelle. This is a UK BAP species and has recently undergone a significant decline in abundance (see Appendix 1). This and other bat species may be foraging in the woodland and over the hedgerows, feeding on invertebrates supported by the site.

No reptiles were identified on site at the time of survey. It may be possible that reptiles occur within the surrounding area and wildlife sanctuary, but given the lack of suitable habitat within the main site it is unlikely to support a significant reptile population.

The small stream on site is unlikely to be large enough to support amphibians such as frogs, toads and newts for breeding but may be used throughout the year for feeding

and foraging habitat. Common Toads *Bufo bufo* in particular can travel large distances from their breeding ponds to suitable habitat.

It is possible that Badger *Meles meles*, are also present within the wider surroundings. A number of corn heads were found along the hedgerows within the site boundary, a known food source of badger. The surrounding pasture land would provide suitable habitat for worming. No further evidence of badger was identified on site.

Management Recommendations

- Introducing fen community plants at the north eastern corner of the site where the stream enters, will allow the water to be filtered and cleaned as it moves through the wildlife sanctuary. At the time of the survey the stream was being fed by water running off the adjacent fields and was visibly polluted, judging from the rusty-orange colour of the water. By improving the water quality as it enters the site, aquatic plants and invertebrates will be encouraged to move into the stream, further increasing biodiversity within this area. Currently the Reedmace fen community present within the south-westerly corner of the site is successfully filtering the water moving through this area and off the site (Figure 2). The fen, if enlarged will support a wide range of terrestrial and semi aquatic species.



Figure2: Fen located in the south west corner of the site.

- The strips of recently seeded grass along the driveway could be used to create a species-rich hay meadow. This would support a number of native plants currently identified within this area as well as a number of invertebrates, particularly butterflies. The area could be seeded with a wild flower mix, sourced locally. Management would involve mowing early in the spring and then late summer/autumn, to allow time for the wildflower species to set seed. All cuttings should be removed from the meadow to reduce the soil nutrient levels and thus make the area for suitable for a wider range of species.

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- Maintaining and managing the native species hedgerows will ensure suitable habitat is present for foraging birds. Hedgerows should be cut on a rotational basis every other year. This would increase the height and density of the hedgerows. Trimming all the hedgerows in one year should be avoided, cutting no more than one third of the hedgerows in any year. This will provide suitable over-wintering habitat for birds and invertebrates.
 - Manage the grassland area within the site 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 margins of longer sward at the currently mowed edges along the hedgerows. This will promote a greater diversity of habitat structure and enable flowering hedgerow plants to flourish such as Bluebells and Bush Vetch. This will then provide suitable habitat and nectar sources for a number of invertebrate species, including bees and butterflies.
 - The trees within the woodland should remain unmanaged, deadwood should be left *in situ* as it can support a diversity of specialised invertebrates. This in turn would provide a suitable food resource for a number of woodland birds including Nuthatch *Sitta europaea* and woodpeckers Picidae. Standing deadwood can also provide suitable roosting opportunities for bats.
 - Invasive species such as the Rhododendron should be removed from the site as a precautionary measure.
 - Creating a small pond in the south west corner of the site, supplied by the small stream, could provide suitable habitat for a number of amphibian species including newts *Triturus* sp., Common Toad *Bufo bufo* and frogs *Rana* sp. This pond could also support a number of aquatic plants and invertebrates and encourage dragon- and damselflies to the site.
 - Mowing? of the dog walking area should be undertaken in early spring and late summer, allowing a meadow to establish. Swathes through the meadow could be cut to allow walkers to use the site without trampling the whole area.
 - The Leyland Cypress hedgerows should be removed once the native species hedgerows have matured.
 - The meadow and rushy grassland area within the wildlife sanctuary should be maintained, grazing should be restricted over winter to prevent soil compaction which may reduce botanical interest.

Further Suggestions to Enhance the Wildlife Value of the Site

- Any further planting on site should use native species of a local provenance. Those producing berries or nuts would be suitable to support birds over the winter months.
- The installation and maintenance of bird tables within and around the planted areas, once they have had time to establish, would provide a food source for the bird populations throughout winter. It was noted a number of species planted could supply food in the form of berries including Holly and Bird Cherry.
- The removal of the non-native hedgerows will allow for the native hedgerows to expand and mature in their place. As the majority of hedgerows on site link together, they may provide a suitable corridor for native woodland plants such as the Primrose and Bush Vetch to continue to expand in this area, as well as creating a linked network of suitable habitat for small mammals such as Harvest Mice *Micromys minutus*, a UK BAP species.
- Bug boxes could be installed in sheltered locations around the site in order to provide suitable over-wintering accommodation for a number of invertebrates including ladybirds and lacewings. Other boxes containing short lengths of bamboo, reed stems, bramble stems or blocks of wood with holes of varying sizes can be used by insects such as solitary bees and wasps, which use the hollow stems and holes for nesting. These can be fixed onto trees and other structures in sheltered locations around the site.
- Bird boxes could also be considered on some of the more mature trees within the wildlife sanctuary. This would also ensure that birds using the nest boxes would not be disturbed throughout the busy summer months when birds are breeding. Bird boxes should be erected so that they are sheltered from the wind, rain and strong sunlight. If they are in full sun, the chicks could overheat and die. Boxes should be positioned 1.5-5m above ground to reduce the risk of predation and replicate natural nesting habits.

Further Survey or Information Requirements

- Recording observations of any wildlife on site could promote the role of the Caravan Club as biodiversity champion for a number of species. Introducing an observations board will advertise this to members and may also encourage visitors to record any wildlife seen, further increasing the Caravan Club's role of supporting biodiversity. Records of any notable or protected species may be useful to those charged with the task of monitoring biodiversity and so records could be passed on to Dorset Environmental Records Centre at:

The Manor House,
Broad Street,
Great Cambourne,
Cambridgeshire,
CB23 6DH.
Email: Enquiries@derc.org.uk
Telephone: 01305 225081
Fax: 01305 224402

- Talks/walks could be organised with members looking at the meadow created along the driveway or pond-dipping with children if a pond were to be created. This would introduce people to the biodiversity in the New Forest National Park and surrounding area.

Species list

Birds:

<u>Latin name</u>	<u>English name</u>
<i>Corvus corone</i>	Carrion Crow
<i>Cyanites caeruleus</i>	Blue Tit
<i>Larus ridibundus</i>	Black Headed Gull
<i>Motacilla alba</i>	Pied Wagtail
<i>Parus major</i>	Great Tit
<i>Turdus merula</i>	Blackbird
<i>Turdus philomelos</i>	Song Thrush

Invertebrates:

<u>Latin name</u>	<u>English name</u>
Araneae	A spider
<i>Bombus</i> sp.	A bumblebee

Plants:

<u>Latin name</u>	<u>English name</u>
<i>Acer campestre</i>	Field Maple
<i>Achillea millefolium</i>	Yarrow
<i>Aesculus hippocastanum</i>	Horse Chestnut
<i>Agrostis capillaris</i>	Common Bent
<i>Alnus glutinosa</i>	Alder
<i>Bellis perennis</i>	Daisy
<i>Betula pendula</i>	Silver Birch
<i>Cardamine flexuosa</i>	Wavy Bitter-cress
<i>Carex hirta</i>	Hairy Sedge
<i>Cerastium fontanum</i>	Common Mouse-ear
<i>Cirsium vulgare</i>	Spear Thistle
<i>Cornus sanguinea</i>	Common dogwood
<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn
<i>Cynosurus cristatus</i>	Crested Dog's-tail
<i>Dactylis glomerata</i>	Cock's-foot

<u>Latin name</u>	<u>English name</u>
<i>Euphorbia helioscopia</i>	Sun Spurge
<i>Fagus sylvatica</i>	Beech
<i>Festuca rubra</i>	Red Fescue
<i>Fraxinus excelsior</i>	Ash
<i>Fumaria muralis</i>	Common Ramping-fumitory
<i>Galium aparine</i>	Cleavers
<i>Glechoma hederacea</i>	Ground-ivy
<i>Hedera helix</i>	Ivy
<i>Holcus lanatus</i>	Yorkshire Fog
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Ilex aquifolium</i>	Holly
<i>Iris pseudacorus</i>	Yellow Iris
<i>Juncus articulatus</i>	Jointed Rush
<i>Juncus effusus</i>	Soft Rush
<i>Ligustrum vulgare</i>	Wild Privet
<i>Lolium perenne</i>	Perennial Rye-grass
<i>Mentha aquatica</i>	Water Mint
<i>Oenanthe crocata</i>	Hemlock Water Dropwort
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Plantago major</i>	Greater Plantain
<i>Polypodium vulgare</i>	Common Polypody
<i>Potentilla reptans</i>	Creeping Cinquefoil
<i>Prunella vulgaris</i>	Self-heal
<i>Prunus padus</i>	Bird Cherry
<i>Prunus spinosa</i>	Blackthorn
<i>Quercus robur</i>	Pedunculate Oak
<i>Ranunculus acris</i>	Meadow Buttercup
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Rosa</i> sp.	A rose
<i>Rubus fruticosus</i> agg.	Bramble
<i>Rumex obtusifolius</i>	Broad-leaved Dock
<i>Salix caprea</i>	Goat Willow
<i>Sambucus nigra</i>	Elder
<i>Sedum anglicum</i>	English Stonecrop
<i>Senecio jacobaea</i>	Common Ragwort
<i>Stachys officinalis</i>	Betony
<i>Taraxacum officinalis</i> agg.	Dandelion
<i>Trifolium repens</i>	White Clover
<i>Typha latifolia</i>	Reedmace
<i>Ulex europaeus</i>	European Gorse
<i>Ulex minor</i>	Dwarf Gorse
<i>Urtica dioica</i>	Common Nettle
<i>Vicia sepium</i>	Bush Vetch
<i>X 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.