

New Forest Fact File

WILDLIFE AND CONSERVATION

Wildlife and its management in

The New Forest

The New Forest is a semi-natural landscape which has been shaped since prehistoric times by man and his animals. It is the largest remaining area of lowland heath in Britain and the mosaic of different habitats provides for a rich flora and fauna. Many rare and endangered species of animals and plants are found here.

The following information is not an in depth look at the flora and fauna of the New Forest but illustrates the importance of the area for nature conservation and provides examples of how the Forestry Commission manages wildlife in the New Forest.

REPTILES

All six native reptiles are found in the New Forest, in addition to 3 species of newt, the common frog and common toad.

Habitat destruction elsewhere has meant that the New Forest has become an important haven for these creatures. Careful, traditional management has provided a relatively stable range of environments important to the different species, although some have shown declined in recent years.

Snakes

Adders are the most commonly seen snake in the New Forest and are found in open spaces such as heath and grassland. Grass snakes are also found in the Forest but in damper areas such as valley mires. The rare smooth snake is found in the New Forest preferring dry, sandy hillsides with heather and gorse, sloping down to marshy valleys - conditions provided perfectly by the lowland heaths of the New Forest. These creatures are protected by law but are in danger from the destruction and over use their habitats in Britain.

Sand Lizard breeding programme

Sand lizards are a rare and endangered species preferring dry, open country. In Britain they are found only in the sandy heaths of Dorset, Hampshire and Surrey, and the Lancashire coastal strip. Sand lizards were extinct in the New Forest by 1970. A captive breeding programme was set up by the Forestry Commission in 1985 in liaison with the British Herpetological Society. Breeding pairs were captured and bred at Marwell Zoo and the New Forest Reptile Centre and the young released onto selected sites. A good site will have a good depth of heather for protection and a south facing aspect to gain warmth from the sun. If no suitable sites are available then a site is prepared. Patches of bare sand are exposed to improve egg laying sites and natural heather is retained in suitable areas. This reintroduction programme began in 1989. In 1998, 806 young sand lizards were released onto six selected sites and signs of breeding of previously released adults were seen. The program continues to be a success and monitoring is ongoing.

INVERTEBRATES

The New Forest is very rich in invertebrate species with 55 % of butterflies and moths, 46% of beetles, 74% of dragonflies and damselflies, and 67% of grasshoppers and crickets that are found in Britain being found in the New Forest.

Up to 10,000 species of invertebrates are found in the Ancient and Ornamental woodlands and are mainly associated with the large quantities of dead wood found in these areas.

Stag Beetle

Nationally, numbers of stag beetle have decreased and in 1997 the Hampshire Stag Beetle Hunt was launched with funds from the EU Life project in the Forest. The survey is gathering information about the distribution of Stag Beetle in the county as part of a national study and will provide a clearer indication of the status of the British Stag Beetle population. Stag beetles feed on sap and fruit and lay their eggs in the dead wood of deciduous trees. The larvae remain in the wood for up to 4 years before they emerge as adults and breed. Their life cycle therefore requires ancient trees and dead wood which should make the Ancient and Ornamental woods of the New Forest an ideal habitat. Records received during the first year of the survey however have been almost entirely from local gardens rather than the Forest itself. This suggests that the Ancient and Ornamental woodlands are not the ideal habitat we thought they were. The reasons for this are not clear.

New Forest Cicada

The New Forest Cicada, discovered in The New Forest in 1812, was thought to be extinct in 1941 but was rediscovered in 1962. It is the only cicada found in the UK and is only found in the pasture woodlands of the New Forest. The New Forest cicada lays its eggs in the stems of trees and shrubs and when the larvae emerge they fall to the ground and live subterraneanly for 3 to 17 years feeding on root sap. When they emerge, the adults live on the aerial parts of the plants and feed off the sap. This adult stage lasts only 6 to 8 weeks. The decline in numbers of New Forest cicadas may be linked to the decline in the number of small leaved lime trees which are its favoured host, although these trees have been very rare in the Forest for hundreds of years. In an attempt to revive the cicada population, a number of lime trees have been planted in recent years. Monitoring the effectiveness of the planting is a long term project due to the length of the subterranean larvae stage of the life cycle.

Another theory for the decline of this species in the New Forest is that the English climate does not suit it very well and it can only live on warm south facing slopes where the various elements of open vegetation are present. Even in the New Forest these areas are not common and the presence of trees which it needs also serve to reduce the temperature at ground level and delay the development of the larvae. Only very few places have the correct requirements and these need to be carefully managed to provide the right balance of warmth and humidity.

Butterflies and Moths

Inclosure rides and glades allow sun into the plantations encouraging the growth of favoured food plants of butterflies, moths and other nectar-feeding and shrub dwelling insects. A decrease in this flora resulted from letting common stock into the inclosures in the early 1960s and the mowing of rides which brought about a dramatic decrease in the variety and numbers of these insects in the New Forest. The practice of allowing commoners' stock into inclosures has largely been eliminated and there is an ongoing programme of ride re-instatement being carried out by the Forestry Commission. This aims to encourage the growth of plants such as brambles and thistles, the preferred food source of the Silver-washed fritillary butterfly, and violets, the food source for many caterpillars. The indications are that this has been a successful programme to date, with a gradual recovery of the populations of butterflies, moths and other nectar-feeding and shrub dwelling insects being recorded.

BIRDS

Plantations in the New Forest support a number of birds of prey including sparrowhawks, common buzzards, hobbies, kestrels and the rare honey buzzard, all of which are protected by law. Before any felling is carried out in the inclosures, trees must be checked for nests, which if present are recorded and felling will be delayed until the young have fledged the nest. Gold crests and firecrests are also found in these habitats. Ancient and Ornamental woodlands are rich in insect species and therefore also support a number of insect feeding bird species including all three species of woodpeckers, redstarts, spotted flycatchers and adolescent hawfinches (adult hawfinches are not insect feeders). Many bird species are found on heathland including the nationally rare Dartford warbler, nightjar (a summer visitor) and occasionally, a breeding pair of Montagu's harriers. Valley mires support populations of snipe, curlew, lapwing and a few redshank although the latter three are very prone to disturbance by recreational users and dogs so have not fared so well in recent years.

Sparrowhawks

New Forest keepers are involved in a sparrowhawk conservation programme which monitors the numbers of adults and size of broods in the New Forest. The young are ringed to provide information on their movements once they have left the nest. The levels of organo-chloride residues in eggs are also monitored to provide information about the effect of these chemicals on breeding success of sparrowhawks, following the reduction in sparrowhawk numbers in the New Forest in the 1960s which has been attributed to picking up organo-chlorine from their prey.

Montagu's Harriers

In 1995 a pair of Montagu's Harriers returned to breed in the North of the Forest after an absence of 30 years. The Montagu's is a very rare summer visitor to Britain and because of its habit of ground nesting, is very vulnerable to casual disturbance by visitors and predation by foxes. In 1998 their breeding was unsuccessful due to the eggs being taken by crows. This highlighted the continued need for the Forest Keepers to control the numbers of crows and magpies, which are artificially high in the Forest, because they scavenge scraps left by Forest visitors. If they are not controlled they will endanger not only the Montagu's harrier but also Dartford warblers and woodlarks.

Dartford Warbler

These birds are confined to lowland heaths and are being threatened by the loss of suitable habitats throughout Britain. The population in the New Forest is approximately 500 pairs (540 pairs in 1994) making it the most important population of Dartford Warblers in Britain. Management of the open heath through burning is closely linked to the requirements of this nationally rare bird, with mature dry heath and gorse its optimum habitat.

MAMMALS

Deer

The New Forest is home to five different species of deer - fallow, roe, red, sika and muntjac. In the past, deer numbers have been controlled by hunting by man and by their natural predators (wolves, bear and lynx). Today, in the absence of these controls, it falls to the Forestry Commission keepers to keep numbers at a sustainable level. Deer cause damage to forest crops and also threaten grazing on adjacent lands and therefore must be regulated as part of the management of the New Forest.

The Forestry Commission's objective towards deer management as stated in The New Forest Management Plan is;

“The value of Fallow deer in maintaining the traditional character of the Forest by their contribution to the grazing regime is recognised. However, the population will be maintained at a level commensurate with an acceptable level of risk of damage to Forest crops and damage to neighbours' crops.”

In order to achieve this objective, forest keepers carry out a census of deer across the Forest every April. These figures are then used to develop a shooting plan for control of populations so that numbers do not rise beyond the capacity of winter food supply and cause excess damage to timber crops. Culling is carried out using high velocity rifles from specially constructed high seats and is carried out at different times of the year for male and female and different species.

Fallow:	Buck	August - April
	Doe	November - February
Roe:	Buck	April - October
	Doe	November - February
Sika and Red:	Stag	August - April
	Hind	November - February

No culling takes place during October when fallow, red and sika deer are mating.

New Forest Management Plan 2001-2006: Deer population to be maintained at:

Fallow	1200
Roe	400
Sika	100
Red	100
Muntjac	To be excluded

Grey Squirrels

The Forestry Commission's objective in relation to grey squirrel control as stated in the *New Forest Management Plan 1992-2001* is:-

“Attempts shall be made to control grey squirrel numbers to acceptable levels using whatever methods are permitted”

Grey squirrels cause a great deal of damage to trees by removing the bark, sometimes ring barking them (which is fatal for the tree). In order to minimise tree damage, squirrel numbers are controlled by shooting, trapping and/or drey poking by forest keepers. More recently Warfarin poisoning has been introduced as a more labour saving method of squirrel control.

Badgers

Badgers are found throughout the woodlands of the New Forest but in lower densities than surrounding areas. This may be attributed to the low densities of earthworms, their preferred food, which requires them to supplement their diet with fungi, acorns, crab apples, berries and invertebrates.

In 1976 the Forestry Commission set up a Badger Protection Group for the New Forest. At this time a survey showed that 147 to 154 setts were present on the Crown lands, although in any one year 30 to 40% of setts are not occupied. Between 1976 and 1984 the population of adults was approximated as being between 235 and 262 (FC 1984), with 322 setts being recorded in 1982. A survey carried out in 1990 by the New Forest Badger Protection Group estimated the adult badger population as being between 163 and 191. This is the first time since the group started monitoring the population that numbers have dropped below 200 and the indications are that numbers have now stabilised.

Updated: jan2004. R Daponte

Badgers are protected by the Protection of Badgers Act 1992 under which it is an offence to damage or obstruct a sett showing signs of current use by badgers, or disturb a badger within a sett. Following this Act, the Forestry Commission published a Forestry Practice guide "Forest Operations and Badger Setts" which set out guidelines which would reduce interference to setts during Forest operations. It states that;

"Most forestry operations can be carried out without interference to badger setts, provided they are carefully planning and supervised"

The general guidelines to which the Forestry Commission operate in the New Forest are as follows:

- Locate and record setts - main, annexe, subsidiary and outlying.
- Time Forest operations near setts to avoid the badgers' breeding season
- Restrict or avoid Forest operations close to badger setts (minimum 20 metres protection zone)
- When thinning and felling ~ take care that fallen trees don't damage or block setts
 - ~ do not allow extraction vehicles to enter the protection zone
 - ~ fell trees away from holes, runs or latrines
- Recreation sites to be kept away from setts

Bats

The New Forest habitats are important places for bats. Of the 16 or so species which can be regarded as native to this country, 11 have been recorded from the New Forest during the last two years.

The ancient and ornamental woodlands, heathlands and grass lawns, various ponds and even the conifer plantations provide good feeding areas for the moths, beetles and other insects which bats eat.

The most important areas are the ancient and ornamental woodlands which provide natural roost sites in old woodpecker holes, cracks in trees etc which are important to bats both as breeding sites in the summer and as hibernating sites in the winter. The New Forest is almost completely devoid of the mines, caves and cellars which are widely used by bats in other parts of the country and as a result here they are almost entirely dependent on trees. There are a few exceptions to this; these are Pipistrelles, Serotines and Long-eared bats which frequently breed in houses, the former using gaps behind fascia boards or behind hanging tiles on the outside of buildings while the Long-eared bats can generally be found actually in the roof space. The other exception is the one colony of Greater Horseshoe bats in the Forest which can be found in a cellar under a large building on the Western edge of the Forest.

The species recorded from the New Forest in recent years are:-

Noctule	Grey Long-eared
Serotine	Whiskered
Greater Horseshoe	Brandt's
Barbastelle	Bechstein's
Pipistrelle	Daubenton's
Brown Long-eared	

FUNGI

Fungi perform a vital role in the well being of their habitats and are the food and home for over 1000 species of insects. The New Forest is one of Europe's most important sites for fungi due to a combination of many factors including the Forestry Commissions good woodland management practices. To help conserve fungi in the New Forest, the Forestry Commission produced a New Forest Fungi Code. Under this code collecting of fungi is limited to amounts for personal use only. In practice this is set at up to 1.5Kg. Collection for commercial purposes is illegal under the Theft Act. Two areas have been demarcated where no collecting at all is permitted to allow scientific comparisons to be made. These areas are clearly signed.

In 1998, a national guide to fungi conservation "The Conservation of Wild Mushrooms" was published by English Nature in collaboration with The Woodland Trust, The National Trust, the Forestry Commission and other groups. This national approach to fungi conservation is a positive step in the move to protect the fungi of Great Britain. Additionally, 'Rotters' a new mobile exhibition tells people about the facts of life about fungi. Funded by COPUS, the Committee on the Public Understanding of Science, the exhibition will be located at the Bolderwood carpark.

FLORA

The species of flora present in the New Forest are too numerous and diverse to list here, but as one of the largest remaining areas of lowland heath and ancient woodland habitats, the New Forest supports several rare and endangered and many uncommon species. The heathland habitat is synonymous with species of heather. The lowland valley mires support marsh gentian, bog orchids, bog asphodel, cotton grass and round-leaved sundews. The pasture woodlands are important for a number of species and in Britain the internationally rare wild gladiolus is found only in the open grass areas of the New Forest which have a light covering of bracken.

There are many texts which cover the flora and fauna of the New Forest in more depth, and it is strongly suggested that further reading from the bibliography is undertaken.



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