

Part Two

# My Local Area

MY LOCAL AREA



# Action for Priority Areas

The audit of biodiversity has enabled the selection of priority habitats and species for action within this plan. By combining information on the location of priority species and habitats in the borough we can identify areas where action should be targeted first and foremost to most benefit biodiversity.

Seven priority areas have been identified and in the following pages you can read all about the habitats and species that are found in each area and why they are an important part of the borough's biodiversity. They range from the large expanse of the Itchen Valley to the much smaller area of wood and grassland around Wyvern School in Fair Oak and include a great diversity of habitats and species from mudflat to heathland, brent goose to green-winged orchid.

For each area, the main issues that affect their biodiversity are explained and detailed action is proposed to address each issue individually.

The overall aim of each action plan is to enable successful protection, management, restoration and creation of priority habitats that will in turn promote the protection and enhancement of populations of priority species. Reference is made to the relevant Hampshire habitat action plans (from which these plans have been developed) at the end of each priority area action plan.

Where more specific action is considered to be required for a species, an action plan has been developed and can be found in Volume 2 of the Hampshire BAP. Reference is made to relevant Hampshire species action plans after each priority area plan.

Action plans covering species found in the borough will be implemented by working groups made up of organisations that have most influence over the conservation of each particular species.

Of course, each plan is not going to be entirely comprehensive; there may well be issues that you are aware of or species that you have seen that are not mentioned. It is hoped that as you read through the plan you will come up with ideas as to how you may be able to help with either some of the action proposed or by coming up with new plans for example, perhaps for improving a particular area you know in your locality.

With this in mind, details of who to contact to become involved in biodiversity action are given in Appendix 3.

## Key to habitat maps for priority areas:

-  Woodland
-  Unimproved grassland
-  Improved grassland
-  Arable land
-  Heath
-  Coast
-  Wetland
-  Built-up

# Action for the Flexford Priority Area

## Quick facts

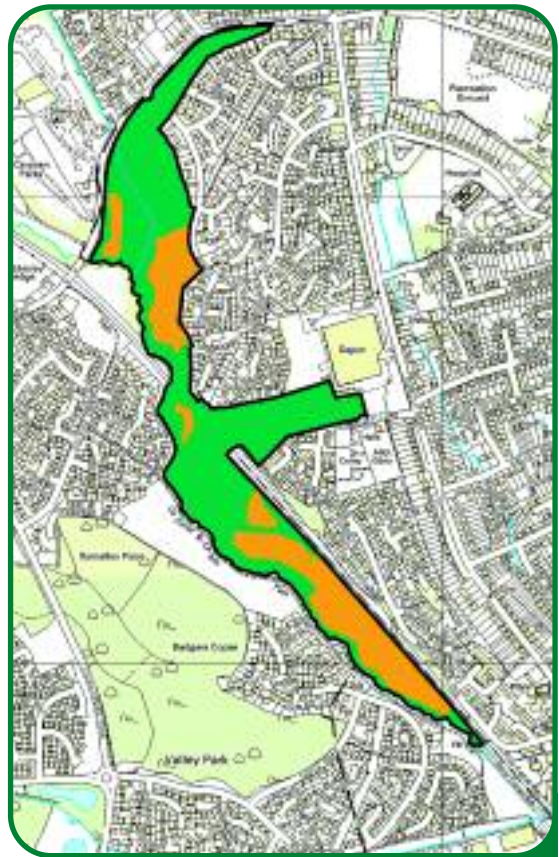
Total area: 22ha (same area as Lakeside Country Park)

Designations: SINC – 98%

## Location

The Flexford Priority Area is located on the extreme northwestern edge of Eastleigh Borough, along the valley of the Monks Brook, a tributary of the

River Itchen. Urban Chandler's Ford is to the east and the new development of Valley Park is to the west. The railway line to Romsey divides this priority area in two. There is good access to the area for pedestrians with a network of footpaths crossing the site.



The first development in the area was the construction of the railway line back in 1847. It now separates the Priority Area in two with Upper Flexford and Ramalley Copse on the northern side of the line and Lower Flexford along the Monks Brook to the south.

The whole Flexford Priority Area is well served by public footpaths and regularly used by the local community to enjoy the wildlife and countryside. However, some problems with rubbish tipping and garden waste disposal occur and this can cause problems to grazing New Forest ponies and encourage the spread of rampant alien species as well as looking unsightly. In addition, severe erosion is caused by bikes being used off designated tracks.

Ramalley Copse, to the northeast of the railway line, is owned and managed by Eastleigh Borough Council. It is termed ancient semi-natural woodland, with documented records for it going back to the 16th century. Management for specialised woodland plants and animals is practiced by coppicing which benefits biodiversity through increasing the variety of conditions available for different species within the wood.

## Description

Once, the majority of the area was managed by Hiltingbury Farm with blocks of ancient woodland (a key habitat in the area supporting many rare sedges) interspersed with grazed meadows and species-rich hedgerows. Now all of the Flexford Priority Area is owned by Eastleigh Borough Council, having acquired it as a condition of planning permission for the Millers Dale housing estate back in 1980.

The stream corridor of Monks Brook, a tributary of the River Itchen runs through the heart of the area and forms an important green corridor for both people and wildlife, linking together remaining fragments of semi-natural habitat along its course and bordered by large stands of alder carr.



## Woodland Management

Many species of our native trees do not die when they are cut but instead send up new shoots. These replace the trunk cut down with several smaller trunks. This process is called coppicing and has been used by man since Neolithic times to produce a renewable source of wood products. Areas of woodland were cut on a rolling basis, about once every 10-15 years. Traditional coppicing includes the retention of some larger trees (known as standards) amongst the stools. In the past, these trees provided planks for house, ship and furniture building and its legacy can be seen within Ramalley Copse today, notably by the presence of several large wild cherry trees.

The rest of the area within the Flexford Priority Area falls within the Upper and Lower Flexford Nature Reserve, an area of ancient woodland, alder carr woodland and wet grazing meadows, interspersed with old hedgerows. The land is leased to the Hampshire Wildlife Trust which manages it for wildlife conservation and the quiet enjoyment of the public. This oasis is characteristic of how much of the countryside would have appeared prior to the major housing developments at Chandler's Ford, Millers Dale and Knightwood.

The wet grasslands on the reserve support many plants that are declining a great deal within the countryside as a whole through the increase in intensive farming practices such as fertiliser and pesticide application. Marsh marigolds are amongst the first plants of spring to flower and are found on the wettest areas of grassland. They brighten up any walk with their glossy bright yellow flowers and large kidney-shaped leaves. Later, ragged robin, southern-marsh orchid and yellow iris put on their summer-time floral display and butterflies and other insects arrive to feed on their high nutrient 'bio-fuel' – nectar. Common meadow butterflies such as orange-tip, meadow brown and gatekeeper flit from flower to flower, topping up their energy levels as they search for a mate. The gatekeeper, meadow brown and the rarer, marbled white are particularly associated with grasslands as their caterpillars feed on grasses. The reserve supports good populations of yellow loosestrife which itself is used by a rare bee that collects the oil from the flower to feed its larvae and a nationally scarce moth (Dentated pug) whose caterpillars feed on the leaves.

Unfortunately, observations of the plants and animals over the past 10 years or so have indicated a gradual drying out of the soil in the area. Once, birds such as redshank and snipe that favour wet meadows used to breed here but they have not been seen for nearly a decade. The falling water levels in the area have probably been caused by the surrounding development. As open land was replaced by brick, mortar and paving, water that once entered the soil and percolated underground through the reserve now enters sewers and is channelled directly into the Monks Brook. Species that favour wet soil conditions are gradually being replaced by those more adapted to dry soil and in particular trees are gaining a foothold where once was open grassland. Although trees are a valuable and important part of the natural environment, other habitats such as unimproved grassland are also very important for wildlife, harbouring species that need open, sunny conditions rather than shade. Often it is the variety of habitats in an area that encourages the most species. Many need more than one particular habitat in which to successfully survive and breed. For example, the green-woodpecker mainly feeds in grasslands, searching for ants and other invertebrates but it also requires woodlands, to bore its nesthole in a tree-trunk. To combat this gradual conversion of grassland to woodland, grazing by New Forest ponies has been re-introduced on the reserve. The ponies stop trees establishing by feeding on saplings before they become too big and tough for them to consume.

This grazing similarly benefits the grassland by maintaining and increasing the variety of grasses, sedges and flowering plants present by keeping fast growing species under control.

Run-off from surrounding concrete areas is high in calcium and when this water meets the predominantly neutral conditions on the reserve, and coupled with pollutants from the road and railway there will almost certainly be a noticeable effect on the plant communities. The sudden run off from the housing is also causing severe flooding of the site. There is a need to manage the water levels to ensure a more natural water flow through the reserve is maintained.





The woodland within the Flexford Nature Reserve can be roughly categorised into two types: woodland that occurs on the wet soils along the stream, dominated by alder, and that which is present on the drier soils on the higher ground away from the stream, consisting mostly of oak and ash. Much of this woodland has been present for many hundreds of years in this location and is termed ancient woodland. Much of this woodland would benefit from coppice management allowing light to the ground flora and creating a diverse range of stand ages, which will increase the longevity of the woodland.

### Ancient woodland

Ancient woodland is woodland that has been present since at least 1600, if not before this date. It is often much richer in woodland plants and animals than those that have developed only more recently. This is due to the slow rate at which such specialised woodland species colonise woodlands. The older the woodland is the longer the time species have had to colonise it. Therefore there is a greater diversity of species present in ancient woodlands than in more recent ones.

Wildflowers include bluebell, yellow archangel and solomon's seal and because these species are usually only found in ancient woodlands they are termed 'ancient woodland indicator species'. If you spot these species in a woodland it gives you a good clue that the wood as a whole has a long history, probably dating back before the 16th century.

Along much of the stream bank, wild garlic (otherwise known as ramsons) grows in profusion. It belongs to the same family of plants as garlic and onion, and this association becomes very evident if you bruise a leaf, a strong smell of garlic is given off. Waterside birds such as kingfisher and grey wagtail can be spotted flitting along the stream hunting for fish and insects.

## Action

### Issue 1: Water quality and quantity

#### Current action

The Environment Agency monitors the water quality of rivers and streams and takes action to minimise pollution incidents. In 1996, a physical survey of the whole of Monks Brook was carried out on behalf of the Environment Agency and this included noting any plants and animals seen.

#### Proposed action

Carry out a vegetation survey of the reserve to re-classify the now stable plant communities and use for future monitoring. \*(HWT)

Complete an analysis of the reserve in terms of water levels and water chemistry to inform the management process. \*(HWT/EA)

Explore ways in which the management of adjacent railway embankments, roads and the upstream pumping station can be altered to minimise damaging effects that occur to the reserve. \*\* (HWT/EA/HA)

Explore ways in which run-off from surrounding housing can be regulated to prevent flooding incidents through the reserve. \*\* (EA/HWT)

### Issue 2: Mis-use

#### Current action

Voluntary wardens, members of the nearby neighbourhood, monitor the Flexford Nature Reserve on a regular basis, keeping the Hampshire Wildlife Trust's warden up-to-date with any issues or problems that have occurred on the reserve.

#### Proposed action

Discourage people from dumping waste into the reserve by liaising with the public and community groups on a one to one basis \*(HWT)

Fully audit the damage being done to the reserve by unauthorised activities and raise awareness of these by locals and involve them in practical solutions such as footpath improvements, moving some rights of way etc \*\* (HWT)

**Issue 3: Woodland management**

**Current action**

Coppicing has been re-introduced to Ramalley Copse and is carried out by Eastleigh Borough Council's Countryside Service.

**Proposed action**

Continue to periodically coppice sections of Ramalley Copse in line with the woodland management plan.\* (EBC)

Promote management of the alder carr woodland by coppicing and removal of laurel to create more light, therefore increasing diversity.\*\* (HWT)

Where woodland and grassland meet, the woodland edge should be cut to provide a wavy edge thereby creating sheltered bays and increasing the diversity of conditions for wildlife. \*(HWT/EBC)

Monitor the effects of coppice management on the plant and animal communities, surveying the woodlands at a minimum, once every 10 years \*(EBC/HWT)

**Issue 4: Grassland management**

**Current action**

Grazing, scrub removal by hand and mowing are practised on the valuable grassland habitats.

**Proposed action**

Ensure that light grazing of appropriate areas of grassland continues into the foreseeable future \*(HWT)

In areas where grazing is not possible, continue to cut and rake every other year.\*(HWT)

Continue the programme of scrub control on valuable grassland areas by cutting encroaching scrub if necessary \*(HWT)

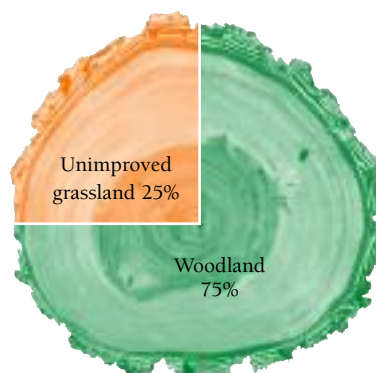
Encourage the laying of scrub around the edges of the reserve to form valuable hedgerows \*\* (HWT)

Carry out a vegetation survey of the grassland areas once every five years, particularly noting any changes that are occurring to plant communities \*\* (HWT)

Scrub of all ages occurs in boundary areas and dominant species are hawthorn and buckthorn with smaller yet still noteworthy populations of dogwood, elder and blackthorn. These areas provide good nesting and feeding opportunities for many species of bird such as blackcap, nuthatch and willow warbler. In the past, there has been some hedge laying, but there is the potential to do more to enhance this habitat

The reserve is managed by volunteer wardens and a local working group that carry out tasks to maintain the habitats within the reserve. Standard monitoring techniques, developed by English Nature are used on the reserve to ensure that the site remains in favourable condition.

**Areas of habitats within the Flexford Area**



NB: 2km length of Monks Brook stream also within the priority area

**Eastleigh Priority Species recorded within the Flexford Priority Area**

**Recorded in last five years**

Yellow loosestrife\*

\* Priority species in Eastleigh Borough only

**ACTION TIMESCALE**

\* within next 2-3 years

\*\* within next 5 years

\*\*\* within next 10 years

**KEY TO ORGANISATIONS**

EA  
Environment Agency

EBC  
Eastleigh Borough Council

HA  
Highways Authority

HWT  
Hampshire Wildlife Trust

**Relevant Hampshire species or habitat action plans for Flexford Priority Area are:**

- Pipestrelle bat
- Birds of wet grassland
- Ancient semi-natural woodland
- Unimproved neutral grassland
- Hedgerow

# Action for the Itchen Valley Priority Area

## Quick facts

Total area: 468 ha  
(roughly the same area as  
Hedge End)

### Designations:

cSAC – 34%

SSSI – 42%

SINC – 28%

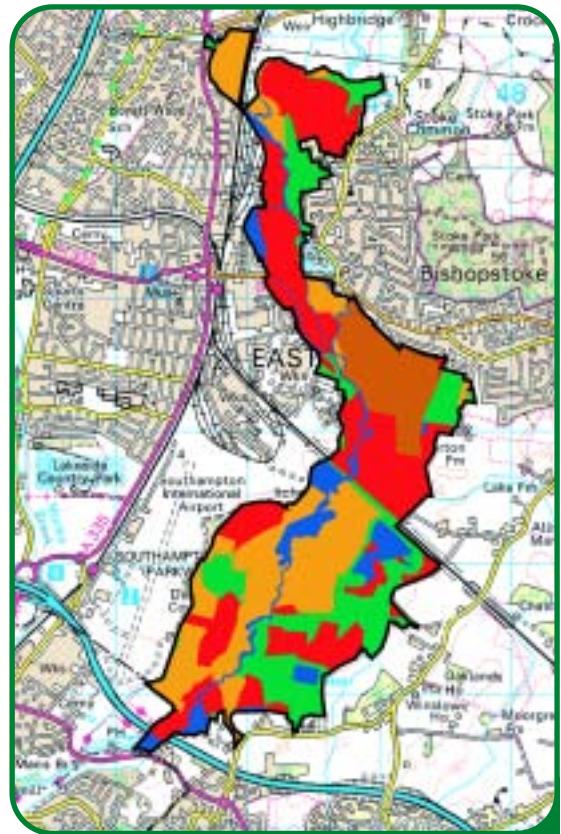
## Location

The Itchen Valley Priority Area is situated in the northwest of the borough and encompasses the channels of the River Itchen and its associated floodplain and also some land elevated above the wet valley floor, on the valley sides.

The numerous channels that comprise the River Itchen enter the borough north of the towns of Eastleigh and Bishopstoke, continue southwards between the two towns and onwards through the wide-open floodplain north of West End. They leave the borough at Gaters Mill, just north of Southampton City.

Many of the channels have been constructed or adapted by man to divert the course of the river to supply water for mills, flood meadows or, as in the case of the Itchen Navigation, to provide passage for boats.

Most of the river itself and some areas of the floodplain are designated as either cSAC, SSSI or SINC.



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## Description

Chalk streams are so-called as they arise and flow over chalk rock. Chalk rock is water-permeable and soaks up and stores any rainwater that falls on it deep beneath the earth's surface much like a giant sponge. The water-holding rock is known as an aquifer and it is from this that chalk springs spout at the surface – the sources of chalk streams and rivers.

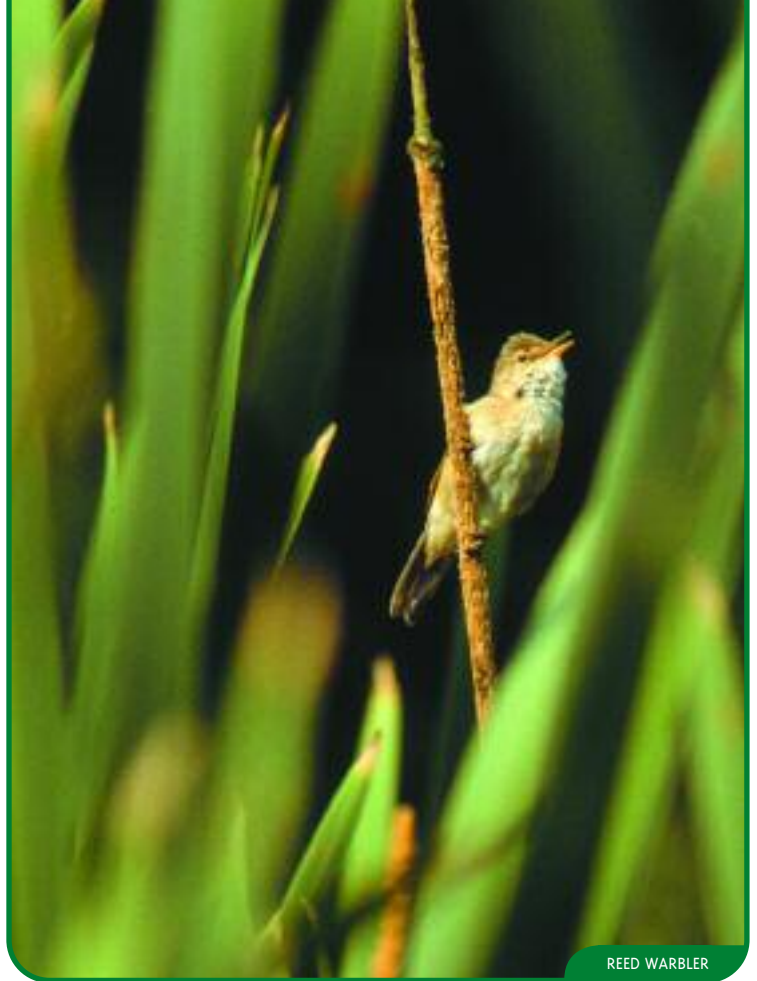
As chalk streams are fed from underground aquifers and not directly from erratic rainfall they have a steady flow of water throughout the year that is relatively constant in temperature, well oxygenated, lime-rich and clear. The porous nature of the aquifer also filters out pollutants that enter the chalk in rainfall and because of this the River Itchen generally has water of good quality flowing through it. In places, however, where rainwater or sewage discharges directly enter the river, water quality decreases. The pollutants include phosphates and silt washed off farmland, synthetic chemicals from industry and bacteria from sewage effluent.



In the water of the main river channels, water crowfoots and other submerged plants grow luxuriantly. The water-crowfoot, a relation of the buttercup, is almost entirely submerged; only the small white flowers are pushed above the water to be pollinated by airborne insects. Firm roots attach it to the gravel bed of the river to prevent it being washed downstream in the fast flowing waters. The vegetation in the channel provides cover for a good number of different fish species such as the internationally protected bullhead, brook lamprey and Atlantic salmon.

Small numbers of Atlantic salmon still make the journey from the sea to where they themselves were hatched in the gravels of the River Itchen. They spend the first few years of their lives as juveniles in the freshwaters of the river feeding on invertebrates and then make the transition to saltwater as they head out to sea to become breeding adults. On their return to breed, fishing reduces their numbers if they are not returned after being caught and then any remaining fish swim upriver to their favoured stretches of stream for egg-laying. Once the eggs are laid in the gravel of the streambed, they rely on a steady flow of oxygen-rich water over them to develop. Many of the salmon's historical spawning gravel areas have become choked by silt, washed from the floodplain, especially off cultivated land which has much exposed soil. The silted gravel no longer provides sufficient oxygen in which the eggs can survive so hatching of salmon fry has been much reduced. In addition structures in the river channel such as mill impoundments, sluices and weirs may block the passage of many species of fish as they move upriver to spawn, although fish passes such as those at Bishopstoke Lock and Allbrook have eased this problem by providing gradual inclines for the fish to swim or leap up.

The river is famous for its trout fishing and has been managed for this interest for many years with the current biodiversity of the river developing alongside the fisheries. The river south of Kings Worthy is stocked with farm-raised brown trout to meet fishing demand but north of here a small population of wild brown trout exists. Behavioural and genetic interactions between farmed and wild trout may not be beneficial to the long-term



REED WARBLER

survival of the wild trout populations as they may interbreed or be out competed for the best habitats within the river by the larger farmed fish.

The good water quality of the river and the gravel substrate support an abundant and diverse invertebrate community. Many rare and specialised species such as the fine-lined pea mussel and the white clawed crayfish are found, the latter having declined by between 25-49% in the last 25 years due to the spread of a fatal disease from introduced crayfish to our native species. It is so endangered that it has disappeared from the stretch of the River Itchen that flows through Eastleigh Borough, being confined to only the most upstream reaches of river where the crayfish plague has not spread.

The water vole, a semi-aquatic mammal that lives along the rivers edge excavating burrows in the banks has also been detrimentally affected by an alien species. Mink kept in farms for their fur have escaped within the catchment and prey on water voles. This predation coupled with clearance of bank side vegetation for fishing access and development has led to a 94% decline in their UK population size between the years 1989 and 1997. It was also once thought that mink may also harm the otter by out competing it for fish, but research has shown that this may not be true. Being such a



large animal, about 10 times heavier than the mink, the otter can easily deter a mink from an area in which it is feeding. The loss of natural bank sides, as well as disturbance by humans and dogs, is thought to be more of a problem for otters in the area.

Off the main river channels, in ditches and drains that criss-cross the valley floor, the water flows more sluggishly than in the main channels and silt builds up as the water slows down and drops particles it can no longer hold in suspension. Here, plants that benefit from the deep silt such as bur-reed, yellow iris and water parsnip grow along the bank-side. These plants are known as emergents, most of their leaves and stems are above the water surface but their roots are bedded in the silt taking up nutrients and water. Further up the bank and in areas of wet swampy ground not directly fed from the river, other plants that have attractive flowers such as purple loosestrife, greater willowherb and meadowsweet can be found as well as extensive areas dominated by grasses such as common reed and reedmace (often incorrectly called bulrush). These species need wet ground but do not tolerate their roots being immersed in water and provide suitable nesting and feeding conditions for specialised birds such as reed warbler, sedge warbler and Cetti's warbler.

Inhabiting some of the drains that criss-cross the floodplain is the very rare southern damselfly, a relative of the more familiar dragonflies that are often seen flitting around ponds. As a flying adult the damselfly is brightly coloured with striking blue and black markings. It only survives as an adult for a few weeks over the summer where it searches for other adults with which to breed. Most of its life it spends in the drains, submerged in the silts developing as an aquatic nymph. It is not until it is about two years old that it crawls out of the water, up a plant stem and transforms into the flying adult stage.

The floodplain of the river is naturally flat and wide and largely in agricultural use as grazing land, although in places where development occurs close up to the river's banks the floodplain is constricted. The banks of the river may be artificially modified, by widening, deepening,

straightening and bank reinforcement to prevent flood risk. This leads to the direct loss of bank side vegetation and natural features in the stream such as riffles, shingle banks and meanders. Such an artificial environment does not provide for as diverse a range of species as is present elsewhere in the river.

### Water meadows

In the past, the meadows along the valley floor were managed as water meadows with channels and water control structures being operated by hand to allow river water to flow over the grass and encourage its growth, to the detriment of other flowering plants. The resulting meadows provided very good grazing but were not very rich in wildlife. By the beginning of the 20th century this labour intensive practice had fallen out of general use as labour prices rose and artificial fertilisers and herbicides became more widely available. Since then, most of these former water meadows have undergone a high degree of agricultural improvement with the application of artificial fertilisers and herbicides which has not improved the situation for wildlife, and some of the meadows furthest from the river have since been ploughed and the drains filled in. Others, however, have been successfully managed to produce valuable wetland habitats, sometimes using special grants such as Countryside Stewardship.

Today, the best meadows for wildlife in the Itchen Valley are those that are grazed non-intensively by cattle and that do not receive any artificial fertilisers, herbicides or pesticides, for example at Itchen Valley Country Park. This management encourages the growth of a diverse community of plants in the wet meadows and along the drains such as water avens, betony and devil's-bit-scabious which are only normally confined to unimproved wet grasslands. The unimproved wet meadows also provides suitable feeding and breeding conditions for invertebrates such as dragonflies and damselflies, wetland birds such as snipe and redshank and mammals such as water vole and water shrew.

There is growing evidence that water levels, both in the river itself and flowing underground through the floodplain, have fallen as a result of increasing water abstraction over the past few decades. Many species reliant on high water levels are therefore declining or disappearing from the river and its valley. A study of breeding waders on the River Itchen between the years of 1976 and 1982 indicated a decline of 50% in breeding snipe and redshank and this has been attributed in part to falling water levels within the floodplain and the loss of unimproved grassland due to agricultural improvement. Somewhat ironically, the old water meadow structures are now providing a means of retaining water to benefit wildlife by increasing water levels. Abstraction not only impacts water quantity but also water quality. By reducing the amount of water in the river, levels of pollutants present are less diluted.

Ponds and lakes are scattered throughout the valley with the largest lakes being found at Willow Farm, just south of the railway line between Eastleigh and Hedge End, formed from disused

gravel extraction pits. Some ponds are former duck decoys and have characteristic curving ditches called pipes leading off a usually square or rectangular pond which is surrounded by dense vegetation. These provide breeding areas for wildfowl such as mallards and other water loving birds such as coot and moorhen.

On the valley sides large areas of woodland, some of which has been present for hundreds of years remain and add to the habitat diversity of this internationally important area. The woodlands at Itchen Valley Country Park are composed of both native and coniferous trees. Conifers are being thinned to allow the regeneration of broadleaved trees and some of the remaining conifers are to be harvested when they reach maturity. Broadleaved woodland will then replace some of the mixed stands. This will provide a more favourable habitat for our native woodland flora and fauna that has evolved with the cycle of autumn leaf loss and spring growth, encouraging for example, the familiar and well loved display of bluebells that carpet woodlands in the spring. Ride management and coppicing have been re-introduced with an accompanying rise in butterflies including the silver washed fritillary. Common woodland birds are found in good numbers, and buzzard can sometimes be seen acrobatically displaying to one another above the park.

**Decoy ponds**

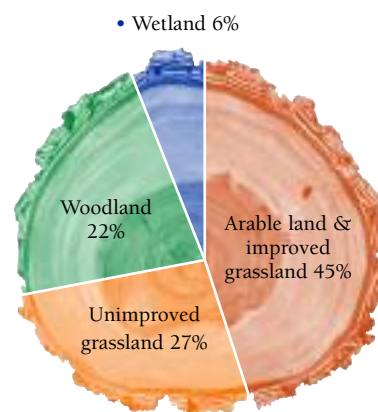
Decoy ponds were first constructed in medieval times for the breeding and management of wildfowl, mostly ducks, in order to provide a constant and sustainable supply of food.

The earliest method of capturing ducks in England was by driving them into tunnel nets at a time when the young birds could not fly and the older ones were moulting. This practice, which was in use by the 13th century, was outlawed in 1534 after numbers became seriously depleted.

Another method of capturing ducks was to use their natural instinct to keep predators in site once spotted. The decoyman would use a specially trained dog with a fox-like appearance to tempt the ducks to follow it up the pipe where they would be netted.

Duck decoys were used in many parts of the country right up to the mid 20th century but fell into disrepair as hunting for ducks declined as a result of the increase in livestock rearing to feed an increasingly urban population.

**Area of habitats within the Itchen Valley Priority Area**



NB: 13 km length of River Itchen also within the priority area. Figure for length of hedgerow is unavailable.

# Action

## Issue 1 Falling water levels

### Current action

Being designated as a European candidate Special Area of Conservation (cSAC) the River Itchen and some parts of its floodplain are protected from the harmful effects of development. Any new development that is likely to increase levels of water abstraction from the river can only proceed if it can be demonstrated that there is not likely to be a significant detrimental effect on the nature conservation interest of the site or development is in the national interest.

### Proposed action

The Environment Agency, Southern Water, Portsmouth Water and other organisations that have an influence over the management of the River Itchen cSAC are currently undertaking a million-pound study to investigate the impacts of water company operations on the River Itchen. The investigation, known as the River Itchen Sustainability Study will propose a sustainable management scheme for the long-term preservation of the river as an important area for wildlife and for water supply and must receive continued support from all involved bodies. \* (PARTNERSHIP)

Ensure that new development has minimal impacts on water resources and the natural environment through sensitive design of drainage systems and water supply in new developments.\* (EA)

Agree and implement operating contracts with organisations and individuals who manage water control structures on the River Itchen, such as sluices and gates, to optimise water levels for wildlife as part of a Water Level Management Plan for the river.\*\* (EA/EN)

Ensure any new applications for abstraction licences or increases to current abstraction levels do not reduce river flows to harmful levels \* (EA)

## Issue 2 Development

### Current Action

As the local planning authority, Eastleigh Borough Council must ensure that the habitats and species of the River Itchen cSAC are not significantly affected by any development proposals.

### Proposed action

Undertake detailed Appropriate Assessment of all development proposals that may affect the river catchment.\* (EBC)

Include policies in the local plan that restrict new development in the Itchen valley where these would lead to increased flood risk, pollution risk, loss or damage to river habitats, landscape or river corridor open space or reduced access to the river.\* (EBC)

Work in partnership to restore appropriate stretches of the Monks Brook tributary back to a more natural watercourse thus promoting habitat and species diversity.\*\*\* (EA/EBC)

## Issue 3 Pollution

### Current Action

The Environment Agency has statutory powers to regulate and prevent pollution of our rivers. It advises water companies, organisations and individuals who utilise water on ways in which to minimise pollution and it can also proceed with prosecution if a pollution incident has occurred that could have been prevented.

### Proposed action

Include conditions with planning permissions and drainage consents that address interception of oil and other chemicals to prevent pollution of the river.\*(EA & EBC)

Support a LANDCARE programme to cover the River Itchen. This programme funds a project officer who, as part of their post, advises farmers and landowners on ways in which to minimise the amount of pollutants and sediments/silts that enter watercourses through surface water run-off and soil erosion.\*\* (PARTNERSHIP)

### Issue 4 Fisheries management

#### Current action

A number of initiatives aimed at enhancing self-sustaining stocks of fish, particularly brown trout and Atlantic salmon are currently underway. These include the introduction of legislation to reduce fishing of Atlantic salmon by rod and net, and better controls to prevent the escape of farmed fish.

#### Proposed action

Work in partnership with fisheries and individual landowners to agree and implement fishery management guidelines compatible with nature conservation interests of the River Itchen.\*\* (EA/EN)

### Issue 5 Introduced species

#### Current action

Current action for the white-clawed crayfish is concentrated around surviving populations further up the River Itchen catchments. English Nature has powers to prosecute those responsible for the illegal introduction of non-native species into the wild and in conjunction with the Environment Agency can regulate the movement of introduced species by man.

#### Proposed action

Continue to survey for and research into the requirements of the water vole, white-clawed crayfish and other priority species along the River Itchen.\* (HRG)

Contribute to any relevant co-ordinated reintroduction programmes for water voles in the Borough.\* (PARTNERSHIP)

Implement appropriate mink control in key sites supporting water voles ensuring co-ordination between adjacent landowners.\* (EA/EBC/NFU)

### Issue 6 Loss of habitats through agricultural change

#### Current action

Itchen Valley Country Park is managed by Eastleigh Borough Council specifically to maintain the nature conservation interest of the site. Cattle graze the wet grasslands, sections of drains are systematically cleared and woodland is managed by coppicing and thinning, all of which promote biodiversity. A few other areas of farmland in the floodplain are maintained under the Countryside Stewardship Scheme, with financial incentives for appropriate grassland management (including measures to raise water levels) and to restore typical river valley features such as hedgerows, ponds and ditches.

#### Proposed action

Prepare a new management plan for IVCP by 2003 to guide future work on site by the Eastleigh Countryside Service. Ensure that it is in accordance with any new information on habitat management for priority species.\* (EBC)

Renew the Woodland Grant Scheme at Itchen Valley Country Park by 2002,\* (EBC)

Identify suitable areas of land within the PBA for sympathetic management work to be re-instated concentrating on areas where priority species and habitats are currently or potentially could be present.\* (HBIC)

On areas of land as identified in the action above, inform landowners of incentive and grant schemes available and encourage and support applications for the re-instatement of sympathetic management. Also provide advice on management techniques that would improve the biodiversity value of their land.\* (LLG)

Aim to establish new populations of the southern damselfly in at least one new site in the Itchen Valley Priority Area by restoring/creating suitable ditch habitat if the area is considered to be most appropriate.\* (HSDG)

Encourage landowners to convert arable land back to permanent grassland both to reduce siltation of the river and to extend wet grassland habitats.\* (FWAG)

#### ACTION TIMESCALE

\* within next  
2-3 years

\*\* within next  
5 years

\*\*\* within next  
10 years

#### KEY TO ORGANISATIONS

EA  
Environment  
Agency

EBC  
Eastleigh Borough  
Council

FWAG  
Farming and  
Wildlife Advisory  
Group

HBIC  
Hampshire  
Biodiversity  
Information Centre

HRG  
Hampshire  
Research Group  
(Comprises HWT / EA  
/ EN / Southampton  
University /  
Farnborough College /  
Sparsholt College)

HSDG  
Hampshire  
Southern Damselfly  
Group

HWT  
Hampshire Wildlife  
Trust

LLG  
Landowners Liaison  
Group (Comprises  
FWAG, Hampshire  
Management Advisory  
Project, National  
Farmers Union County  
Landowners &  
Business Association)



**Eastleigh Priority Species recorded within the Itchen Valley Priority Area**

**Recorded in last five years**

- Otter
- Pipistrelle bat
- Serotine bat
- Water shrew
- Cetti's warbler
- Firecrest
- Goosander
- Grasshopper warbler
- Little egret
- Nightingale
- Reed warbler
- Snipe
- Song thrush
- Whinchat
- Southern damselfly
- Atlantic salmon
- Brook lamprey
- Bullhead
- Buttoned snout moth
- Silver washed-fritillary
- Stream water crowfoot

**Recorded 6-10 years ago**

- Water vole
- Black tailed godwit
- Gadwall
- Golden plover
- Lesser spotted woodpecker
- Reed bunting
- Reed warbler
- Skylark
- Spotted flycatcher
- Turtle dove
- Yellow wagtail
- White clawed crayfish
- Dotted chestnut moth\*
- Kent black arches moth\*
- Mocha moth\*
- Green flowered helleborine
- River water dropwort

\* Priority species in Eastleigh Borough only

**Last record pre 1981**

- Pisidium tenuilineatum (a freshwater bivalve mollusc)
- Desmoulin's whorl snail

**Relevant Hampshire species or habitat action plans for Itchen Valley Priority Area are:**

- Otter
- Water Vole
- Southern damselfly
- White-clawed crayfish
- Pipistrelle bat
- Seed-eating farmland birds
- Birds of wet grassland
- Ancient semi-natural woodland
- Unimproved neutral grassland
- Lowland wet grassland
- Hedgerows
- Arable land
- Chalk streams



# Action for the Southern Damselfly in Hampshire



## Why action was needed

This small elegant blue and black damselfly is a globally threatened species that has disappeared or declined from many countries in Europe where it used to be more common. It is believed that up to 25% of the world's population occurs in the UK with Hampshire being a national stronghold for the species.

In Hampshire it is found in the New Forest and along the River Itchen.

The causes of the decline in this species are thought to be due to a loss of suitable habitat either by lack of appropriate management or complete habitat destruction such as through development. Changes in water levels and flows on wetlands and rivers also affects the habitat of this delicate species and as it is a poor flyer it is slow to colonise new areas and obstructions such as roads, bridges and buildings may stop it moving between areas of suitable habitat.

## Action so far

Since 1998 a body of interested organisations and individuals have formed the Hampshire Southern Damselfly BAP Group with the express aims of investigating the ecology and status of the damselfly and formulating and carrying out action to benefit the species in Hampshire.

In 1999 surveys of the River Itchen and its floodplain were carried out and in 2001 further surveys have taken place that have included studies on the species dispersal capabilities.

Eastleigh Borough Council which owns and manages Itchen Valley Country Park, one of the best sites for damselflies along the River Itchen, has drawn up a management plan for the reserve which concentrates on getting water levels right especially for this species.

## Results so far

The surveys that have already taken place have helped to identify the location and status of the southern damselfly in Hampshire and in Eastleigh borough with six new sites being discovered along the River Itchen during the 1999 survey. The habitat requirements of the species are also becoming clearer and this will assist in habitat management.

## The future

Both the southern damselfly and its habitat need to be targeted for action if the southern damselfly is to continue to survive and even spread out into other suitable habitat in the borough.

Action to maintain and increase the numbers and range of the southern damselfly in the borough:

- The Environment Agency and English Nature will endeavour to restore and create 0.5 km of new ditch habitat suitable for southern damselfly in the Itchen Valley by 2004
- English Nature and the Environment Agency will produce and implement Water level Management Plans on southern damselfly breeding sites to help meet the water requirements of the species.
- Eastleigh Borough Council is in the process of revising the detailed management plan for Itchen Valley Country Park in line with new research findings regarding the southern damselfly's habitat requirements.
- Eastleigh Borough Council as a local planning authority will ensure that future development in the borough does not adversely affect existing or possible new populations of southern damselfly, either directly through habitat destruction or indirectly through hydrological changes.

Action to gain a better understanding of southern damselflies in the Borough:

- HSDG will continue to investigate the species ecology and habitat management requirements.

### What you can do to help damselflies and dragonflies

To help to maintain and increase the numbers and range of damselflies and dragonflies in the borough you can:

- Build a pond in your garden. Even a small water feature will attract dragonflies and damselflies and you may be lucky to see the nymphs crawling up a plant stem and transforming into an adult.
- If you own or manage larger pieces of land, ponds are a very valuable wildlife habitat that you may consider building. Seek advice before you build a pond as it may result in damage to surrounding wetland habitats if sited in the wrong place and may require planning permission.

- If you have a long forgotten pond or other wetland habitat on your land consider restoring it to a more valuable wildlife habitat by sympathetic management. Advice on wetland management and incentive schemes such as Countryside Stewardship is available from DEFRA.
- Visit Itchen Valley Country Park and support the work that is taking place to conserve the southern damselfly. Take a walk around the water meadows that support the southern damselfly and you may be lucky to see one during warm, still summer days.
- Come along to a practical conservation task in a wetland to benefit damselflies and dragonflies. This may involve digging a new pond or clearing out a silted up one.
- If you know of or are concerned for a local pond consider becoming a pond warden as part of the scheme supported by the British Trust for Conservation Volunteers. Wardens look after and monitor local ponds for wildlife.

To help us gain a better understanding of damselflies and dragonflies in the Borough you can:

- Become a recorder for the British Dragonfly Society. They hold regular events that will help to improve your identification skills and your sightings will be added to a nationwide database to assist in their conservation.

### Where to see it

The southern damselfly is a small, delicate blue and black insect that is only on the wing during the summer months and even then only when it is not too windy. It looks very much like other, more common damselfly species and can only be distinguished from its more common cousins by people who have a trained eye. However, a visit to Itchen Valley Country Park in the summer should reward you with sightings of many damselflies and dragonflies. Follow the trail through the water meadows for the best views.



COMMON HAWKER DRAGONFLY

# Action for the Moorgreen Priority Area

## Quick facts

Total area: 15 ha  
(equivalent to about 27 full-size football pitches)  
Designations: SSSI – 93%

## Location

The Moorgreen Priority Area is located roughly in the centre of the Borough, along a small tributary of the River Hamble. Busy roads surround it on most sides including the M27 motorway as it curves around West End. The large retail complex of Hedge End is to its south and the built up area of West End is to its west. To the north is grazing land intersected by hedgerows. Much of the Priority Area is privately owned and designated as SSSI. Woodland along the southern and eastern edge of the Priority Area is mostly included within the SSSI and owned and managed by Eastleigh Borough Council with public access.

## Description

The meadows within the Moorgreen Priority Area are amongst the richest grasslands for wildlife in the Borough, being agriculturally unimproved. They have a far greater variety of plants and animals compared to agriculturally improved grassland as they have not received any applications of artificial fertilisers, herbicides or pesticides or been re-seeded with only a few species of grass.

Across the UK, 97% of this habitat has been lost between 1930 and 1984, making it one of the most endangered in Britain today. Surviving pockets of unimproved grassland, like that at Moorgreen Meadows are therefore very important to wildlife at both a local and national scale and this is acknowledged with the designation of the site as a Site of Special Scientific Interest (SSSI).



## Peat

The grasslands within this Priority Area have formed on moist, organic-rich soil known as peat, which is composed of slowly decomposing plant and animal remains. The wetness of the soil all year round prevents bacteria from getting enough oxygen to break down the remains quickly and so the thickness of the peat layer tends to grow each year. The water in the soil comes from surrounding springs that issue from natural breaks in the rock nearby and flow through the site wetting the peat as they go.

Within the wet grasslands, plants whose names suggest their love of moisture can be found, often in great abundance and providing a colourful display of flowers throughout the spring and summer. These include marsh orchids with their deep pink flowering spikes, bog pimpernel with its small white flowers and low creeping habit and bog myrtle, a rare shrub outside of its strongholds in the New Forest and northeast Hampshire heathlands.



COMMON SPOTTED-ORCHID

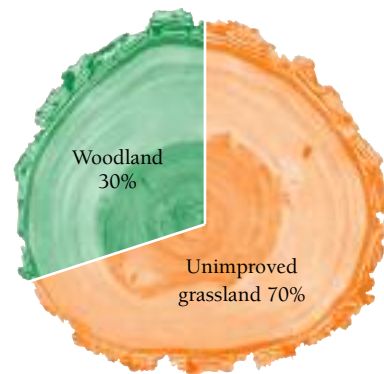


The variety of plants in turn, promotes a richness of animal life. Many more insects, birds and mammals occur in unimproved grasslands than in improved ones due to the increased variety in plants on which to feed, shelter and grow. Unfortunately the building of the motorway at the western end of the Priority Area has changed the underground patterns of water flow into the SSSI and the fields at the western end of the Priority Area have dried out. This has led to a decline in many of the species that were formerly common and characteristic of the damp peat. The once large population of orchids, including the most southerly population of the northern marsh-orchid, have declined considerably since the early 1990s. In addition to the motorway, small-scale features within the site itself also affect the water content of the peat. Numerous small drains criss-cross the site to provide drainage to surrounding ground, utilising the tendency of water to flow with gravity to the lowest areas. In the near past however, some channels have been deepened and the surrounding peat has dried out to a greater degree than other areas

Species-rich unimproved grasslands need to be managed to maintain their nature conservation interest and this is accomplished by grazing cattle on Moorgreen Meadows. Cattle prevent scrub from spreading into the grassland and shading out the lower growing plants and also maintain the diversity of plants within the meadows by removing dead plant matter that would otherwise choke out smaller, less quick-growing species of plant. Over-grazing however – allowing too many cattle to graze for too long a period – also suppresses the more interesting plant communities and if continued over a number of years can be damaging. Therefore, the right balance needs to be struck to achieve optimum conditions for the important plant communities.

The south and eastern side of the Priority Area is mostly wooded and owned by Eastleigh Borough Council who maintain the Rights of Way across the site. Much of the woodland has developed on former areas of grassland and has species such as alder and willow on the wettest peat, although some of the oak and ash woodland on the drier soils, away from the stream and drains has a longer history and has been coppiced in the past.

### Area of habitats within the Moorgreen Priority Area



NB: 1 km of stream and 1.5 km of hedgerow also within the priority area



HOVERFLY

# Action

## Issue 1 Drying out peat

### Current action

English Nature has special responsibility to monitor the condition of SSSIs throughout the whole of the UK. It can work alongside land managers and other government agencies to promote initiatives to restore sites that are being damaged by factors outside the control of any one individual or organisation.

### Proposed action

Undertake hydro-geological studies to build up an accurate picture of the groundwater and surface water flows on the site throughout the year.\* (EN/HRG)

Monitor any changes that occur to vegetation communities and their associated species and compare with hydrological changes, such as water chemistry and ground water.\* (EN/HRG)

Explore ways in which the water flows within the reserve can be managed to ensure the long-term survival of a diverse vegetation community if monitoring indicates harmful effects are occurring.\*\* (EN/HRG)

## Issue 2 Inappropriate management

### Current action

English Nature has statutory powers to formulate and if need be, impose on land owners and managers of SSSIs schemes of management to ensure the nature conservation interest of the SSSI does not diminish as a result of mis-management.

### Proposed action

Review current grazing management on the SSSI and formulate a management scheme ideally suited to the maintenance of the important plant communities.\*\* (EN)

## Issue 3 Lack of management

### Current action

Eastleigh Borough Council own and manage the southern and eastern side of the Moorgreen Priority Area, maintaining Rights of Way and carrying out tree safety work in the area. However, there has not been to date, the resources to implement any single scheme of management for the site.

### Proposed action

Complete and implement management plans for the woodland and grassland owned by Eastleigh Borough Council and ensure compatibility with any adjacent plans.\*\* (EBC)

## Eastleigh Priority Species recorded within the Moorgreen Priority Area

### Recorded in last five years

Bog pimpernel\*  
Bog myrtle\*  
Northern marsh-orchid\*

### Recorded 6-10 years ago

Early marsh-orchid\*

\* Priority species in Eastleigh Borough only

## Relevant Hampshire species or habitat action plans for Moorgreen Priority Area are:

Pipestrelle bat  
Birds of wet grassland  
Hedgerow  
Unimproved neutral grassland  
Lowland wet grassland

### ACTION TIMESCALE

\* within next  
2-3 years

\*\* within next  
5 years

\*\*\* within next  
10 years

### KEY TO ORGANISATIONS

EBC  
Eastleigh Borough  
Council

EN  
English Nature

HRG  
Hampshire  
Research Group  
(Comprises HWT / EA  
/ EN / Southampton  
University /  
Farnborough College /  
Sparsholt College)



# Action for the Netley & Bursledon Common Priority Area

## Quick facts

Total area: 143ha (the same area as Netley village)

Designations: SINC – 48%

## Location

The Netley & Bursledon Common Priority Area lies adjacent to the west of the M27 motorway corridor as it winds its

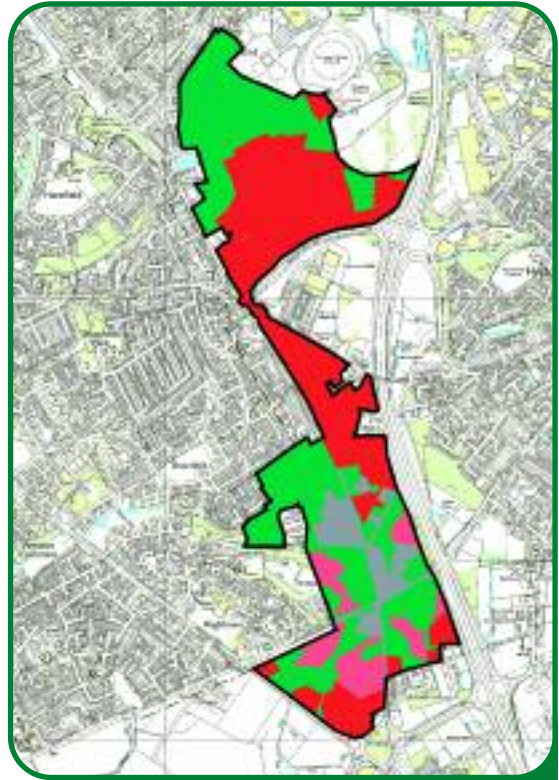
way past West End and Hedge End. It stretches southwards from the large woodland at Telegraph Hill, includes the grazed pastures adjacent to Thornhill Park in Southampton and carries on down to Windhover roundabout, just north of Bursledon where most remnant heathland is found within the borough. Scattered amongst the semi-natural habitats of the Priority Area are large houses and their gardens, and bordering the Priority Area at Telegraph Woods is the newly developed County Cricket ground.

## Description

The majority of the area was formerly common land and the most important habitats now surviving in the area are remnants of this past use. Historically, common land provided grazing for the livestock of local people and was typically vegetated with heather and grasses – known as heathland.

Towards the south of the Priority Area are Netley and Bursledon Common, fragments of the once extensive areas of common land that covered this area of the Borough. Most of the common land has been built upon for housing or been converted to agriculturally improved grassland so that only about 20% remains of the area that was present in 1810.

The remaining areas of heathland are dissected by a number of roads and surrounded by housing, effectively isolating the heathland blocks from one another. Only the most mobile species are able to travel from one block to another such as some



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birds whilst others, such as reptiles and insects will have greater difficulty overcoming these obstacles. Scrub and trees are becoming established on the once open heathland, and large areas are covered in dense bracken, shading out some of the characteristic heathlands plants. This is due to a lack of traditional management practices such as grazing and rotational cutting which assist in the maintenance of open heathland and the preservation of its special fauna and flora. Some areas of the common have become completely wooded since they were fenced off from the surrounding heathland back in 1800, an example being Dumbleton's Copse to the north of Netley Common. Heather plants can still be seen in glades within the woodland but these are becoming fewer and fewer as fast-growing exotic species such as laurel and rhododendron take a hold within the wood.

Heathland is an internationally rare and threatened habitat of great importance to a wide variety of species including reptiles, birds and invertebrates, many of which are found in no other habitat. The Dartford warbler, a small active, crimson-breasted bird with a striking red eye can sometimes be seen on heathlands within the Priority Area busily foraging for insects on the prickly gorse bushes that are found scattered on the commons. Unlike all other warblers, the Dartford warbler stays in Britain for the whole year, braving cold winters

MY LOCAL AREA





that see most other species of warbler heading south to the Mediterranean and Africa.

Other than heathers, many other species of plant specialise in growing in heathlands and can be found on Netley and Bursledon Commons. Such species are often both rare and isolated in Eastleigh borough, the nearest other populations being found either in the New Forest or towards the northeast corner of the county and Surrey heaths. This increases the importance of conserving the populations here in the borough as they are likely to contribute to the genetic diversity of the species. Species that fall into this category include those which thrive in the wet heathland conditions on site including black bog-rush, bog asphodel, heath rush, and round-leaved sundew. The sundew merits particular mention as it is a member of a family of plants that have a very peculiar and gruesome habit. They eat meat, or to be more precise – insect meat.

### Round-leaved sundew

Round-leaved sundews are plants that supplement their diet with items that provide them with additional nutrients lacking in the heathland soils on which they grow. The plant exudes a scent that is attractive to insects that then become stuck to the specially adapted leaves that have sticky projections on their edges. As they struggle to release themselves from the sticky trap, the leaf folds around them and slowly digests them – in a bath of acid.

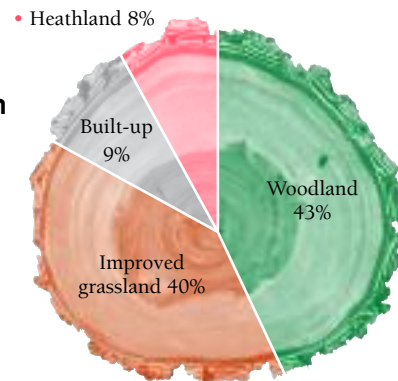
Eight species of different grasshoppers and crickets have been recorded from the area, including the bog bush-cricket which is a nationally scarce species. Reptiles including common lizards, adders and grass snakes can sometimes be seen basking in the morning sun before they move off to hunt in the surrounding vegetation.

The north of the Priority Area is dominated by Telegraph Woods, an area of enclosed common, once part of the Forest of Bere, and now composed of both broadleaved and coniferous trees. The Forest of Bere was once one of the royal hunting forests of the Norman kings and stretched across the southeast of Hampshire. It was made up of woodland and heathland and would have looked

much like the New Forest does today. Two areas of relic heath remain within Telegraph Woods and these are being restored and expanded through scrub and tree clearance work by Eastleigh Countryside Service as part of the Hampshire Heathlands Project.

Telegraph Wood supports a population of the locally uncommon southern wood ant, a species that needs well lit rides and clearings in which to make its nest so they can catch the warmth of the sun. The nests are constructed of twigs and formed into mounds about the size of beach balls. Once a common species throughout woodlands in England, research in the UK has indicated some contraction in its range, noticeably from north and east England. This is thought to be due to lack of traditional woodland management such as coppicing which leads to dark shaded conditions on the ground that do not favour the species.

### Area of habitats within Netley & Bursledon Common Priority Area



NB: 3km of hedgerow also within the priority area

### Eastleigh Priority Species recorded within the Netley & Bursledon Common Priority Area

#### Recorded in last five years

- Brambling\*\*
- Nightingale\*\*
- Yarrow pug moth\*

#### Recorded 6-10 years ago

- Dormouse\*\*
- Dartford warbler\*\*
- Southern wood ant\*\*
- Six-belted clearwing moth\*
- Broom-tip moth\*

- Rosy wave moth\*
- Large red-belted clearwing moth\*
- Bog bush-cricket\*
- Bog asphodel\*
- Round-leaved sundew\*
- Black bog-rush\*

\* Priority species in Eastleigh Borough only

\*\* Priority species in Hampshire and Eastleigh Borough



# Action

## Issue 1 Lack of management

### Current action

The Hampshire Heathlands Project provides resources and management advice to owners of heathlands to maintain and restore them for the benefit of nature conservation.

### Proposed action

Continue to support the work of the Hampshire Heathlands Project to restore heathland within Telegraph Woods and on Netley Common which includes the systematic clearance of scrub and bracken.\* (EBC/HCC)

Endeavour to include areas of privately owned heathland in the Hampshire Heathland Project in the near future, through consultation with their owners.\*\* (HCC/EBC)

Seek to acquire privately owned areas of heathland in the area or to obtain leasehold of such sites to secure their long term management.\*\*\* (EBC/HCC)

Work with landowners to improve the biodiversity of woodlands in the priority area, advising them on management such as clearing invasive laurel and informing them of grant schemes available.\* (EBC/HCC)

## Issue 2 Habitat isolation

### Current action

Government guidance to planning authorities advises that proposals for development should also include measures to enhance the nature conservation interest of the area.

### Proposed action

Explore the potential of heathland creation on motorway and road verges in the area and to link the areas of heathland divided by the A27 road.\*\* (HA/HCC/EBC)

## Issue 3 Loss of habitat due to development and agricultural change

### Current action

Heathland is a habitat that merits designation as a Site of Importance for Nature Conservation (SINC) within Eastleigh Borough Council's Local Plan. SINC's are protected from the harmful effects of development through specific policies within the Local Plan.

### Proposed action

Maintain the existing SINC designations within the Priority Area for inclusion within the draft Local Plan.\* (EBC)

Bursledon and/or Netley Common to be designated as a Local Nature Reserve by 2005.\* (EBC/HCC)

## Issue 4 Misuse

### Current action

The Countryside Unit of Hampshire County Council own and manage Netley Common as a countryside site. Rangers patrol the site to discourage mis-use and to educate visitors about the area.

### Proposed action

Discourage the mis-use of areas of heathland by putting up signs in places it occurs and by liaising with the public and community groups. This should highlight the damaging effects it has on livestock and habitats.\*\* (HCC)



WOOD ANTS

### ACTION TIMESCALE

\* within next  
3 years

\*\* within next  
5 years

\*\*\* within next  
10 years

### KEY TO ORGANISATIONS

EBC

Eastleigh Borough  
Council

HA

Highways Authority

HCC

Hampshire County  
Council

## Relevant Hampshire species or habitat action plans for Netley & Bursledon Common Priority Area are:

- Pipestrelle bat
- Hedgerow
- Heathland



ADDER

MY LOCAL AREA

# Action for the Solent Coast & Hamble Estuary Priority Area

## Location

The Solent coast & Hamble estuary is the largest Priority Area in the borough covering approximately 910 hectares of mainly coastal habitats. It stretches along the whole of the borough's south coast and up the tidal Hamble estuary on the eastern boundary of the borough.

The area also includes important areas of inland habitat that are adjacent and continuous with the coast such as the wooded valleys leading from the Solent coast and the large woodland complex in the Upper Hamble estuary stretching to the south of Hedge End.

## Description

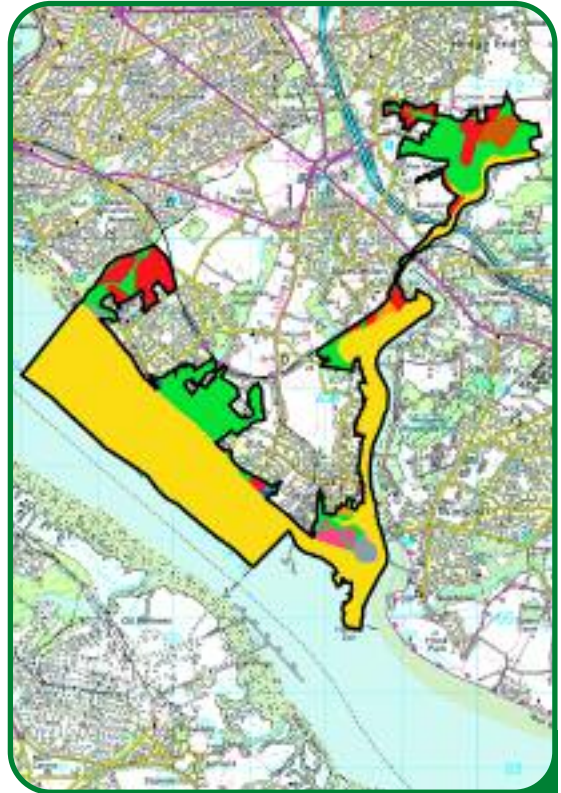
Habitats and species associated with the coast are, to different extents, influenced by the saltwater of the sea. They may be immersed in the seawater as the tide rises or be subject to sea spray in stormy weather.

The lowest lying areas of the borough's coast are always immersed in seawater and are truly marine environments, beyond the influence of the tides. Typical species found both within and on the surface of the submerged sediment are burrowing worms, shrimps, crabs and fish. Shallow sandy sediments are important nursery areas for fish and feeding grounds for sea birds.

Towards the land, where the tides begin to expose sediment that has been deposited by the sea, mudflats are found. The mud is rich in organic material which supports a huge biomass of specially adapted invertebrates that can tolerate some degree of drying as the sea retreats. This rich food supply is exploited by internationally



**Quick facts**  
 Total area: 910 ha  
 (equivalent to Eastleigh town)  
 Designations: cSAC – 15%  
 SPA – 18%  
 SSSI – 26%  
 SINC – 8%



MY LOCAL AREA


important numbers of waders and wildfowl; birds that are equipped to feed in shallow water and wet sediment with a whole host of beak shapes adapted for extracting the burrowing invertebrates.

**Mudflats**

Mudflats are a hugely productive habitat in which burrowing and grazing invertebrates such as worms, crustaceans and molluscs abound. It has been calculated that in any one square metre of mudflat up to 80,000 individuals of a burrowing snail (Laver Spire Snail) can be commonly found. Birds in great numbers feed on this rich food source and as a whole the Solent is the fourth most important over wintering site for coastal birds in Britain. It regularly supports over 150,000 individual birds including important populations of Brent geese (7,500), Teal (4,400), Ringed Plover (550) and Black-tailed godwit (1,125).

Landward of mudflats, saltmarshes form in mud exposed for a greater length of time to the air and therefore able to be colonised by plants. In Eastleigh Borough, saltmarsh is found along the shore of the tidal Hamble River with the largest expanses at Hacketts, Lincegrove and Mercury Marshes.

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Specialised plants that can tolerate high salt levels dominate saltmarshes. All are specially adapted to deal with the desiccating conditions as freshwater is in short supply. In the lowest areas of the saltmarsh glassworts and cord-grass are found.

### Glassworts

Glassworts overcome the problem of desiccation by storing freshwater within their waxy stem giving them a somewhat swollen appearance. They have also lost their leaves through evolution to cope with the dry, salty conditions as plants naturally lose most of their water through these. Glassworts instead use their green stem to photosynthesise.

As the pioneer glassworts and cord-grass gain a hold in the wet mud, they trap particles of sediment around them at high tide. Gradually the mud level rises and is dryer for longer periods and other plants such as sea aster, sea plantain, sea lavender and sea purslane invade. Many of these plants reduce their water loss by having fleshy leaves in which water is stored whilst others, such as marsh-mallow have hairy leaves that reduce evaporation from the leaf surface by producing a damp micro-climate around the leaf which slows down the rate of evaporation.

In addition to specialised flora, saltmarsh supports a diverse range of invertebrates and algae and are of particular importance as feeding, roosting and breeding grounds for birds such as redshank, oystercatcher, curlew and dunlin.

The sediment that makes up mudflats and saltmarsh is supplied through the continuous erosion of the land and transported around the coast by the movement of the sea. Naturally eroding coastal cliffs are an important source of such sediment and can be found along some stretches of the borough's coast, most notably at Netley Cliff where the eroding face reaches to a height of about 5 metres. Maritime cliffs are a priority habitat within the UK BAP and are of national importance for invertebrates providing nesting sites for rare bees and wasps that burrow into the soft cliff face.

Natural coastlines are dynamic systems, constantly changing in shape and form as a result of physical processes such as erosion and its opposite, accretion. But they are becoming increasingly rare as coastal development increases. Marinas require the removal of intertidal sediment for boat access leading to the loss of mudflats and saltmarsh.

Inland too, there is pressure to protect development such as housing and farmland from flood or erosion by constructing defence structures such as sea walls or gabions. Such structures restrict natural coastal processes and this can lead to a gradual loss of intertidal habitats through lack of sediment supply and by a process known as coastal squeeze.

### Coastal squeeze

There is mounting scientific evidence that relative sea-levels are rising, both as result of falling land levels in the south of England (as a result of the rebounding of Scotland after the ice cap which covered it in the last ice-age has melted) and rising sea-levels (as a result of global warming and the melting of the ice caps).

The natural response of intertidal habitats is to move inland but in places where hard structures are present they are prevented from doing so.

The result is a gradual narrowing of intertidal habitats and eventually their total loss as the sea reaches the base of the defence structures.

The Solent Coast and Hamble Estuary Priority Area also encompasses extensive areas of inland habitats including natural transitions in habitats between intertidal areas and the land proper. In many areas of coast, these natural transitions have been lost as a result of building up to the water's edge but at Upper Hamble Country Park and Badnam Copse on the edge of the River Hamble, the flanking saltmarsh grades to reedbed and then to ancient semi-natural woodland. These woodlands are some of the most ecologically diverse in central southern Britain, harbouring localised species such as the small-leaved lime and wild-service tree.

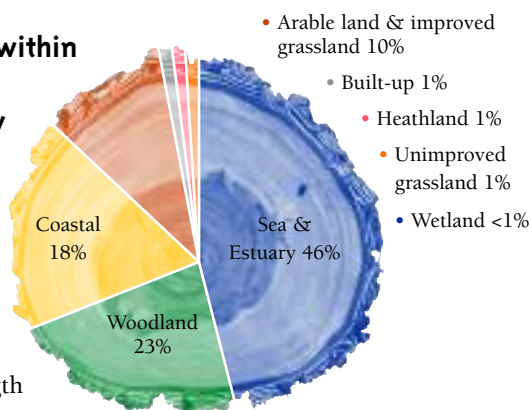
Inland, adjacent to the southern coast, areas of woodland and grassland at West Wood and Royal Victoria Country Park provide valuable additional habitats just adjacent to the sea. At West Wood, lesser-spotted woodpecker and the rare beetle *Sphiginus lobatus*, have been recorded and skylark regularly breed in the adjacent grassland. At Royal Victoria Country Park the lawns contain the nationally declining green winged orchid and suffocated clover.

Grasses such as purple moor grass and bents dominate most of the heathland at Hamble Common, although since the re-introduction of grazing heather species are increasing in area. The common supports an important population of the locally rare grayling butterfly and efforts are currently underway to encourage this species by specialised management techniques such as leaving bare areas of soil where the species can rest and sun itself and to encourage the grass on which it feeds as a caterpillar.

The coastline of the Solent is extremely well-used by people who come from throughout the UK and Europe to enjoy the world-class water sport facilities and to enjoy the scenic environment by walking, picnicking and bird watching. The Hamble estuary is a mecca for yachting; it has up to 3,500 boats moored in marinas with associated boatyards, parking and facilities along its banks. Disturbance to sensitive wildlife such as roosting birds can be a problem in some areas, especially in the winter months when birds have limited energy reserves. In addition, pollutants from boatyards such as anti-fouling paint, oil, run-off from parking areas and farmland can also impact upon the marine environment, introducing damaging levels of contaminants into the water column.

### Area of habitats within the Solent Coast & Hamble Estuary Priority Area

NB: 1.5km of maritime cliff also within the priority area. Figures for length of hedgerow are unavailable.



### Eastleigh Priority Species recorded within the Solent Coast & Hamble Estuary Priority Area

#### Recorded in last five years

- Skylark\*\*
- Little egret\*\*
- Turtle dove\*\*
- Nightingale\*\*
- Slavonian grebe\*\*
- Common Scoter\*\*
- Snipe\*\*
- Spotted flycatcher\*\*
- Black-bellied brent goose\*\*
- Dunlin\*\*
- Turnstone\*\*
- Knot\*\*
- Little egret\*\*
- Snipe\*\*
- Mediterranean gull\*\*
- Yellow wagtail\*\*
- Grey plover\*\*
- Firecrest\*\*
- Whinchat\*\*
- Black-tailed godwit\*\*
- Nightingale\*\*
- Cetti's Warbler\*\*
- Golden plover\*\*
- Goosander\*\*
- Dartford warbler\*\*
- Grayling\*
- Crescent striped moth\*
- Six-belted clearwing moth\*
- Broom-tip moth\*
- Marbled green moth\*

- Orange footman moth\*
- Rosy wave moth\*
- Red-tipped clearwing\*
- Buttoned snout\*\*
- Marsh mallow\*\*
- Stiff saltmarsh-grass\*\*
- One-flowered glasswort\*\*

#### Recorded 6-10 years ago

- Reed bunting\*\*
- Black-necked grebe\*\*
- Linnet\*\*
- Lesser spotted woodpecker\*\*
- Sanderling\*\*
- Bar-tailed godwit\*\*
- Slavonian grebe\*\*
- Red-breasted merganser\*\*
- Silver-washed fritillary\*\*
- Haematopota grandis*  
(a horsefly)\*\*
- Mocha moth\*
- Suffocated clover\*\*
- Spreading hedge-parsley\*\*
- Curved hard-grass\*\*
- Annual beard-grass\*\*
- Greater broomrape\*\*

\* Priority species in Eastleigh Borough only

\*\* Priority species in Hampshire and Eastleigh Borough





# Action

## Issue 1 Coastal squeeze as a result of climate change and rising sea levels

### Current action

Coastal Habitat Management Plans (CHaMPs) are being prepared by English Nature and the Environment Agency for sites along the Hampshire Coast that are of European importance for nature conservation. CHaMPs have the specific aim of balancing the needs for flood defence with the needs of biodiversity through the development of a strategic approach to site management. Loss of habitat in one area as a result of coastal squeeze may be compensated by the permitted deterioration of a flood defence structure elsewhere along the coast.

### Proposed action

Continue to support and input into the work of relevant fora to devise and implement strategies to maintain the extent of coastal habitats in the face of projected sea-level rise including identifying and safeguarding land that may be required for coastal realignment. \* (PARTNERSHIP)

## Issue 2 Disruption of natural coastal processes

### Current action

Recommended strategies for coastal defence works along individual stretches of the Solent Coast have been prepared under the auspices of the Solent Shoreline Management Plan prepared by a consortium of coastal defence authorities in the Solent. Each stretch of coast has a recommended strategy for defence.

### Proposed action

Employ sympathetic engineering solutions to areas where some protection is essential but where habitats may be detrimentally affected otherwise.\* (EBC/EA)

Continue to support and input into the work of relevant fora to devise and implement strategies to restore and create coastal habitats through for example, flood defence and coastal defence programmes.\* (PARTNERSHIP)

Raise public awareness of the ecological and economic value of maintaining unrestricted coastal processes.\* (EN/EBC/HCC/SF/SCOPAC)

## Issue 3 Water quality and pollution

### Current action

The Environment Agency monitors the water quality of rivers and streams and responds to individual incidents of pollution as they occur. It works with water users to advise them of measures that can be taken to minimise pollution incidents as a result of management practices.

### Proposed action

Include conditions with planning permissions that address bunding of oil/chemical tanks if the EA recommends this.\* (EBC)

Establish and support projects to promote best practice in the use and disposal of harmful marine anti-fouling agents alongside their gradual phasing-out.\*\*(EA)

Ensure new development has minimal impacts on water resources by implementing Sustainable Urban Drainage Systems and by designing urban drainage schemes in accordance with best practice to intercept contaminants.\* (EBC/EA)

## Issue 4 Changing land use and management

### Current action

Much of the Solent coast and Hamble estuary Priority Area is designated as a site of European importance. Legislation requires that any new proposals for development must be assessed for their likely significant impact on the conservation interest of the site. If research indicates a significant adverse effect is likely, the development will not be allowed.

### Proposed action

Include policies in the Local Plan that restrict new development on the tidal foreshore of the river and estuary where these would lead to increased flood risk, pollution risk, loss or damage to river habitats, landscape or river corridor open space or reduced access to the river.\* (EBC)

#### ACTION TIMESCALE

\* within next 3 years

\*\* within next 5 years

\*\*\* within next 10 years

#### KEY TO ORGANISATIONS

EA

Environment Agency

EBC

Eastleigh Borough Council

EN

English Nature

HCC

Hampshire County Council

SCOPAC

Standing

Committee On

Problems

Associated with the

Coastline

SF

Solent Forum

Agree and implement operating contracts with owners of water control structures along the River Hamble that optimise nature conservation interests.\*\*\*(EA)

### Issue 5 **Recreation**

#### Current action

All authorities with powers to regulate activities that occur within the internationally designated Solent European Marine Site are currently compiling a management plan to ensure that the conservation interest of the European site is safeguarded over the long-term.

#### Proposed action

Contribute data and knowledge on the impacts of recreational demands on the areas biodiversity to relevant bodies and work with them to develop and implement actions to address issues identified including devising bylaws where necessary to control harmful activities.\*\* (HCC/EBC)

### Issue 6 **Inappropriate or lack of management**

#### Current action

One of the main aims of public bodies such as Eastleigh Borough Council and Hampshire County Council is to protect and enhance the natural environment for the health, enjoyment and prosperity of the public. Large sites within the priority area that are of importance to nature conservation are owned and managed by public bodies to assist in safeguarding the environment.

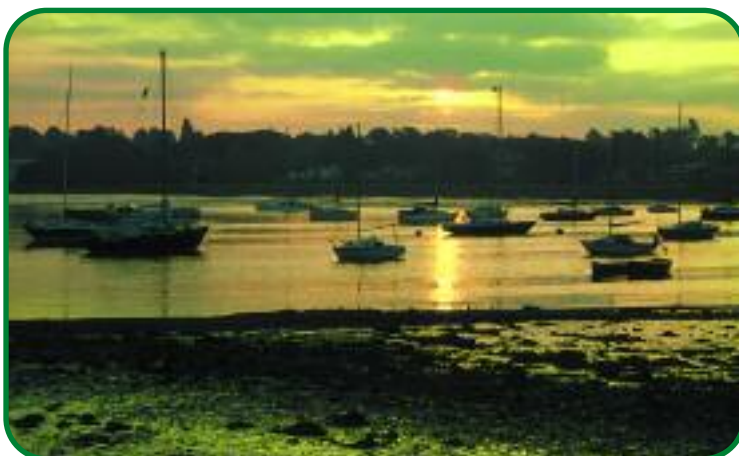
#### Proposed action

Review or compile management plans for all publicly owned nature conservation sites within the PBA specifically ensuring they have regard to the requirements of priority species they already or potentially could support.\*\*\* (EBC/HCC)

### Relevant Hampshire species or habitat action plans for Solent Coast and Hamble Estuary Priority Area are:

- Otter
- Pipestrelle bat
- Seed-eating farmland birds
- Birds of wet grassland
- Ancient semi-natural woodland
- Maritime cliffs
- Saltmarsh
- Coastal grazing marsh
- Mudflats and eelgrass beds
- Wood pasture and parkland
- Hedgerows
- Unimproved neutral grassland
- Arable land

BAR-TAILED GODWIT



# Action for the Stoke Park Priority Area



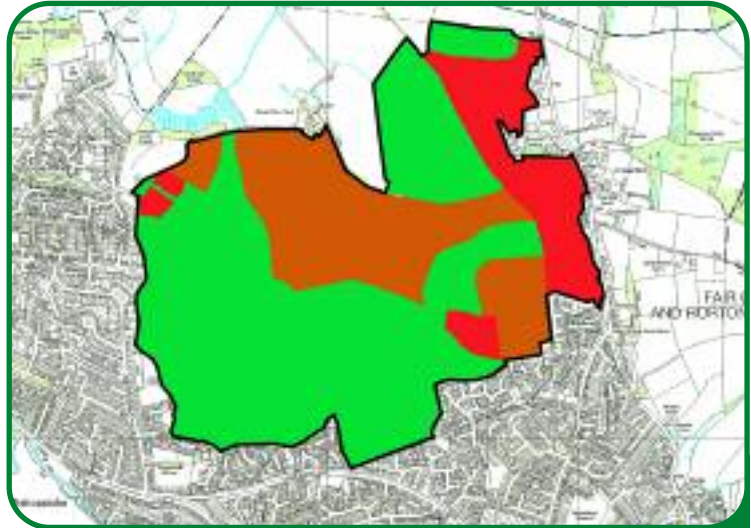
## Quick facts

Total area: 207 ha  
(two-thirds of Bishopstoke and Fair Oak)  
Designations: SINC – 60%

## Location

The Stoke Park Priority Area is located to the north of the borough directly abutting

the northern edge of Bishopstoke and Fair Oak and delineating the northern boundary of this development. It is set within a farmed landscape with large areas of woodland remaining.



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## Description

Stoke Park Priority Area has the highest concentration of woodland present in the borough. It includes Stoke Park Wood which is a mainly coniferous plantation owned by the Forestry Commission and Crowd Hill and Upper Barn Copses owned by the woodland charity, The Woodland Trust. A smaller area of privately owned semi-natural woodland, Hill Copse, is the furthest block of woodland north within the Priority Area.

The Forestry Commission manages Stoke Park Wood to produce softwood products such as paper pulp and timber. To supply this demand, non-native coniferous trees have replaced the native stands of broadleaved trees that were once present in these woods, changing the character and ecological value of the woods.

Unlike broadleaved trees, most coniferous trees retain their leaves (needles) all through the year, continuously growing new needles to replace old. Coupled with the need to densely plant coniferous trees to yield maximum crop off the land, conditions under coniferous trees are very shaded all through the year. As their needles fall to the ground and begin to rot, they produce chemicals that make the soil very acidic. This prevents many

shrubs and plants that normally grow underneath trees from surviving. Many of our most familiar woodland plants such as bluebell, wood anemone, lesser celandine and primrose grow and flower in the spring months before broadleaved trees come into leaf, but in coniferous woodlands this window of opportunity is absent.

However it is not all bad news. The maintenance of wide woodland paths (rides) through the woodlands enable sunlight to reach the ride edges and in many areas especially along the perimeter of woodland blocks, native trees still grow. It is these sunlit edges that are the most valuable areas of the woodland for biodiversity, enabling a rich and varied flora and therefore fauna to establish. Indeed, Stoke Park Woods has one of the most diverse and species-rich plant communities of any woodland in the Borough. In a botanical survey of the woodland in 1990, forty species of plants were recorded that are particularly associated with sites that have been wooded for a considerable length. These plants are called ancient woodland indicator plants and are typical components of botanically rich ancient woodland communities. Species such as moschatel, otherwise known as town hall clock due to its four-faced flower spike, wood spurge, tutsan and wood sorrel make up part of the diverse floral community.

The large areas of woodland within the Stoke Park Priority Area provide suitable conditions for many species of animal that are primarily associated with woodland cover.

The dormouse, a diminutive woodland mouse that feeds on nuts and berries is known to live in the woodlands in this area, as well as badgers and roe deer.

### The dormouse

The dormouse is a species identified within the UK Biodiversity Action Plan as a species in need of priority action to halt its decline and to help restore populations. In the past 100 years it has become extinct in 7 counties and surviving populations have become more and more isolated as woodlands and linking tree cover has been grubbed up. Although nocturnal and difficult to spot as it climbs amongst the branches of trees and shrubs on food forays, its presence is often given away by the collection of neatly gnawed hazelnuts at the base of its favourite shrubs.

An annual butterfly census scheme within the woods has recorded the purple emperor and the silver-washed fritillary, the former being of particular note as this is a rare butterfly that has declined considerably within woodlands throughout the UK and is a priority species for action within the UK BAP process. It frequents the treetops with males defending a territory around a notable tree seeing off any intruding males and trying to attract passing females with which to mate. This butterfly needs willows on which to lay its eggs and for its caterpillar to feed and woodland management to ensure that willow is retained within woodlands is recommended by Butterfly Conservation, a charity dedicated to butterfly conservation.

Between the woods the land is cultivated with a network of hedgerows dividing the large fields and providing linear corridors of cover through which some woodland life can move from woodland to woodland. However, hedgerows have been lost

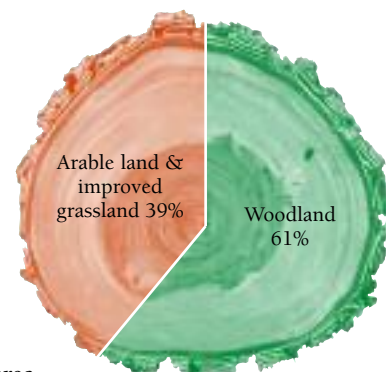
from the area in line with the declines seen all over the UK during the last century which have been estimated at about a 21% net loss in hedgerow length between 1984 and 1990. Hedgerows can be lost through either their outright removal to make way for development or to produce larger agricultural fields to allow the use of bigger machinery in or through neglect.

### Hedgerow management

Due to modern high labour costs and loss of traditional skills many hedges are not cut or laid. Such hedges tend to change into lines of trees and develop gaps losing their importance as dense cover for wildlife. At the other extreme, too frequent and badly timed cutting leads to poor habitat conditions for wildlife within the hedges. For example, if hedges are trimmed annually as opposed to every two-three years, flower and fruit production is much reduced as only branches that have grown for a couple of years or more produce these products. Flowers and berries on hedgerows are important food sources for many hedgerow species such as butterflies and birds.

During 2000, a population of the rare plant, lesser quaking grass was recorded from the large arable field to the north of Stoke Park Woods. This species of grass has declined considerably within the UK over the past century due to changes in farming practice and has been identified as a priority species for action in Hampshire. It grows on disturbed, bare soil in the spring and in the past ploughed arable fields provided this. However, today, many arable fields are sprayed with herbicides to remove any unwanted species of plants from the commercial crop and many others are sown with crops during the winter months that subsequently grow over any bare ground so there is none present in the spring when wild plants are germinating.

### Area of habitats within the Stoke Park Priority Area



NB: 3km of hedgerow also within the priority area.



# Action

## Issue 1 Management for priority species

### Current action

Forest Enterprise own and manage Stoke Park Wood and are preparing Forest Design Plans for all their woodland holdings throughout the UK. These include many ecological beneficial management proposals which must be informed by up to-date information on the location and status of priority species present.

### Proposed action

Complete a Forest Design Plan for Stoke Park Wood by 2003 taking particular care to include specific management recommendations for priority species.\* (FC)

Promote the Forestry Commission's Woodland Grant Scheme to private woodland owners in the area.\* (EBC/FC)

Seek to ensure suitable management of arable land which supports lesser quaking-grass by advice and promotion of appropriate incentives schemes.\*\* (DEFRA/FWAG)

Encourage specialist recording groups to visit the area and particularly to record and feedback any priority species located.\* (HBIC)

Endeavour to ensure data collection schemes such as butterfly transects, bird surveys etc have sufficient manpower to continue for the foreseeable future.\* (BC/EBC)

## Issue2 Habitat isolation

### Current action

To ensure there is no further loss or fragmentation of semi-natural habitats as a result of development, the Local Plan identifies important wildlife sites that must be protected from development.

### Proposed action

Continue to work with landowners to plant hedgerows and field corners to provide links between woodland blocks.\* (EBC/HCC)

Uphold the SINC designations for the woodlands within the PBA on the review of the Local Plan.\* (EBC)

Ensure the connections between semi-natural habitats, provided by green corridors are preserved and enhanced through the development control process.\* (EBC)



WOOD-SORREL

### ACTION TIMESCALE

\* within next 3 years

\*\* within next 5 years

\*\*\* within next 10 years

### KEY TO ORGANISATIONS

BC

Butterfly Conservation

DEFRA

Department of the Environment, Food and Rural Affairs

EA

Environment Agency

EBC

Eastleigh Borough Council

EN

English Nature

FC

Forestry Commission

FWAG

Farming and Wildlife Advisory group

## Eastleigh Priority Species recorded within the Stoke Park Priority Area

### Recorded in last five years

Dormouse\*\*

Purple emperor\*\*

Silver-washed fritillary\*\*

Lesser quaking-grass\*\*

\*\* Priority species in Hampshire and Eastleigh Borough

## Relevant Hampshire species or habitat action plans for Stoke Park Priority Area are:

Pipistrelle bat

Seed-eating farmland birds

Hedgerow

Ancient semi-natural woodland

Arable land

# Action for Seed Eating Farmland Birds

## Why action is needed

Birds that frequent our farmland rely on both the food and cover it provides for them to survive and breed successfully. Seed eating farmland birds are, as the name suggests, a group of birds that mostly eat seeds but also need other food such as insects on which to feed their young in the spring and summer. Such birds include the yellowhammer, skylark, linnet, tree sparrow and grey partridge.

Between the 1970s and mid 1980s all of these species underwent dramatic population declines in the UK, the extremes being – 83% for the grey partridge and – 45% for the yellowhammer. Since then, some farmland bird populations have remained stable whilst others have continued to decrease, although at a slower rate than previously.

Changes in agricultural management are thought to be the largest single factor causing these declines. For example, the switch from spring sown to autumn sown cereals has resulted in the loss of weedy stubble fields that used to sustain birds over the winter. Now fields are ploughed and sown again after the crop is harvested in the summer leaving no food for the birds over winter. In addition, other changes in farming practice such as different crops being planted, the wider use of chemicals and a general tidying and increased productivity of farmland have all led to declines in birds.

However, the reasons for declines birds generally are not as clear cut as sometimes suggested. There is a group of resident insectivores that has increased in population size in the past 30 years. The majority are associated with woodland: Green woodpecker and great spotted woodpecker, nuthatch, blue tit, long-tailed tit and, on farmland great tit and coal tit and wren. The reasons for these changes are unclear.

## Action so far

Action to halt the declines in seed eating farmland birds has to date not been very successful, with populations of farmland birds seemingly continuing to decline.

Some progress has been made by the increased emphasis and finances available to farmers to manage their land in ways that are more sympathetic to wildlife through 'agri-environment schemes'. These schemes are funded by the government and provide payments to farmers for specific management techniques such as leaving margins at the edges of arable fields for wild plants.

Since the declines in farmland birds were first noticed in the 1970s, groups of people who are interested in birds have undertaken UK-wide surveys to monitor their populations and range. This data is invaluable to monitor any further changes that occur to bird populations, be they good or bad and to suggest areas where most effort should be concentrated to reverse declines.

## Results so far

Despite the increased emphasis on wildlife-friendly farming, populations and ranges of seed eating farmland birds have not begun to increase. Linnet and tree sparrow populations have remained stable since the dramatic declines recorded in the 1970s and 80s. The skylark, yellowhammer and grey partridge have continued to decline, albeit at a lesser rate than previously.

## The future

Both the birds and their habitat need to be targeted for action if they are to recover or even spread out into other suitable habitat in the borough.

Action to maintain and increase the numbers and ranges of seed eating farmland birds in the borough:

- English Nature and DEFRA will encourage the better management of sites of importance to seed eating birds, EN through Management Statements and DEFRA through agri-environment schemes.
- DEFRA will select the best areas to target the new Arable Stewardship scheme for landowners. This scheme provides payments for specific management that benefits farmland wildlife and especially seed eating birds.
- RSPB will consider the best areas to set up winter-feeding schemes and nest box provision for farmland birds and implement such schemes in partnership with landowners, local authorities, local bird groups and the Game Conservancy.
- The Game Conservancy will continue to promote the use of gamebird crops that benefit seed-eating farmland birds as well as gamebirds to landowners.

Action to help us gain a better understanding of seed-eating birds in the borough:

- HOS and the BTO will continue to run and improve surveys for seed eating farmland birds.

## What you can do to help birds

To help to maintain and increase the numbers and range of birds in the borough you can:

- Put out food for birds in your garden. This will greatly increase the survival of many species through the winter. Please remember though that once you have started to feed the birds in the winter you must carry on as they will begin to rely on your food to sustain them.
- Put up a few nest boxes in your garden but remember to place them in areas inaccessible to cats.
- If you own a cat, keep it in at night to stop it hunting roosting birds. Also consider fixing a bell to its collar to warn birds of its approach.
- If you own or manage farmland consider entering your land into Countryside Stewardship. Consider creating conservation headlands around crops, restoring winter stubble and using target-specific sprays on set-aside. Advice on management and incentive schemes to benefit birds is available from DEFRA.
- If you currently own or manage some land for gamebirds consider planting winter food crops that benefit both gamebirds and wild birds. Advice on suitable crops is available from the Game Conservancy Trust.
- Come along to a practical conservation task in your area. Many of the management techniques you will learn benefit wild birds.
- Become a member of the Royal Society for the Protection of Birds, the largest environmental charity in Europe. It manages many sites specifically for birds around the country also lobbies for wider action to benefit birds.

To help us gain a better understanding of birds in the Borough you can:

- Join the Hampshire Ornithological Society, a group formed for anyone interested in birds. It holds regular events such as guided tours of sites and runs countywide surveys. It always needs volunteers to join in and send in sightings.



GREAT TIT

# Action for the Wyvern Priority Area

## Location

The Wyvern Priority Area is situated to the south of Fair Oak, stretching along a Y shaped stream and its valley. This watercourse, known as Allington Stream, joins the River Itchen further downstream. Much of the Priority Area is set within a farmed landscape with grazed pastures and arable fields. To the east of the Priority Area are the grounds of Wyvern School with much of the land used as playing fields. These are closely mown, even up to their edges and do not support very much wildlife. To the north is the edge of Fair Oak with houses and gardens adjacent to the woodland. To the west are larger houses with extensive grounds.

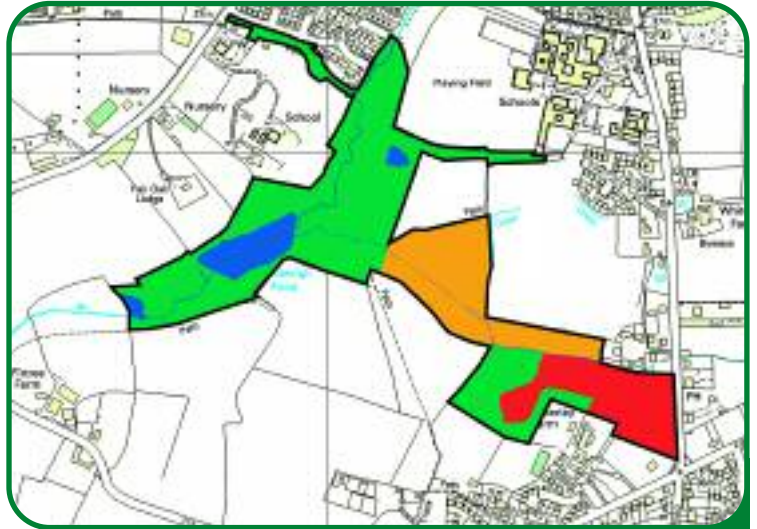
## Quick facts

Total area: 19ha  
(9 Swan Centres could fit in the same area)  
Designations: SINC – 53%

## Description

The Wyvern Priority Area covers about as much land as half of the town of Horton Heath and is made up of ancient boggy woodland, unimproved meadows crammed full of orchids, ponds that harbour rare species such as the great-crested newts and streams that provide an underwater habitat for many aquatic creatures such as mayflies, fish and otter.

Most of the land was once part of an estate owned and managed by the manor to provide hunting, fishing and recreational opportunities. The large fish pond in the midst of the woodland was artificially constructed in the mid 19th century and stocked with fish for food. Although used on and off since then for informal fishing the pond has developed a diverse and rich flora and fauna both on and in the water and along its edges. Dragonflies patrol the area using their huge goggle eyes to spot flies which they catch in their front legs whilst on the wing. Ducks and other water



birds breed along the pond edges, using the dense vegetation as cover from marauding foxes and even the otter has been known to visit the area in search of a carp in the pond.

Over the years, the wear and tear on the pond walls caused by the weather and by tree roots growing on the earthbank of the wall has led to the inevitable. Cracks and large splits have appeared and water has drained from the pond leaving a muddy expanse of silt which was once underwater. The fish in the pond were rescued by the Environment Agency and the wet mud has begun to be colonised by plants that specialise in growing in such conditions. Areas of reed, iris and other water-loving plants will slowly change to alder and willow scrub and eventually wet woodland if the pond wall is not repaired.

Much of the woodland along the stream and adjacent to it is very boggy and impenetrable with areas of tall herbs such as hemlock water-dropwort and willowherb growing to the height of a man. The trees that make up the woodland are mainly ash and oak but in the very wettest areas these are replaced by the smaller growing alder and willow. These species are adapted to the wettest growing conditions, being able to tolerate water-saturated soil around their roots.

In the past, woodlands were a very valuable source of products that were used by the local community. Firewood, timber for building and slender saplings for fencing were all harvested from the local wood and the very practices that sustained this supply encouraged wildlife. Nowadays the market for

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such traditional wood products has dwindled and so has the management that supplied them. This has been much to the detriment of wildlife. Many woodlands are now left neglected and have actually lost much of their special value to wildlife.

Many areas of the woodland have also been invaded by alien species such as rhododendron and laurel. Once planted extensively in woodlands especially by the Victorians for their floral display, these evergreen plants now pose a threat to our native woodland species. Their vigorous growing habit shades out other plants and alters the acidity of the soil so much so that native species cannot grow.

To the east of the main block of woodland is Wyvern meadow, an area of grassland that would neatly fit a running track with little room to spare. Although small the meadow is a jewel in the schools crown. Every spring it puts on a staggering display of white and pink orchid flower spikes often growing in groups of 50 plus and reaching to the height of a man's knees. As well as the common-spotted orchids and southern marsh-orchids, the meadow also harbours other flowering plants, many of which are seldom seen in our countryside nowadays. The spikey purple head of the saw-wort, a relation of the more familiar creeping thistle can be found alongside the

compact lilac flower of the devils-bit-scabious. Rushes, sedges and grasses grow throughout the meadow, but are especially abundant in the boggiest areas with mosses providing a living blanket of green around their bases. The meadow is managed to maintain the wildlife interest with conservation days devoted to clearing developing scrub from the meadow's edges and grazing by cattle. These practices ensure that the open nature of the site is maintained by halting the natural succession of the grassland to scrub and ultimately woodland.



GREAT CRESTED NEWT

Unimproved neutral grasslands such as this meadow at Wyvern School are very rare in our countryside today. Studies show that between 1930 and 1984, 97% of all unimproved grassland was lost, principally as a result of changes to agricultural management. The push to increase food production in this time, for the UK to be able to 'feed itself' encouraged farmers to add artificial fertilisers, pesticides and herbicides to their land. These chemicals however have a detrimental effect on wildlife as previously species-rich meadows have been converted to fields of only a few plant species. Such fields do not provide the variety of feeding and resting opportunities needed by many species and so wildlife gradually dies out or moves away from the site.

Further to the east of the triangular shaped Wyvern meadow is an area of grassland known as Lapstone Farm. This site is owned and managed by Eastleigh Borough Council which has been improving the value of the land to wildlife over the past few years. Native trees and shrubs have been planted on areas of grassland that had been agriculturally improved in the past and other areas have been seeded with wildflower seeds in a bid to increase the variety of wildlife present.

The great crested newt, our largest and rarest newt species has been recorded in the pond towards the north-east corner of the PBA. This colourful amphibian is specially protected under UK and European law as it is rare and you must have a licence to handle one. It is so called as the male sports a ragged crest that runs down the whole length of his body which, in the breeding season, he uses to great effect coupled with his bright orange belly to attract a female. Unfortunately, they have not been seen for a number of years and this is thought to be as a result of the pond becoming overgrown and shaded by willows which has led to the loss of the water weed that the newts use to wrap their developing eggs in.

Ponds naturally dry out over decades and are slowly colonised by a succession of plants as the water diminishes, until finally, it becomes woodland. Although this is a natural process, man has, over centuries, chosen to preserve ponds by cutting down encroaching scrub and this practice, known as pond management is especially important today as ponds are being lost at an alarming rate from our landscape and are not being replaced. Many ponds on farmland that were once used to quench the thirst of livestock have been filled in as more modern mechanisms to deliver water to fields have taken their place. For our native wetland wildlife to survive we must preserve the remaining ponds we have today through pond management.

Like many of our best areas for wildlife in the Borough, the Wyvern Priority Area is effectively an island oasis for wildlife in a sea of more inhospitable habitat. The land that surrounds it is mostly used for intensive agriculture and not managed sympathetically for wildlife. This presents a problem to any wildlife on site that may need to spread out, perhaps to find other individuals to breed with, new sources of food or more room to grow. To reach another suitable site, any species would have to cross fairly large areas of unsuitable habitat that perhaps would not provide very good cover from predators, feeding opportunities or suitable growing conditions. The bid to move to pastures new would very likely fail or at worst, end in death. This is a very real problem for many species, especially those that are not very mobile and have quite specific environmental requirements such as butterflies and plants. They are effectively marooned on islands, unable to spread or increase their population size.



MY LOCAL AREA

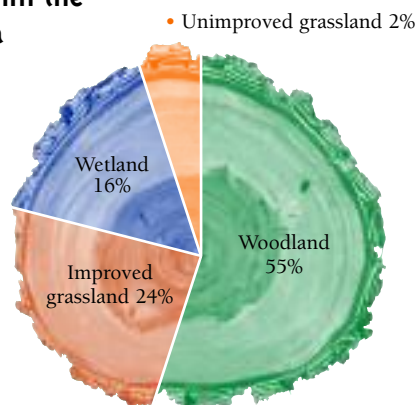
**Eastleigh Priority Species recorded within the Wyvern Priority Area**

**Last recorded more than 10 years ago**

- Otter\*\*
- Great crested newt\*\*
- Mole cricket\*\*

*\*\* Priority species in Hampshire and Eastleigh Borough*

**Area of habitats within the Wyvern Priority Area**



NB: 1.5 km of hedgerow and 1.5 km of stream also within the priority area.



# Action

## Issue 1 Lack of management

### Current action

Many organisations with an interest in furthering nature conservation support projects that promote the favourable management of important wildlife habitats. This may involve, for example providing advice to landowners, setting up practical conservation work days on a site or providing financial support for management work.

### Proposed action

Endeavour to secure the future of Quobleigh Pond as a SINCP by exploring opportunities for its long-term maintenance and management.\* (LLG)

Identify suitable areas of land within the PBA for sympathetic management work to be re-instated concentrating on areas where priority species and habitats are currently or potentially could be present.\* (EBC)

On areas of land as identified in the above action, inform landowners of incentive and grant schemes available and encourage and support applications for the re-instatement of sympathetic management. \*\* (LLG)

## Issue 2 Alien species

### Current action

There is little control of rhododendron or laurel taking place within the woodland at the present time.

### Proposed action

On areas of land identified for action to address lack of management, provide advice to landowners on management techniques that would improve the biodiversity value of their land including measures to control invasive and alien species where these threaten priority species or habitats.\* (LLG)

## Issue 3 Island habitats

### Current action

New development and land-use change can result in further fragmentation and isolation of habitats and features of importance to nature conservation. Government guidance to local planning authorities expects that land-use planning objectives should be to extend and re-connect sites, patches and areas, ultimately reversing fragmentation.

### Proposed action

Seek opportunities to work with landowners and managers to undertake habitat restoration and creation schemes to benefit biodiversity. Focus on areas that will help reverse the deleterious effects of fragmentation and isolation by linking existing sites or by providing stepping stones between habitats or where priority species will be benefited.\*\* (EBC/EA/HCC)

### ACTION TIMELINE

\* within next 3 years

\*\* within next 5 years

\*\*\* within next 10 years

### KEY TO ORGNISATIONS

EA  
Environment Agency

EBC  
Eastleigh Borough Council

EN  
English Nature

FC  
Forestry Commission

HCC  
Hampshire County Council

LLG  
Landowners Liaison Group (Comprises FWAG, Hampshire Management Advisory Project, National Farmers Union, County Landowners & Business Association)

## Relevant Hampshire species or habitat action plans for Wyvern Priority Area are:

- Pipestrelle bat
- Seed-eating farmland birds
- Ancient semi-natural woodland
- Hedgerow
- Unimproved neutral grassland
- Arable land

# Action for the Otter

## Why action was needed

Before the 1950s the otter was a widespread animal inhabiting the vast majority of rivers and streams in England.

Between 1950 and 1970 it underwent a population crash and the otter was lost from its previous range in the Midlands and the south-eastern counties.

The cause of this decline is now known to be as a result of increased pollution of watercourses especially with chemicals known as PCBs that built up in the body of the otter and led to poor breeding success and even death. In addition, changes to bankside management resulted in the loss of shelter and breeding sites and increases in road building and road traffic increased the likelihood of an otter being hit.

## Action so far

From the 1980s onwards a concerted programme of action has been implemented to restore otter populations in England back to their former numbers and haunts.

Cleaner water is now running in our rivers as stricter pollution controls, better water treatment and restricted use of damaging chemicals in the surrounding countryside have been introduced.

We also have a better understanding of the habitat requirements of the otter and this has resulted in more favourable bankside management, the construction of artificial holts and design of otter crossings on dangerous roads.



Detailed studies utilising the technique of DNA fingerprinting (using otter droppings known as 'spraints') has enabled the identification of individual otters on stretches of river. Using this data we can then find out how many different individuals there are in a population, how they are related, their range and usage of habitats.

## Results so far

This action has been and continues to be of great benefit to the recovering otter population in England. Populations that had survived in the southwest of England, Wales and Scotland have slowly expanded back into England.

In Hampshire the otter used to be found on most rivers yet a survey in 1989/90 revealed the presence of otters on only three. Today it is found in an ever-increasing number of areas and within Eastleigh there is a strong population on the River Itchen.

## The future

Both the otter and its habitat need to be targeted for action if the otter is to recover.

Within Eastleigh Borough there is potential for the otter to spread out from the River Itchen to colonise smaller streams and the River Hamble to the east.

Action to maintain and increase the numbers and range of otters in the borough:

- The Environment Agency will, with the co-operation of the water companies who supply our water, review levels of abstraction from rivers as well as consents for discharges to ensure that the needs of otters and other riverine species are met.
- Eastleigh Borough Council as a local planning authority will ensure that future development in the borough does not adversely affect existing populations of otters or its ability to spread into further areas.
- Eastleigh Borough Council will use opportunities within the development control process to maintain, restore and create habitats suitable for otters and other riverine species.
- English Nature will review the selection of UK protected riverine sites.
- The South-East Otters and Rivers Project (SEORP) will identify existing otter road crossing sites on the Rivers Itchen and Hamble and, in conjunction with Eastleigh Borough Council, implement measures to reduce kills at these sites.

Action to help us gain a better understanding of otters in the Borough:

- SEORP will investigate possible factors limiting the expansion of otters within the Borough such as prey availability, habitat management and accidental death.

### **What you can do to help the otter**

To help to maintain and increase the numbers and range of otters in the borough you can:

- Cut down on your water use by putting a 'hippo' in your toilet cistern which is available from your water supplier. The water we use in the borough is pumped from underground supplies that also feed rivers. The more water we use, the more is pumped out leading directly to lower river flows and increased problems of pollution. This is especially true in the summer months when the rivers are at their lowest.

- If you own or manage a stretch of river or wetland consider the needs of otters and other riverine species in any management work that takes place. Specialised advice on management for otters is available from the South East Otter and Rivers Project, the Environment Agency and the Hampshire Wildlife Trust. Advice on incentive schemes such as Countryside Stewardship and Woodland Grants are available from DEFRA and the Forestry Authority respectfully.
- Come along to a practical conservation task along a river that may involve habitat management work to benefit the otter and other riverine animals and plants. You may even find yourself building an artificial holt.
- If you walk your dog on footpaths beside rivers and streams, please keep it on a lead to prevent possible disturbance to otters and their habitat.

To help us gain a better understanding of otters in the Borough you can:

- In the unfortunate event of hitting an otter or spotting an already dead one, please report the incident to SEORP so that important information can be collected to assist in our understanding of their ecology.
- Inform SEORP of any sightings of otters.

### **Where to see it**

The otter is an elusive, nocturnal animal that frequents rivers in search of fish, its favourite prey. Sometimes it travels overland between streams but uses dense cover to keep hidden. To see an otter in the wild you have to be very lucky. Even people who spend day after day on the river or are actively looking for them for research purposes rarely see the animal itself. They rely instead on field signs left behind such as muddy footprints or its distinctive droppings to confirm its presence. In Eastleigh, it is found along the River Itchen and a few lucky people have reported seeing it at Itchen Valley Country Park.