

# HOWARDIAN

## LOCAL NATURE RESERVE

### NATURE TRAIL

Declared a Local Nature Reserve in 1991



Published by the Friends of Howardian Local Nature Reserve  
and the City of Cardiff Leisure and Amenities Department



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## HOWARDIAN LOCAL NATURE RESERVE NATURE TRAIL

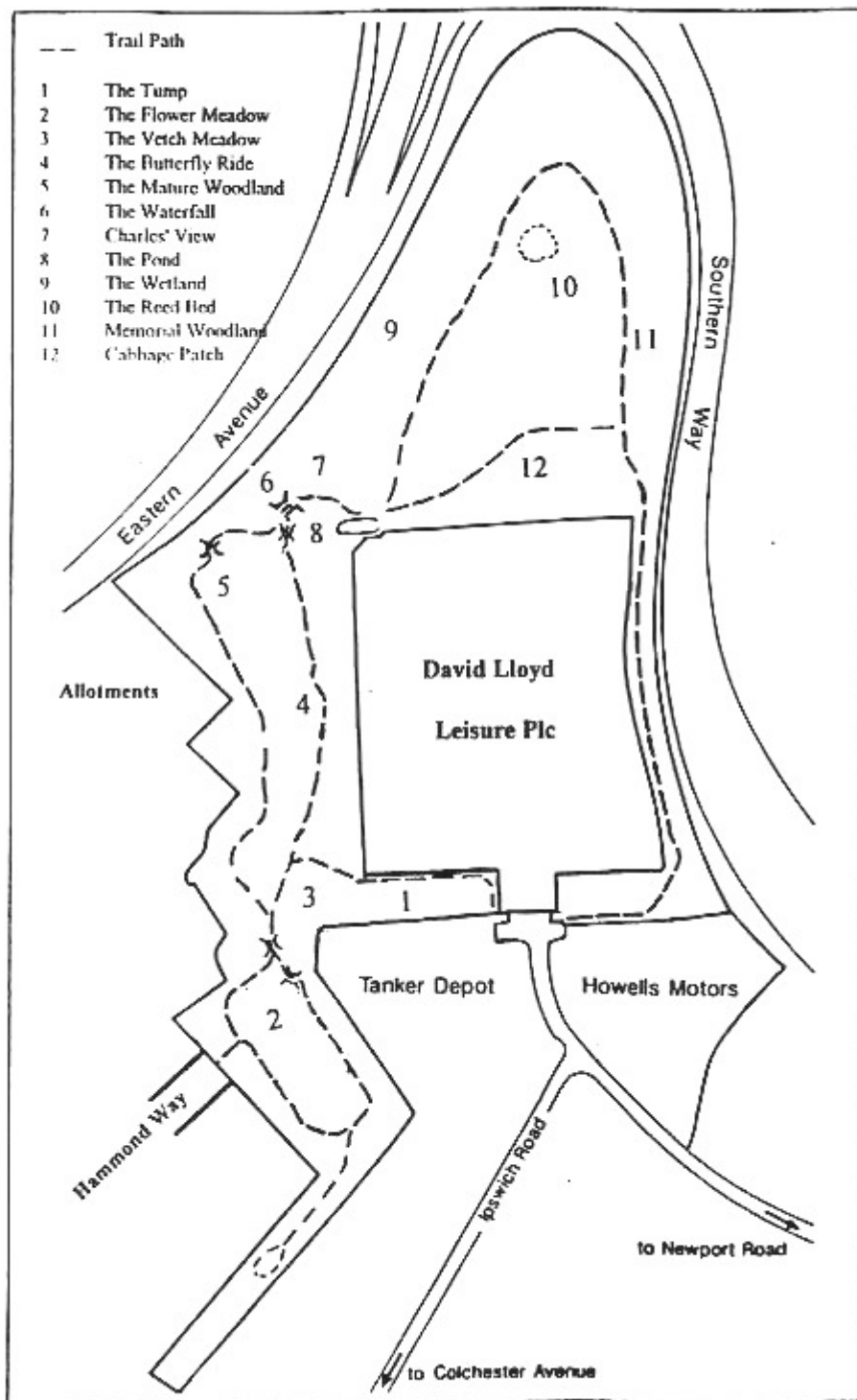
### General Information

Access	The nature trail begins and ends at the Ipswich Road entrances to the Reserve.
Parking	On street parking is available nearby.
Public Transport.	Buses serve Colchester Avenue and Newport Road.
Special Interest	Birds, plants and insects.
Distance	2 km (1.5 miles)
Ownership	The site is owned and supervised by Cardiff City Council Leisure and Amenities Department.

### Value Statement

The Reserve was specifically created to provide a habitat and breeding ground for the other species of life which share our planet. In order to preserve it, humans must reduce their presence and impact to the very minimum to avoid upsetting and disturbing the delicate balance existing in the Reserve. You are therefore requested not to make unnecessary noise and to observe the by-laws designed to protect the inhabitants of the Reserve. Specifically, when visiting the Reserve, please comply with the following:-

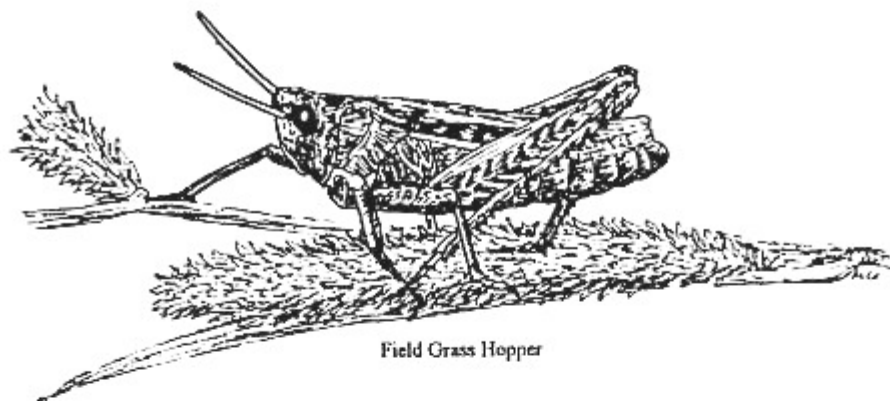
- *No taking or harming of any animal or egg.*
- *No taking or harming of any plant.*
- *No camping.*
- *No dogs unless under proper control.*
- *No motor vehicles.*
- *No cycles.*
- *No guns.*
- *No fires.*
- *No litter.*



## Background

In 1973 Cardiff City Council asked the Natural History Society of Howardian High School if it would like to manage 6 acres of scrub/grass/woodland, adjacent to the School, as a nature reserve. This began 17 years of involvement by the pupils with the Reserve, until the school's closure in 1990. During this time the Reserve was gradually extended to 30 acres. A large part of the Reserve comprises a former domestic rubbish tip, 15 feet deep, sealed with a foot or so of top soil. The tip was last worked in 1970. Hence, much of the reserve is man made but retains the characteristics of estuarine communities, semi-natural woodlands and emerging scrub vegetation.

This range of habitats attracts a wide variety of plants and animal life. Howardian Local Nature Reserve is one of the first examples of a statutory nature reserve being established on a former domestic refuse site and it therefore serves as a valuable example to other similar schemes throughout Britain.



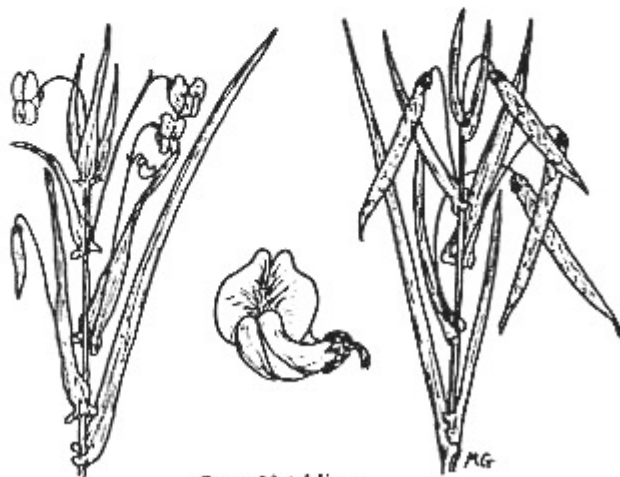
Field Grass Hopper

The Reserve is truly urban, being bounded by major roads and industrial and residential developments. It is also traversed by various services including three main underground sewers, two underground drains, overhead and underground power cables and a dual carriageway traffic indicator cable.

### The Entrance and the Tump

The trail begins at the new entrance to the reserve found just to the left of the electricity sub station near the entry gates of the new David Lloyd Leisure site on Ipswich Road. The trail then follows the northern edge of a raised tump for some

400 feet before entering the established Reserve near the Flower Meadow. The Tump acts as an almost undisturbed wildlife corridor enabling fauna to move (via a tunnel under Southern Way) from the A48 dual carriageway to the west to the tidal reach of the Rhymney River in the east. The Tump has been planted with over 2,000 saplings since 1991, including Aspen, Mountain Ash, Hawthorn and Scots Pine. The Tump is a haven for small birds. Throughout the year Wrens and Dunnocks are relatively common. Linnets can be seen if you are lucky. In the spring and summer the territorial calls of Willow Warblers and Chiff Chaffs may be heard.



Grass Vetchling

### The Vetch Meadow

After leaving the Tump follow the trail to the main path through the Flower Meadow and turn left over a wide railway sleeper bridge, then left again over another bridge into the Vetch Meadow. In spring look at (or smell) the small patch of Wild Garlic on the bank of the ditch by the first bridge.

The meadow, a former tip site, is mown annually to encourage meadowland flora. There are at least six Vetches in this field including the rare Grass Vetchling (crimson flowers, from May to July), Yellow Vetchling (yellow flowers from May to August), Hairy Tare (small whitish flowers from May to August) and Bird's-foot Trefoil (yellow flowers from May to August). Most of the Vetches have flowers that look like the Sweet Pea.

A number of butterfly species are associated with the pea family including the Common Blue which can be seen on most days throughout the summer. The Alder Buckthorn found in the north-east and north-west corners of the meadow is one of the

most plants of the Brimstone. This is probably the only butterfly you have a chance of seeing on a sunny winter's day.

Along the western edge are a number of Blackthorn, producing dense white flowers between March and May. The fruit of this tree is used to make sloe gin and wine. If you taste the raw fruit you will find it very bitter.

Between June and early August specimens of Common Spotted Orchid, in addition to a colony of Bee Orchid, can be found near the Poplars at the southern end of the Vetch Meadow. The Common Spotted Orchid has dark green spotted leaves and white to purple flowers. A patch of Japanese Knotweed can also be found along the southern edge of the meadow. This is a very invasive, non native plant with only limited wildlife value. A lot of hard manual labour is required to prevent it from spreading. As you follow the path round the meadow look for Field Grass Hoppers, particularly on warm summer days, and Goats Rue, which unusually has yellow flowers, rather than the more common pink.

#### The Flower Meadow

Follow the path back over the bridge to the Flower Meadow. You pass an old hedgerow dominated by three tall willow trees, a stand of Bird Cherries and a Horse Chestnut tree. The willows are a popular roosting site for Finches in the winter. The Bird Cherries produce white flowers in spring and dark black bitter fruits in late autumn. At dusk in summer Pipistrelle Bats can usually be found feeding on insects in this area. The bats' roost sites have not yet been located.



Goat's Rue

The plants in the Flower Meadow include Self-heal, Lesser Stitchwort and Common Centaury. Self-heal is a very attractive spreading plant with dark purple flower spikes between June and September. It is claimed to be a useful wound herb for sore mouths and throats. The Centaury is a slender member of the Gentian family with soft pink flowers between June and August. An infusion of leaves and flowers is said to stimulate the appetite. In the Middle Ages it was reputedly used to remedy snake bites!

From the Flower Meadow you can take either the west (left) route through the Mature Woodland or the east route (straight ahead) along the Butterfly Ride. Both routes lead you to Charles' View and the large open area at the northern end of the Reserve.

### The Butterfly Ride

The easterly path follows a fairly wide ride through the mature woodland and small clearings. In the summer the Ride is a mass of colour and one of the best sites on the Reserve for butterflies. The Bramble, Thistle and Rosebay Willowherb attract a wide variety of butterflies including the Painted Lady (a migrant from the continent often seen in late summer), the Small Heath, the Large and Small Skipper and the Meadow Brown. Most of these butterflies breed on the various grasses you find along the Ride.



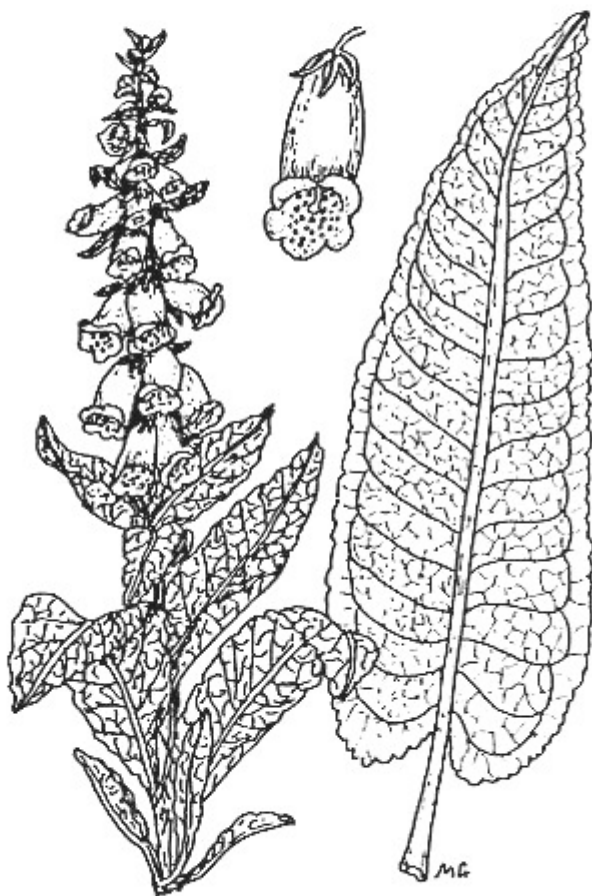
Comma butterflies on Bramble

In the Autumn and Winter a large variety of resident birds including Blue Tits, Coal Tits, Great Tits, Long-tailed Tits, Bullfinches and Greenfinches and Thrushes can be seen feeding in the trees. Migrants such as Redwing and Fieldfare often feed on berry bearing trees such as the Rowan.

## The Mature Woodland

The westerly path begins near a large Horse Chestnut and takes you through the mature woodland past the edge of the allotments and then Eastern Avenue. The Cuckoo Pint or Wild Arum, which has a distinctive hood or spathe, can be seen here in spring. Later in the year it has a distinctive cluster of very poisonous red berries. Other species of flora that can be found in the Mature Woodland include Bluebell and Wood Anemone. Both these plants appear in early spring before the leaves of the deciduous trees block out all the light. Yellow Archangel (a dead nettle), Wood Speedwell, Herb Robert (small pink flowers, May to September, with disagreeable smell), Enchanter's Nightshade, Dog's Mercury and some exceedingly tall Foxgloves are also common where there is sufficient light. Enchanter's Nightshade was hung on external doors in the middle ages to keep away evil spirits.

The mascot species of the Reserve is the Speckled Wood butterfly. This butterfly is a lover of dappled shade found in this part of the Reserve. Although individual adults seldom live longer than a week they can be seen on most sunny days between April and September (and occasionally in March and October). The chocolate and cream markings are unmistakable. The Speckled Wood is one of the few British butterflies that hibernate during the winter as either chrysalis or caterpillars. If you



Foxgloves



look closely you may find the green caterpillars feeding on the underside of a wide variety of grasses.

The dominant tree species in the Mature Woodland are Oak, Ash, mature Birch and a small plantation of coppiced Hazel. In the autumn several Galls become apparent on the Oak trees. The Marbled Gall, as the name implies, is about the size of a small marble. The Spangled Gall is identified by the small brown discs on the underside of the leaves. All galls are aberrations of the plant tissue caused by the presence of the larvae of Gall Wasps hatched from eggs laid on the host plants. Another member of this family of wasps is responsible for the fluffy



Oak Marbled Galls



Bee Orchid

looking Gall on the Dog Rose known as the Robin's Pin Cushion. Autumn is the best time of year to see or hear Jays, Green and Great Spotted Woodpeckers and Grey Squirrels in this part of the Reserve.

Near the stream the path turns right at the valley down past a number of fallen trees which provide food and lodging to many species of insects and birds. In summer Hornets and other members of the Wasp family can be seen chewing decaying wood to make pulp for nests, whilst on damp autumn days look out for fungi, and in particular Dead Man's Fingers, Crampball and Jew's Ears. Dead Man's Fingers are black and, as the name implies, are stiff finger like projections, slightly smaller than human fingers, found growing on old tree stumps and especially Beech. Crampball is a curious brown or black inedible hard ball found growing almost exclusively on decaying Ash stumps. The name comes from the old belief that they prevent cramp if placed in your bed. They are also called King Alfred's Cakes as they resemble burnt cakes. The name Jew's Ears ( and this fungus really does look like a human ear) comes from the belief that Judas Iscariot hanged himself from an Elder tree, the species' main host. This fungus is often used in oriental cuisine.

The Hazel in this area has been coppiced to encourage plants to grow by allowing more light to reach the floor. In summer look out for the Broad-leaved Helleborine, a member of the Orchid family, which bears greenish flowers between July and September.

## The Waterfall

The eastern and western path join just before you cross the stream near a large mature Holly and the waterfall cut into the soft rocks of the Silurian Wenlock strata. This is part of the same outcrop of rock exposed at the nearby Penylan Quarry SSSI. Penylan Quarry, located near the top of Waterloo Road, is of great importance in the study of the Silurian rocks of the Cardiff area, and is the source of a wealth of fossil marine animals which have been collected for over 100 years. The strata of this rock were laid down about 415 million years ago, when this area was covered by the sea!

The banks of the stream are swathed in an extensive carpet of Ivy, and through this in spring push Bluebells, Red Campion and Lesser Celandines (one of at least six species of Buttercup found on the Reserve). Liverworts, which are close relatives of the Mosses, but have flat green fleshy lobes, are also found on the stream bank. All Liverworts are a unique combination of a fungus and an alga living as one unit.

You will notice how dark this area is as the drifts of evergreen Holly and Ivy shield out the sun. The thick year round growth provides both roost sites and shelter for birds and animals in winter.

## Charles' View

Follow the path up the steps and out onto the open land. Take a few minutes to rest and enjoy the view. In summer this area is a haven for a variety of butterflies and moths which can be seen on the grasses and flowers. The eggs of the Common Blue are laid on the Bird's-foot Trefoil. With a bit of luck a Wood White may be seen on



Shaggy Ink Cap Mushrooms

Ragged Robin whilst the Large and Small Skippers rest on the grasses. If you look

closely you may see the pupae cases of the Six Spot Burnet Moth at the base of grass stems.

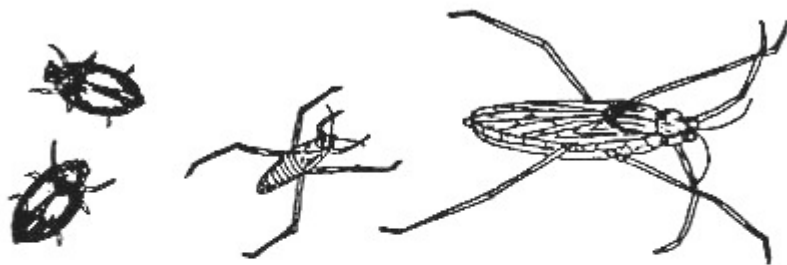
An uncommon species of flora found in this area is the Jointed Rush. As the name suggests, if you squeeze your fingers down the leaf stem of this rush you can feel the joints at intervals.

In autumn look out for the aptly named Shaggy Ink Cap mushroom. This edible fungus, also called the Lawyer's Wig due to the scales on its white cap, is very delicate and after a day or so quickly disintegrates into a black dripping mass. Hence its name.

### The Pond

At the bottom of Charles' View the path bears right between some Ash trees. In spring there is a yellow carpet of Lesser Celandine under the trees. In summer two of the more attractive native butterflies, the Small Copper and the Comma, are often found in this area. The Comma, a member of the Tortoiseshell family, was almost extinct less than a hundred years ago. Why it has recovered so well has not yet been fully explained. Its ragged wing outline, and the marbled pattern of grey, tan and browns, resemble a dead oak leaf and enable the butterfly to hibernate undetected during the winter months.

The entrance to the pond is on the right between the trees. White Willow, Goat Willow and Wild Cherry are some of the tree species that have been planted around the pond. During the autumn and winter Water Plantain and Bulrush heads can be seen emerging from the water.



Whirligig Beetles and Pond Skaters

A close look in the pond may reveal Dragonfly nymphs, Caddisfly larvae, Whirligig Beetles, Pond Skaters and Three-spined Sticklebacks. There are over 180 species of Caddisfly in Britain, most of them with larvae that live in a protective case built from pieces of leaf, shell or stone. In early spring the Frogs begin to lay spawn. It is hoped

that Toad and Newt spawn will also be found in this area of the Reserve in the near future. Toads lay strings of spawn much deeper in the water than frogs whilst Newts lay individual eggs on the back of submerged leaves. The tadpoles of Newts are identified by the external feather like gills.

Kingfisher can sometimes be seen feeding on the Sticklebacks at any time of the year. In spring pairs of Mallards and Moorhens nest in the vegetation.

Perhaps the most exciting time of the year to visit the pond is on a hot summer day in August when the area is alive with the blues, reds and browns of at least seven different Dragonfly and Damselfly species including the Emperor Dragonfly, which has the largest wingspan of any British Dragonfly, the Azure Damselfly, the Common Darter, the Broad-bodied Chaser and the Southern Hawker.



Southern Hawker Dragonflies and Jointed Rush

## The Wetland

On leaving the pond, turn right back onto the path and then bear left up towards the Llanedeyrn Interchange. This is a popular area for Slow Worms and Grass Snakes during the warmer months. However during the winter the path may be under water for two or three months. The surrounding wetland may be wet for up to eight months

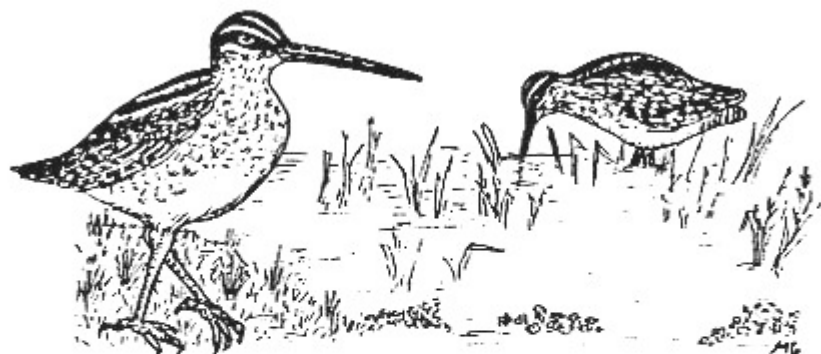
of the year. Wellingtons are recommended during the winter! On your left is the marshy wetland area with extensive stands of Hard Rush. Soft Rush is also found. Snipe are usually present in the winter months and Kestrels hunt for Short-tailed Field Voles. A pair of Heron are often seen, probably feeding on the resident amphibians.

Around the edge of the wetland area Celery-leaved Crowfoot ( a stout looking Buttercup with small flowers) is found. The trees include a number of Alder and Willow species. On the drier ground you can find Burdock with its round "Velcro" like fruits.

Further along the path there are a number of dense thickets of Bramble in which Rabbits live. These bush Rabbits are less prone to myxomatosis than Rabbits living underground. In spring the trills of Whitethroat, newly arrived from sub-Saharan Africa, Blackcaps from the Mediterranean region (although an increasing number over-winter) and the resident Dunnock abound. It is widely held that the Blackcap has the finest voice of all the birds. In winter charms of Goldfinches are common feeding on the Teasel and Thistles.

### **The Reedbed.**

As you approach the most northerly point of the Reserve a large stand of Common Reed is passed on your right which provides a habitat for Reed Warblers and Reed Buntings. In winter over twenty Snipe have been seen, often flying towards the Rhymye Estuary after being disturbed.



Snipe

In 1986 Slender Spike-rush was found in this area. This plant had not been seen so far up the Bristol Channel for over 50 years. Dense beds of the Greater Pond Sedge and thick grass swards permeated with False Fox Sedge provide an ideal habitat for Grass Snakes and Slow Worms. Marsh Bedstraw, a relation of the more common Goosegrass, and Mud Rush are also found near the reedbed. In the early morning Foxes sometimes cross this area.



Sea Clover

As you skirt round the reedbed look out for the flowering Bee Orchids and Sea Clover between May and July. Both are rare and declining in Britain but relatively common on the Reserve. On a summer's evening Burnet Moths can be found in relatively large numbers resting on the Vetches and Trefoils. These plants contain cyanide derivatives which are passed on from the caterpillar stage to the mature moths. The poison, advertised by the red and black colours of the moth, deters predatory birds.

### Memorial Woodland

On your left beyond the pylon as you follow the path south is the memorial woodland, planted in February 1990 by the pupils of Howardian High School as a lasting memorial to the school which closed later that year. Amongst the saplings planted by the pupils were Small-leaved Lime, Alder, Monterey Pine, Guelder Rose, Wayfaring Tree and Mountain Ash. The Wayfaring Tree is a member of the Honeysuckle family which got its name four hundred years ago due to its abundance by the roadways. The flesh of the red berries was used to make the sticky lime that was, until fairly recently, put on branches to trap small birds for food. The region abounds with butterflies, including the Large and Small White, Meadow Brown and Orange Tip.

### The Cabbage Patch

As you approach the end of the open area, under the power cables, you can take a short detour by following a path to the right that heads back towards the pond. Look for Hairy Buttercup on



Hairy Buttercup

the path. After a few yards you enter a large open area known as the Cabbage Patch. On the west side of the meadow is a small coppice of trees planted in 1989 by the local Brownies to commemorate their 75th anniversary. Small mammals including Voles, Moles and Rabbits abound in the open spaces. These attracts birds of prey such as Kestrel and at night, Tawny Owls. Short-eared Owls have been seen very occasionally.

The plants are dominated by Docks and Nettles. The latter are the food plant for a number of the caterpillars of our resident butterflies including the Tortoiseshell, Peacock and Comma. If you look closely you will also see the Field and Creeping Buttercup, St John's-wort and Greater Willowherb. St John's-wort is an attractive



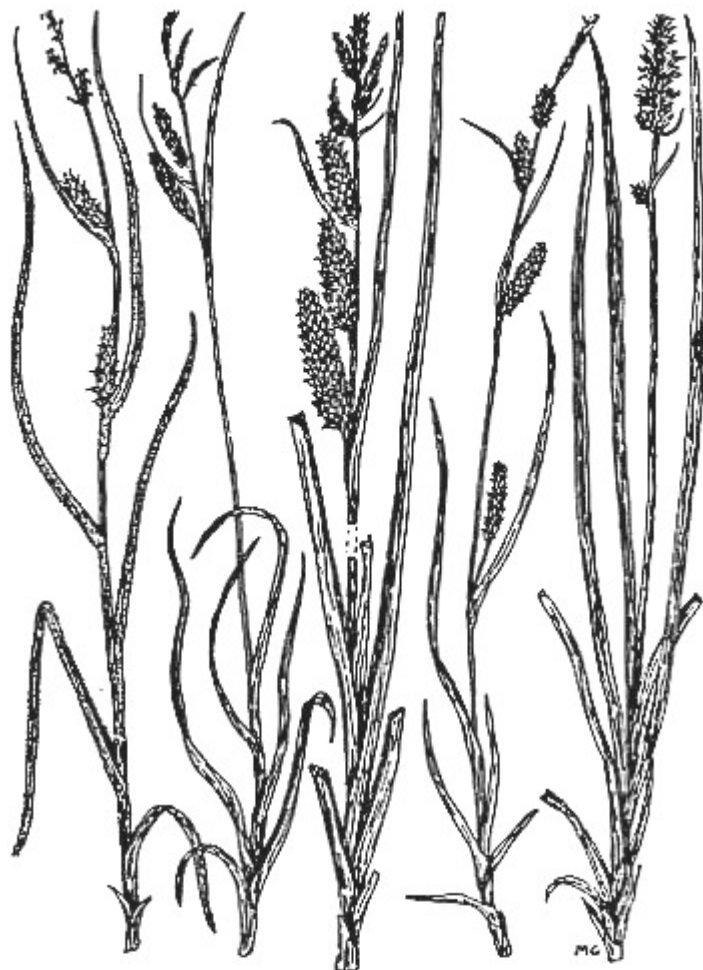
Kestrels

looking slender plant with yellow flowers. It is a herb used in homeopathy to relieve aching and tired muscles.

To complete your walk, return to the path under the power cables. The path leads you to the exit on Ipswich Road, close to the point where you began.

## GENERAL INFORMATION

The Friends hope you have enjoyed your visit. The development of the Reserve's habitats is continuing. If you would like more information or wish to help please contact Nigel Ferrand on 01222 483699. Guided walks will be arranged on request.



Five common sedges found on the Reserve. From left to right: Hairy Sedge, Glaucous Sedge, Greater Pond Sedge, Smooth-stalked Sedge and False Fox Sedge.

### Front Cover

The Reserve's Motif - Speckled Wood Butterfly on a sprig of Bramble.

### Acknowledgements

Dr Mary Gillham, Gwaclod - y- Garth, who has kindly allowed us to use her illustrations.

Dr and Mrs Eilir Jones, Cardiff, for the Welsh translation.