Tadburn Meadows

Local Nature Reserve

Educational Visit Guide

www.testvalley.gov.uk



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Welcome to Tadburn Meadows Local Nature Reserve

About Tadburn Meadows Local Nature Reserve (LNR)

Covering an area of approximately 5 hectares Tadburn Meadows LNR is situated in Halterworth, Romsey. Designated a Local Nature Reserve in September 2002, Tadburn Meadows LNR is conveniently placed for access by local schools, colleges, youth groups or other interested groups. The site supports a variety of plant and animal species including kingfisher, birdsfoot trefoil, southern marsh orchid and the nonnative American Signal crayfish.

The reserve is carefully managed to look after its wildlife – through a combination of mowing, coppicing, scrub clearance and pond creation. This maintains a range of habitats, including grassland for insects such as butterflies and moths, rivers for fish and mammals and woodland for insects and birds.



Kingfisher

At Tadburn Meadows LNR you will find a blend of natural landscapes and the aftermath of development has created additional wildlife habitats. The site largely comprises of wet woodland, meadows and the Tadburn Stream, as well as several ephemeral (seasonal) ponds. Formed because of the variation in hydrology of the site from the wet valley bottom to the drier valley sides. The relatively slow flowing Tadburn stream runs through the site and is surrounded by wet willow and alder dominated woodland.

The combination of running water and terrestrial habitats provide opportunities for studies into plants and animals and comparisons can be made between communities and adaptations. All habitats can provide a great deal of inspiration for visits by younger children, or offer opportunities to measure changes in physical and biotic environment factors brought about changes in the underlying geology and topography. Easy access to the stream through the reserve can be used for stream studies. Land use issues are also a key feature, with modern housing developments surrounding the site and a railway line to the north of the site.

Local history studies can make reference to its past land use for agriculture and inclusion in what was the old Highfield Estate.

Plenty of inspiration can also be found for language, literature and arts projects, and maths projects can be independent of the environmental studies or used to analyse data collected on the reserve. The role of the reserve within the leisure facilities of the borough and how the community utilises the facility can be part of the citizenship education.

Local community groups are also encouraged to use the site for educational visits.

History

Until 1944, the area southeast of Tadburn stream was part of the Highwood Estate, however in August 1944 the estate was sold at auction in various lots. Halterworth Farm was sold to Edward John Coe of Bishopstoke, comprising approximately 41.8 hectares. After changing hands several times the land became owned by Test Valley Borough Council in January 1982. In 1983 6.5 hectares were sold for development and the remaining land now forms part of Tadburn Meadows LNR.

Geology and Hydrology

Most of the site is comprised of alluvial deposits over bracklesham beds, with neutral to basic, poorly drained soils. The stream bed is composed of gravel.

The site consists of a valley bottom which is regularly flooded and a fast flowing stream over gravel beds. The valley bottom also contains a number of drainage ditches which vary in effectiveness due to regular silting up. On the southern side if the stream is a gently sloping, drier valley side.

Wildlife Importance

Lines of mature oaks mark the boundary of the site. At present the hedge is sparse with a few hawthorns and the base consists of rough grass with nettles. The areas is dominated by willow, mostly of a similar age, with a few young oaks, some of these may have been planted but most are likely to have grown naturally. The wood is dense allowing little light to reach ground level, resulting in very little ground vegetation, except for a few patches of brambles. Between the woodland area and grassy paying field is a strip of rough grass, which provides a 'woodland edge' habitat enjoyed by a variety of insects, small mammals and birds.

Parts of the area are much wetter and are dominated by mature alders, which are very close together. There is also some holly and laurel in this area, several parches of brambles and a few planted ornamental trees. The abundant broad-leaved buckler ferns and remote and pendulous sedges are an attractive feature of this area. Other areas dominated by semi-mature alder are generally in poor condition, being dense and shady with a poor understory composed mainly of bramble.

The stream banks are very shaded, with alders, nettles, hawthorn and Himalayan balsam (a non native species) growing under mature oaks. Some areas are very over grown with brambles and climbers. Further upstream the banks are less dense and the trees include mature alders and oaks as well as hawthorn, ash and hazel. The ground flora includes bramble, wood avens, rough meadow grass, garlic mustard, giant fescue, cock's foot and Yorkshire Fog.

The stream, which is tributary to the River Test, is a statutory main river and is therefore the responsibility of the Environment Agency. The streams is generally slow flowing, however this can rapidly change depending of the amount of rainfall. A wall has bee constructed alongside the stream north of Tadburn Meadows to contain the water during any periods of flooding. The stream has a gravel bottom, which has silted over due to the general slow flow of the water. The route of the river is natural with some alterations occurring particularly where foot bridges have been erected. Due to the shading of the stream throughout Tadburn Meadows there is very little in the way of plant life. Instead the stream contains certain detritivorous species (organisms that break down waste material such as leaves). Also present is the non-native species the American Signal Crayfish.

The area of wet meadow would have once have been quite a large open meadow but is now becoming slowly encroached by trees, bramble and bracken due to the lack of management. What remains of the open area is dominated by tufted-hair grass and is relatively species rich. Other plant species present include Yorkshire fog, meadow foxtail, meadowsweet, oval sedge, greater birds-foot trefoil, rough meadow grass, common valerian and purple moor-grass.

Grassy glades that are regularly managed for amenity purposes are often dominated by perennial ryegrass. Some of these areas have recently been managed less intensively to allow the full development of grassland species. This will produce a more attractive meadow sward to develop, consisting of herbs such as creeping buttercup, knapweed, bird's-foot trefoil and devil's bit scabious.

Ongoing management

Tadburn Meadows LNR is managed for both wildlife and public access. Promoting a high diversity of plants and animals (biodiversity) and ensuring that the right conditions are maintained for any rare and unusual species whilst maintaining balance against the need to encourage people to make use of the reserve for recreation and education. A major feature of management is zoning where some areas are fenced and others are left open for public access. The work on the reserve is carried out by the Countryside Officers, local volunteers and contractors.

Most of the habitat management tasks are carried out during the winter months when it will cause fewer disturbances to the animal life and less damage to the plants. In winter birds will not be nesting and many of the smaller animals are in their dormant state. Many plants will die back to ground level or leave seeds to start the new season growth, so this is a good time to be working on the site. Without management, the whole reserve would soon become an area of woodland, heavily shading the river. This would benefit some species of plant and animal, but a lot of biodiversity would be lost. The habitat maintenance programme will preserve the mosaic of different habitats that exist on the reserve and provide the right conditions for a wide range of plants and animals to flourish. The tasks carried out in winter include coppicing, tree felling, ephemeral (seasonal) pond creation. Major fencing work and path building or repairing would also tend to be done at this time of year.

In order to know if the management of the reserve is successful, it is necessary to carry out regular surveys of the plants and animals. This process is called monitoring. Butterflies are monitored every year and dragonflies, birds and freshwater invertebrates are also used as indicators of the reserves status.

Getting to the reserve and parking

Green Travel

When visiting this precious reserve, it is important to think about the environmental impact of your travel choices.

Access

Local people use the reserve regularly as a place to exercise themselves and/or their dogs or enjoy the wildlife. A network of paths, many suitable for wheelchair access, is maintained across the reserve. Most visitors have little impact on the site, but some leave litter that has to be cleared and cause damage to fences and signs which has to be put right by the Countryside Officers. Educational visits by schools and other groups are an important part of the reserves function and besides discovering the wildlife, it is hoped that these visits will increase the understanding about the management if the reserve and create a greater appreciation for this valuable resource.

Parking

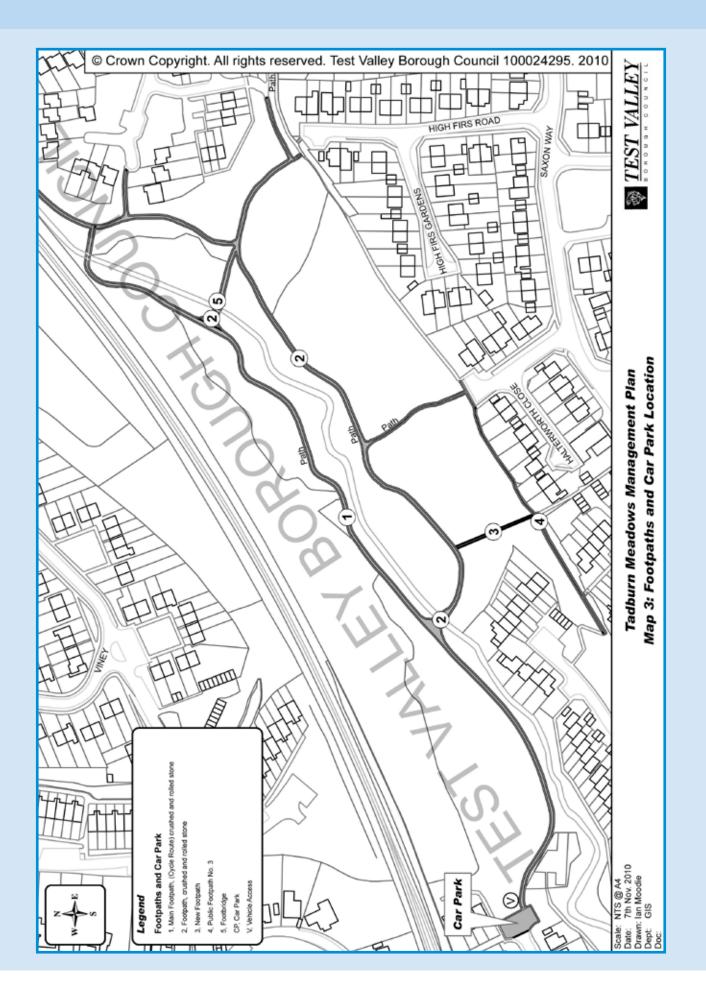
Parking is available at Eight Acres, which can be accessed via Hillside Avenue off of Botley Road. However, parking is limited so it is advised that local groups use alternative transport. Limited parking for the site is available from Eight Acres. There is also footpath access from Halterworth Close, Halterworth Lane and Seward Rise. There is no access to the northern side due to the railway line and a six foot high fence.

On-site Facilities

There are wooden benches around the lakes connected by a network of easily accessible paths and bridges around the majority of the site. These comprise of gravel paths with shallow gradients, making this a particularly good site for those in wheelchairs or others with mobility difficulties. All entry gates are wide enough for wheelchair access.

There are interpretation boards on each entrance to the site. These contain information about the reserve and contact details for the Countryside Officer/TVBC.

There are no toilet facilities, shelters or hand washing facilities on site.



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Educational visits to this site can meet the needs of a wide range of the curriculum or can be designed as a stimulating and enjoyable event for those engaged in less formal learning. The aim of this guide is to indication what this site has to offer and to provide some suggestion for its use. It is hoped that creative users will devise many schemes of their own and be prepared to offer these for display on the TVBC website for the benefit of others.

The pack covers key topics in the curriculum and offers ideas on preparation, site visits and follow up activities. Pupils worksheets are available to print out, but activities can also be easily competed without worksheets via discussion and teacher-led questioning.

Schools or other groups are welcome to use the site at any time, although it is advisable to contact the Countryside Officer so that two groups do not try to do the same thing at the same time. A pre-visit to the site is essential in order that the necessary risk assessment can be made, as there are obvious hazards such as running water and injurious plants. Visitors should also be advised to dress appropriately to guard against rain, cold or sun and to wear suitable footwear. The Countryside Officer can meet you on site during your pre-visit to advise you on these and other matters regarding your visit. You should take this opportunity to assess mobile phone network coverage in case it is needed in an emergency. First aid is also the responsibility of the group organiser. If an ambulance is called, use the site map to determine which access point is closest to the patient and advise the emergency servicers of the road adjacent to that access point.

The Countryside Officer can be present during the visit to act as a guide or to describe the work that is done to manage the site, but the organisation of the visit and control of children or students remains with the group organiser.

There are no toilet facilities on site. Hand washing is essential before eating or drinking and preferably before leaving the site. Anti-bacterial gels are now widely available and offer the simplest solution to this problem provided that there are no allergy issues. There is no roof shelter on the site and only limited cover under trees. Good waterproof clothing is important is rain is forecast.

During the summer term a programme of half-day visits are set up involving Countryside Staff and the Hi-Tech Wild-Trek trailer. Schools within the Borough are eligible to participate. Details are circulated to schools during the Spring Term.

Worksheets Available to Accompany this Pack

All of the worksheets listed below are available to download from www.testvalley.gov.uk

Activity 1: Landscapes

- If I were a Countryside Officer
- Write your own 'Discovery Trail'
- Warmer-warmer-cold!
- Natures pattern
- A special tree
- Talking points
- Foreign plants Friend or foe?

Activity 2 : Habitats

- Somewhere to live
- The moving shadow
- Dragons and Damsels
- Spotting for points
- Something beginning with

Activity 3: Plants and animal lifecycles

- Plant and animal tales
- As old as the trees
- Water, water everywhere
- Fruiting time
- Dabblers and divers
- Mr and Mrs
- What will I be where I grow up?

please follow the Countryside Code!

- Be safe plan ahead and follow any signs.
- Protect plants and animals and take your litter home.
- Leave gates and property as you find them.
- Keep dogs under close control.
- Consider other people.

Health Risks

Although there are minimal risks involved when visiting a Local Nature Reserve you should be aware of the following:

Lymes Disease

This is caused by an infected ticks which are found in grassy or wooded areas. Initial symptoms may include a red rash around the bite and fever. Consult a doctor if symptoms appear. Precautions include wearing long trousers tucked into socks and long sleeves.

Weils Disease

This is caused by infected rats' urine being present near waterways. Symptoms may initially appear flu like. Consult a doctor if symptoms appear. Precautions include covering cuts if working in or near water and washing hands before eating and drinking.

Toxocariasis

This is caused by a parasite in animal faeces. Humans can catch the disease from contact with grass, plants or soil where infected animals have been. Precautions include washing hands after touching soil or playing on grass.

Further Learning Opportunities

As well as Tadburn Meadows LNR, Educational Visit Guides are also available for 3 other Reserves within the Test Valley – Rooksbury Mill LNR, Anton Lakes LNR and Valley Park LNR.

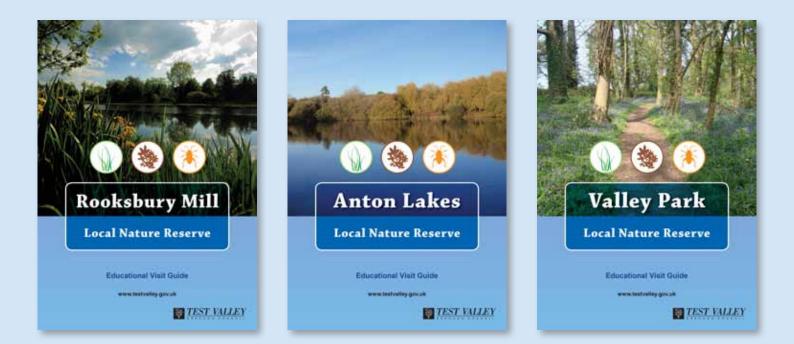
Rooksbury Mill LNR provides a mosaic of chalk grassland, ponds and lakes on the southern outskirts of Andover. The reserves past history as a mill and trout fishery have shaped the areas we see there today, providing children with examples how humans have shaped the natural world.

Anton Lakes LNR is a site where the natural landscape combines with the aftermath of industrial activity to create a diverse range of habitats, from chalk grassland and fen meadows, to lakes and rivers and watercress beds and scrub. Providing ideal opportunities to study the natural environment as well as the effect of cultural and land use issues on a sensitive site.

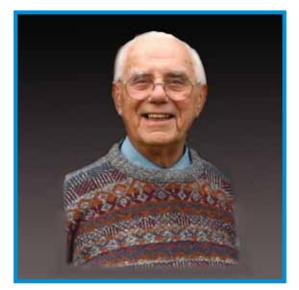
Valley Park LNR is the remnants of Ancient Semi Natural Woodland located in Chandlers Ford. The expanses of woodland, open water and grassland habitats provide inspiration for visits by younger children, or offer opportunities to measure changes in physical and biotic environment factors brought about changes in the underlying geology to topography. Land use issues are also a key feature, with modern housing developments bordering the woodlands.

Together these sites provide children with an enhanced opportunity for learning and a rich personal experience of nature.

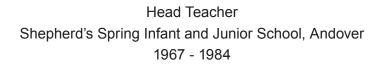
To obtain further information regarding the sites please visit the web address on the back cover of this education pack.



This publication is dedicated to the memory of:



Len Weatherly



This education pack is available as a pdf from www.testvalley.gov.uk

This pack contains a series of National Curriculum linked activities suitable for Key Stage 2 pupils. Some activities are adaptable for younger or older age groups, if necessary. The pack contains activities suitable for use in the classroom or a Test Valley Borough Council Local Nature Reserve.

A detailed map of the site is included within the pack to help you find your way around the site. Further resources can be found from **www.testvalley.gov.uk**

For further information contact: Countryside Officers Community and Wellbeing Service Beech Hurst, Weyhill Road Andover Hampshire SP10 3BR



(01264) 368000