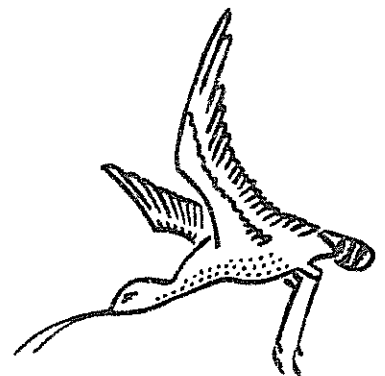


LOUGHBOROUGH NATURALISTS' CLUB

LOUGHBOROUGH
CANAL

AN
INTRODUCTION TO ITS
WILD LIFE

1968



INTRODUCTION

The varied habitats along the Loughborough Canal provide much of interest to the nature lover and, to the casual observer, can add that little extra pleasure to a stroll along the tow path, particularly along the sections before the Canal reaches the Empress Works and after it passes the Swingbridge Lane bridge.

This brochure attempts to summarise some of the interesting plants and animals associated with the Loughborough stretch of the Canal, and covers Plant Life, Invertebrates, Amphibians, Reptiles and Fish, Birds and Mammals.

PLANT LIFE OF THE CANAL AT LOUGHBOROUGH

Like most city and town stretches of canal, the section of Grand Union Canal through Loughborough leaves plenty to be desired from a wild flower lover's point of view. However, the portions lying immediately to the north and to the south of the built-up area still have a good variety of flowering plants, including some very attractive and interesting species.

The section of the canal being considered covers some 2 - 3 miles, stretching from the Bishops Meadow Lock in the north to the first bridge south of the town, some $\frac{1}{2}$ mile south-east of the Empress Works. Over 120 different species of wild flowers, native and alien, could be counted during a summer walk along the tow path between these two points.

The most interesting portion, botanically, lies between the bridge on Swingbridge Lane and Bishops Meadow Lock, adjacent to the town sewage farm, which until recent modernization was renowned locally as a haunt for rare birds of passage. Here, along the tow paths, one can find quite a wide variety of plants, including aquatic species like the Arrow-head (*Sagittaria sagittifolia*) and Water Plantain (*Alisma-plantago-aquatica*) in the open water, whilst here and there along the margins, grows the local and imposing Great Water Dock (*Rumex hydrolapathum*), also Bur-reed (*Sparganium erectum*), Great Pond-sedge (*Carex riparia*) and the alien Sweet Flag (*Acorus calamus*). Quite a variety of riparial species grow along the canal banks here, attractive plants for instance like Purple Loosestrife (*Lythrum salicaria*), Marsh Woundwort (*Stachys palustris*), Fleabane (*Pulicaria dysenterica*), Water Mint (*Mentha aquatica*), and Meadow-sweet (*Filipendula ulmaria*). In addition a good selection of other species, not directly associated with water, occur along the path sides.

Just south of the Swingbridge Road bridge, grows a fair sized colony of Great Yellow-cress (*Rorippa amphibia*) making a splash of colour about mid-summer, and at intervals along the bank one can find such plants as Skull-cap (*Scutellaria gallericulata*), Water Betony (*Scrophularia aquatica*), Gipsywort (*Lycopus europaeus*), Woody Nightshade (*Solanum dulcamara*), and one or more species of Water Forget-me-

not (*Myosotis* spp.). The Yellow Water-lily or Brandy bottle (*Nuphar lutea*) can be seen covering the water surface in many places. Several species of willow-herb occur along the canal sides and both the Great Hairy Willow-herb (*Epilobium hirsutum*) and the Lesser Hairy Willow-herb (*Epilobium parviflorum*) are common. Apart from water frequenting species such as those mentioned, a variety of other wild flowers can be seen. Early in the year Coltsfoot (*Tussilago farfara*) and Celandine (*Ranunculus ficaria*) commence flowering and are followed through the spring, through the summer, and into the autumn by a succession of species representing many plant families.

INVERTEBRATE LIFE IN THE CANAL

The Invertebrates of the canal are a large group of lower animals which, along with the plants, form a large part of the food of the vertebrates (fish, birds and mammals) which live in and near the canal. They are Crustaceans (related to crabs and lobsters), Insects, Molluscs and simpler animals known as Protozoa. These latter are small and the larger ones are barely visible to the naked eye. At certain times of the year they comprise the greatest weight of animal matter in the canal, as although small compared with fish and Water Voles they occur in very large numbers. Because of this they are an important but often unnoticed section of the life in the canal.

Among the Crustaceans, the Crayfish is a rarity in the canal. It resembles a miniature lobster and is found more frequently in the fast-flowing streams on the Charnwood Forest. *Asellus aquaticus*, also known as the Water Slater, feeds on detritus and crawls slowly over the canal bottom feeding. Not being very active it is favoured by the sluggish movement of the canal water. *Daphnia*, commonly known as Water Fleas because of their jerky movements feed on Rotifers which breed in the water. They hatch out in the spring from eggs which were laid by last years generation and are present in large numbers for short periods of the year when they are eagerly sought by the fishes present in the canal. Cyclops, so called because of its single eye in the middle of its head, is related to *Daphnia*. It swims more rapidly and the females can be seen carrying their green egg sacs on either side of their bodies.

Leeches are related to Worms and feed on fishes and Snails, sucking their body fluids. They swim through the water but can be usually found attached by their suckers to the animals on which they feed, or to stones under the water.

Corixids are Water Bugs and swim jerkily through the water. When temperatures are high they often fly to other stretches of water. They often mistake the shiny roofs of cars for water and dive onto them from the air. The other Insects present are Damsel Flies which are small Dragon Flies and Diving Beetles. Most people recognise these only in the adult form, the former hovering over the canal and the latter swimming to the surface of the canal for air. For the largest part of their life, these Insects are present in the canal in a larval form. They are carnivores and will feed on any small animals, including small fish and

are usually found in the shelter of water plants where they can avoid being eaten by larger fish.

The fresh water Snails and Mussels feed in different ways, the former are scavengers feeding on vegetable and dead animal matter, the latter sift their food from a current of water which they suck through their bodies. The Snails are often taken by fish, and birds will feed on both of these Molluscs.

Invertebrates are all affected to varying degrees by water pollution and disturbance of the canal. Many are very sensitive. When their numbers fall, the food supply of fishes, amphibians and birds is often seriously depleted. These are then faced with starvation or alternatively the need to move away from the canal to feed and breed elsewhere, if this is at all possible.

AMPHIBIANS, REPTILES AND FISH

The commonest amphibians in the canal are the Common Frog and the Toad. These feed in the fields and gardens alongside the canal and hibernate in the mud of the canal. In the spring they breed in the canal, laying their spawn where the water is sheltered from the wave action caused by boats. Crested and Smooth Newts are found less commonly than the Frog and Toad, but they use the canal in a similar manner.

Frogspawn is familiar to all, toadspawn is less well known. It is laid in long strings. The newts lay their eggs singly, attaching them to stems of water plants. All four animals have a similar life cycle, the eggs hatch out into tadpoles which breath by gills and live wholly in the water. After metamorphosis they leave the water and live on land to varying degrees. The Toad is probably the most terrestrial and the Crested Newt the least. They favour damp areas when they live on land.

Of the Reptiles, the only one likely to be seen along the canal is the Grass Snake. It feeds on Frogs and small animals and readily takes to the water and swims quite well. The Grass Snake is harmless and is non poisonous.

The canal contains two Fish of no interest to the angler. The Three Spined Stickleback and the Ten Spined Stickleback. The former are very common and the male has a red breast in the spring. He builds a nest and then entices the female inside to lay her eggs. As soon as the female has laid the eggs she leaves and the male watches over them until they hatch. These small Fish are taken by larger Fish and by the Water Beetle and Dragon Fly larvae, especially when they are in the "fry" stage.

THE BIRDS

There is no doubt that for many people, a stretch of water be it canal, lake or river, has a fascination all its own. However, a canal passing through an urban area presents problems which must be overcome if it is to remain an attraction and not degenerate into an eyesore.

It is obviously of prime importance that the water itself does not become too contaminated, for unless this condition is satisfied there will not be the reeds, sedges, aquatic grasses and other flowering plants along the waterside to provide the necessary cover and food for a variety of bird-life.

The northern end of the canal, at Bishops Meadow, was at one time extremely rich in bird-life as the conditions provided by the neighbouring sewage works were favoured by a multitude of waders, including often some exciting rarities which paused here on migration. Modernisation of the works has of course destroyed those conditions, but this stretch of the canal remains the most favourable to bird-life as it is still sufficiently rural and undisturbed to be favoured by a number of waterside species, such as the handsome Reed Bunting and the less conspicuous but more vocal Sedge Warbler.

A little further south, where the canal is heavily built-up on each side, the number of birds which actually live on the water is small; Mute Swans of course are a feature of most inland waterways and the Dabchick and Moorhen will tolerate quite a high degree of human proximity during most of the year, even if they prefer a little more seclusion during the breeding season. Of the two, the Moorhen being the more adaptable might even nest in this area if it were not persecuted by trigger-happy youths. The Pied Wagtail is another familiar resident whose tolerance of civilisation and fondness for water make it happy here. It is almost certainly joined temporarily in winter by its more colourful relative, the Grey Wagtail, with the attractive yellow breast.

Of the other birds to be seen here among the buildings, hardly any have predominantly aquatic requirements; they are more of the type that have become tolerant of man's presence and that use his buildings as nesting sites - like the ubiquitous House Sparrow and the Swifts, Swallows and House Martins which hawk for insects over the water.

The southern end of the canal, having a slightly more open aspect, supports a wider variety of birds than the central portion. Mallard occur here and Herons may be seen from time to time feeding at the waterside. The trees and hedges along the towpath support the usual population of Tree Sparrows, Wrens, Blackbirds and Chaffinches. Kingfishers have been seen along the brook which flows under and alongside the canal beyond the Empress Works.

MAMMALS

These animals have a rather slender attachment to the canal. The aquatic mammal fauna of this country (Seals and Whales) being confined to the sea. However, the canal is made up of more than water and its banks are the attraction to the Mammals.

The Short Tailed Field Vole is found throughout the country where rough grassland is present. Here, the canal banks provide the necessary habitat, and this rodent is found in small numbers. It feeds mainly on grass stems and leaves.

The Brown Rat is another ubiquitous mammal. It is a good swimmer and finds its security in the canal bank, many parts of which are inaccessible to cats, dogs and foxes which prey upon the Rat. Drainage systems which empty into the canal provide it with a ready-made burrow system, through which it can move in its search for food.

The Mole is found in the fields alongside the canal and its workings are more commonly seen than the animal itself. Its hills are sometimes seen on the towpath, and the fortress may be found in the hedgerow. It favours damp fertile ground where its main food, worms, are numerous. The Mole is rarely seen above ground but is occasionally taken by owls and foxes.

The Water-Vole, distinguishable from the Brown Rat by its blunt muzzle and its shorter hairy tail, is an excellent swimmer. It burrows in the canal bank and often enters its burrow from below water level. It feeds mainly on vegetable matter but has been known to take bait from fishermen's bait tins when they are fishing at dusk.

The Rabbit is a casual visitor to the canal, although a few find cover in the scrub and hedgerows and occasionally find a place to dig their burrows into the bank, from whence they can venture at night to feed on the adjacent fields and gardens.

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THE LOUGHBOROUGH NATURALISTS' CLUB

Its aims The Loughborough Naturalists' Club was founded in 1960 by a small group of local naturalists who felt that by joining together in this way, they would not only further their own studies and fieldwork but also be in a better position to aid the conservation movement, which was becoming more vital year by year. Since its inception the Club has grown rapidly, until with its membership standing at well over a hundred, including specialists in many different fields, it is now able to undertake valuable surveys of the flora and fauna of the County.

Its members These are of all ages and range from experts who have spent years studying their chosen group to others who, self-confessedly, know next to nothing but want to know more. Those with greater experience are always ready to help the beginner and young people are especially welcome to join the Club, for we believe that only by encouraging the younger generation of naturalists can we ensure that our efforts in the field of conservation will not be wasted.

There are three classes of membership:-

Full membership. This is restricted to active field naturalists and certain obligations are imposed upon such members. Annual subscription: £1-10-0d.

Associate membership. Open to anyone interested in Natural History. This grade of membership does not carry a vote on matters of Club policy, but as the interest and activity of such members increase, they may, with the approval of the Committee, be elected to Full membership if they so wish. Subscription £1.

Junior membership. Open to young people still receiving fulltime education. Subscription 10/-.

Its publications A quarterly bulletin 'Heritage' is distributed free to all classes of membership. This publication summarises all reports received on local natural history. Also, an Annual Report, which summarises the business and activities of the Club throughout the year, together with a report from the Recorder of each of the branches of natural history, is distributed free to all classes of members. In addition to the above, the Club publishes booklets in the series 'Surveys of Leicestershire Natural History', and these are on sale to members and the public.

Its activities During the autumn and winter, monthly indoor meetings are held at which talks are given by visiting speakers on a wide range of subjects. An exhibition evening and a film evening are usually included. Field meetings are held, mostly during the spring and summer, at various places of natural history interest both in the County and further afield.

Its amenities The Club has a library of books for use by all classes of members, and a Portfolio system is operated, primarily amongst Full members, in which field reports are circulated. Also, a scheme is in operation whereby the publications of numerous natural history organisations, both local and national, are loaned to any member on request. These cover the fields of Botany, Ornithology, Geology, Entomology and Mammalogy as well as more general topics. A list of these organisations is supplied to all members.

Requests for further information or applications for membership should be made to the Hon. Secretary: Mrs P.A.Candlish, The Drive, Woodhouse Eaves, Leics.