

Fact File

RIVER COLNE



GUARDIANS OF THE WATER ENVIRONMENT



NRA

*National Rivers Authority
Thames Region*

Fact File-RIVER COLNE

BIOLOGY

In addition to the chemical sampling, the Colne is also surveyed biologically. Benthic invertebrate surveys are carried out at a number of sites where riffle habitats are present. The population structure of the invertebrate fauna gives a measure of quality complementary to the chemical data. The following table lists a selection of benthic invertebrates found at the Colne sampling sites.

Common aquatic invertebrates found in the River Colne listed in order of increasing tolerance to pollution.

	Hamper Mill	St Michaels Cross d/s Maple	Harfield d/s Maple	Long Bridge Hickings	Above Thames
Caddis Flies	•	•	•	•	•
Damselflies			•	•	
Mayflies	•	•	•	•	•
P/W Shrimps	•	•	•	•	•
River Limpets		•	•	•	•
P/W Mussels				•	•
Beetles	•	•	•	•	•
P/W Snails	•	•	•	•	•
Hog Limes	•	•	•	•	•
Midges	•	•	•	•	•
Aquatic Worms	•	•	•	•	•

(• indicates presence at site)

ABSTRACTIONS

Historically many of the spring sources feeding the Colne catchment have been intercepted or diminished by groundwater abstraction. Generally speaking, water can only be abstracted under licence. The licence states how much water can be taken and how often. Our water resources staff are responsible for licensing abstractions, 4 licences have been granted, and a combined total of 750 mega litres per year can be abstracted under licence from the Colne.

DISCHARGES

Thames Water Utilities Plc own and operate the main sewage treatment works with effluents discharging to the Colne catchment:-

Discharge Point	ML/Yr
St Albans	422,000 (to R. Colne direct)
Wembley Lodge	400,000 (to GUC/R. Colne direct)
Chesham	51,000 (via R. Chess)
Gerards Cross	20,400 (via R. Misbourne)
Uxbridge	10,000 (to Colne Brook)
Berkhamstead	15,000 (via Gade/GUC)

Besides these effluents, the other main influences on water quality are:-

- Surface run-off from urban areas e.g. St Albans, Watford, Rickmansworth, Pinner, Ruislip and Hillingdon.
 - Associated with (a) is run-off from commercial and industrial development, together with highways including parts of the M1, M4, M25 and M40 motorways.
 - A small part of the surface run-off from Heathrow Airport (to the Wrampley River and Stanwell Moor Dutch tributary of the Colne).
 - Trade effluent discharges, include cooling waters and fish farm effluents.
- Although there are no public water supply abstractions from the Colne itself there are major abstractions from the Thames immediately downstream of the Colne confluence.



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TRIBUTARIES

The principal tributaries are the River Ver 132 sq. km., Upper Colne above the Ver 194 sq. km., River Gade 195 sq. km., River Chess 101 sq. km., River Misbourne 139 sq. km., River Alderbourne 8.2 sq. km. and the River Pinn 40 sq. km., where the flood of August 1977 occurred following exceptional heavy rainfall over a small area.

FLOOD DEFENCE

Reducing the risk of flooding from the Colne and its tributaries on a day-to-day basis and planning major flood defence projects in the Colne catchment, forms a large part of the NRA Thames Region's work.

The NRA's flood control room at Waltham Cross keeps a round the clock check on weather conditions and river levels. Staff interpret the information and give the local emergency services early warning of possible floods.

A flood defence team is based at Broadmeads and carries out regular river maintenance work. This includes dredging, weedcutting, and the removal of blockages. This team is mobilized during flood emergencies to keep rivers clear of obstructions so that flood waters can be conveyed away as quickly as possible.

THE LOWER COLNE IMPROVEMENT SCHEME

The Lower Colne improvement scheme began in 1988 and is programmed to end in the financial year 1995/96 at an overall cost of £12.6m. The scheme comprises some 50 small works spread along the main water ways in and around the Colne Valley. They include creation of local bypass channels and flood carriers, and the removal of bottlenecks such as derelict sluices and easily blocked weirs which slow flood flow. The NRA is careful to protect the aquatic ecology and fisheries when undertaking such work. We undertake ecological surveys of the rivers before starting flood defence work.

ENJOYING THE COLNE

The Colne offers a wide variety of uses for sports, leisure interests and relaxation. For the energetic, there is the Ver-Colne Walk from Redbourn to Watford (simply follow the yellow arrow with a river symbol). The river also offers an opportunity for ornithologists to see the grey wagtail, kingfisher or even a little grebe. You will not only find a wide variety of wildlife, but also facilities for a family picnic and excellent coarse fishing.

FISHING IN THE COLNE

The complex system of the Rivers Colne, Colnbrook, Wraysbury and Frays supports an excellent mixed riverine coarse fishery.

The fast flowing nature of the Colne presents an ideal habitat for the roach, dace, chub and barbel found in the river, together with bream, carp, perch and pike, which are also present. Also found in the river is the native British crayfish.

Above Rickmansworth, the river narrows although roach, dace and chub are still found in the deeper pools. Downstream from here and running almost unnoticed through the area are some of the country's best carp lakes, and its tributaries offer excellent potential for the river angler seeking sport from the above species. For further information on where to fish etc., you should contact:-

Colne Valley Anglers Consultative Assoc.,
Mr G Cox,
15 Norwood Terrace,
Norwood Green,
Middlesex,
UX2 4NB.



National Rivers Authority Thames Region:

Kings Meadow House,
Kings Meadow Road,
Reading,
Berkshire,
RG1 8DQ.
Tel: 0734 535000.

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Common aquatic invertebrates found in the River Colne listed in order of increasing tolerance to pollution

	Hamper Mill	Beale Cross 7 1/2 Miles	Harrold 4 1/2 Miles	Long Bridge 3 1/2 Miles	Above Thames
Caddisflies	•	•	•	•	•
Damselflies			•	•	
Mayflies	•	•		•	•
F/W Shrimps	•	•	•	•	•
River Lampies		•	•	•	•
F/W Mussels				•	•
Beetles	•	•	•	•	•
F/W Snails	•	•	•	•	•
Hog Louse	•	•	•	•	•
Midges	•	•	•	•	•
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Location	Effluent (m ³ /d)
St Albans	122,000 (to R Colne direct)
Stoke Newington	400,000 (to GUC/R Colne direct)
Gratham	31,000 (via R Chess)
Gerards Cross	20,400 (via R Misbourne)
Hive N	10,000 (to Colne Brook)
Berkhamstead	15,000 (via Gade/GUC)

Besides these effluents, the other main influences on water quality are:-

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