

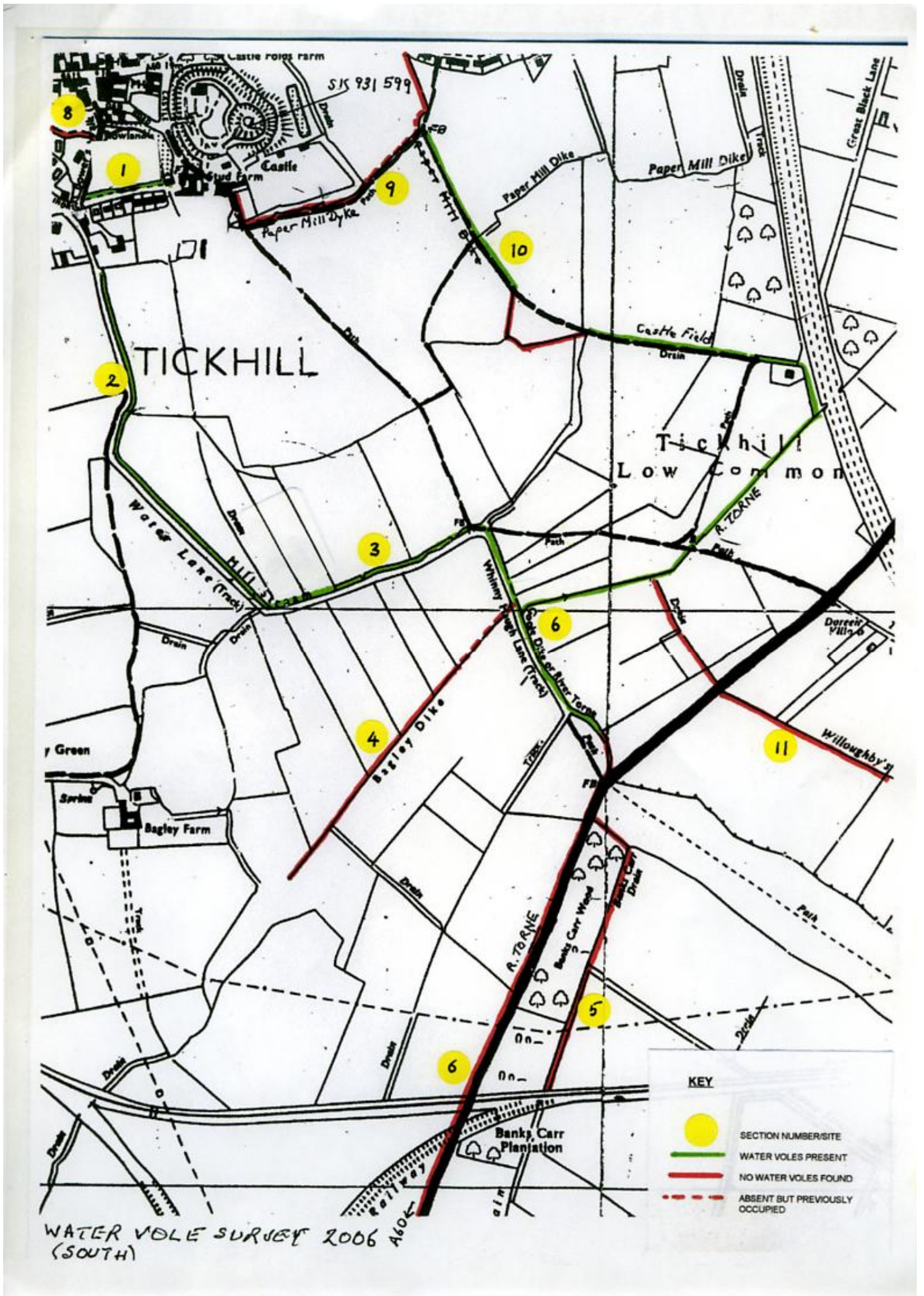
Tickhill Water Vole Surveys 2006

By Tickhill Countryside Group



Tickhill Mill Stream
April 2006

Copyright Tickhill Countryside Group.
Reg Charity No 1096949



WATER VOLE SURVEY (SOUTH) by Tickhill Countryside Group. APRIL/MAY 2006.

The area covered included all water courses South of the A631 within the Tickhill area - Refer to attached Map or to Grid References. All are in South Yorkshire except Bank Carr Dyke which is in Nottinghamshire.

Water voles are most active during the breeding season which runs from March - October. They do not hibernate.

Sightings can be rare but by studying their field signs definite habitation can be found. These include burrows, latrines, feeding remains, pathways in vegetation, small flattened areas and footprints. With further study a reasonable estimate of numbers can be made.

The rivers, dykes and drains were divided up into defined stretches and given Site Numbers. See map or Grid Reference for details.

** GRID REFERENCES indicate the upstream start of each Site.

Section 1. 'Active' Waterways.

** SK 592 928

01.04.06

Site 1. Mill Stream. Weir to Water Lane adjacent to Lindrick.

There is a strong population here. They seem unconcerned by semi-urban activity and this provides protection from predators.

#10 Burrows(in use), 11 Latrines

DISTANCE 150 metres

**SK 591 927

01.04.06

Site 2/3. Mill Stream. Water Lane/Whinny Haugh Lane to the River Torne.

Water Voles were active on the whole length except where there are man made walls. They had burrows under the lane and at spaced intervals in the banks. Breeding had started in at least 2 burrows (small and large droppings at latrines).

23 Burrows were counted. A recent rise in water level prevented a full Latrine count.

DISTANCE 1400 metres

This site provides good habitat with suitable uneven banks where the voles can burrow and find small flat areas to bring their food. They like the flat stones above the waterline for their latrines. The overhanging trees give important protection from predators such as herons and hawks. They coexist with the dog walkers and apparently survive flooding when the sluice upstream is released.

**SK 599 917

27.04.06

Site 6D.E. River Torne. Bank Carr Drain to Mill Stream.

A small amount of activity, including breeding, was found on the last 250 metres. It is hoped that the voles will spread upstream where the river is bordered by Styrrup Golf Course and Jubilee Wood and habitat looks good.

3 Burrows, 2 Latrines. Sighting April and May. DISTANCE 400 metres

**SK 597 921

05.05.06

Site 6 F.G River Torne. Mill Stream to Castle Field Drain.

There were signs of voles wherever the bank was suitable, including a long stretch on the North bank where soil had worn away at water level. This provides an overhang of vegetation with overhead protection in open country. It also disguised full count for field signs.

#14 Burrows, 8 Latrines

DISTANCE 600 metres

It was particularly pleasing to find voles on the **River Torne** and credit must be given to the Environment Agency for stopping the use of weed killer in the river. If the banks were left unmown over the whole length for 2 - 3 feet above water level habitat would be less disturbed during the breeding season (March -October). It is thought that this could greatly improve chances of survival in the open country.

**SK 597 930

07.04.06

Site 10 Castle Field Drain. Lancaster Crescent to the River Torne.

There was a small population of water voles adjacent to the NE corner of Castle Field. There were then occasional signs of activity which stopped some distance before a stretch with friable black earth - This would be unlikely to support burrows. A crack willow is a good landmark (SK 600 925 approx) with better banks again downstream. There was strong activity on the next stretch, with further signs down to the junction with the Torne.

North section. 4 Burrows Several Sightings during April DISTANCE 650 metres
South section. 12 Burrows 2 Latrines DISTANCE 450 metres

The main threat to Water Voles on Castle Field Drain is loss of habitat. Continued sympathetic management by the IDB could greatly improve their chances of survival particularly in the North Section.

Section 2. Previous Habitation.

**SK 594 915

01.04.06/27.04.06

Site 4 Bagley Dyke.

Old Water Vole holes were found for the first 100 metres above Whinny Haugh Lane - where thriving vole activity had been found (site 3). It is understood that it was necessary to carry out emergency drainage work in 2005 which scoured most vegetation from both banks. Unfortunately Water Vole habitat was completely destroyed.

Female Water Voles breed between March and October. They have up to 5 litters with as many as 8 young in each. As Summer progresses the young need to spread into new territory. If they could return to Bagley Dyke there is an encouraging stretch upstream where the bank profile is more shallow with some overhead protection from trees and bushes.

DISTANCE 600 metres

Section 3. No signs of Water Voles.

Site 5 Bank Carr Drain.

Nearest voles some distance. Habitat suitable although earth may be too friable for burrows.

Site 6A,6B,6C River Torne from A60 to Bank Carr Drain.

It is not known whether there are voles at Sandbeck which could possibly spread down the Torne. A60 to the Railway was not visited until late June when vegetation made search impossible. Worth further study under pair of alder trees approx 50m west of Styrrup road. Also through grassland west of railway.

Next to Banks Carr Wood there were some likely holes showing possible old usage. Suitable habitat if the voles spread upstream.

Site 8 Paper Mill Dyke upstream from Mill Pond.

Water Voles have been known in the past, including near the Friary.

Site 9 Paper Mill Dyke below the Mill Pond.

It is not thought possible for the Mill Stream voles (Site 1) to get under the road from the Mill Pond, nor would they be likely to travel overland. However, with a stronger population in Castle Field Drain (Site 10) voles could spread west as far as the wood - 150 metres. There were some likely old holes there.

Site 11 Willoughby Dyke.

Very high sandy banks with little vegetation, thought to be unsuitable habitat

Dykes, drains, ditches, rivers and the future for Water Voles in Tickhill

The Survey was originally carried out at the request of the Tickhill Internal Drainage Board so that appropriate care can be taken during ditch digging and bank clearance. It is hoped that the Environment Agency will also find it useful for their work on the River Torne.

It was then decided to search all possible water to gain the overall picture. There is no doubt that an exciting population of voles exists with opportunity for improvement wherever they have a foothold. It is hoped that people who know the area well will gain an understanding of the habitat needed by Tickhill Water Voles.

A survey for the North of Tickhill was started with more encouraging findings than expected. It is hoped to complete this in spring 2007.

Acknowledgement

Many thanks to Samantha Thorpe for her encouragement and enthusiasm. She has been invaluable in teaching us how to recognise Water Vole activity and helping us to get our eye in.

Angela Firth
angela.firth@tesco.net
Survey co-ordinator

APPENDIX 1 WATER VOLE SURVEY (SOUTH)

INTERPRETATION OF SURVEY RESULTS

Summary of active burrows and latrines found.

Site 1	Mill Stream	150 metres	10 burrows	11 latrines	01.04.06
Site 2/3	Mill Stream	1400m	23 burrows	*	01.04.06
Site 6D,E	R Torne	400m	3 burrows	2 latrines	27.04.06
Site 6F,G	R Torne	600m	14 burrows	8 latrines**	05.05.06
Site 10	Cstle Fld Dr	650m	4 burrows		07.04.06
	Cstle Fld Dr	450m	12 burrows	2 latrines	07.04.06

* Recent rise in water level prevented true count of latrines.

** Further latrines probably concealed by overhang of vegetation.

Approximate Number of Water Voles - Ref.1

Mill Stream alongside Lindrick 01.04.06 using Latrine calculation.

$$y = 1.48 + 0.683x \quad y = \text{water voles} \quad x = \text{latrines}$$

Result suggests 9 Water Voles. Say 2 females, 1 male and 6 juveniles in 150 m

Latrines on the Torne and Castle Field Drain proved much more difficult to find. This was partly due to the type of habitat but may also relate to small and/or fragmented population. It is thought likely that a female vole may only find it necessary to mark her territory when life gets crowded.

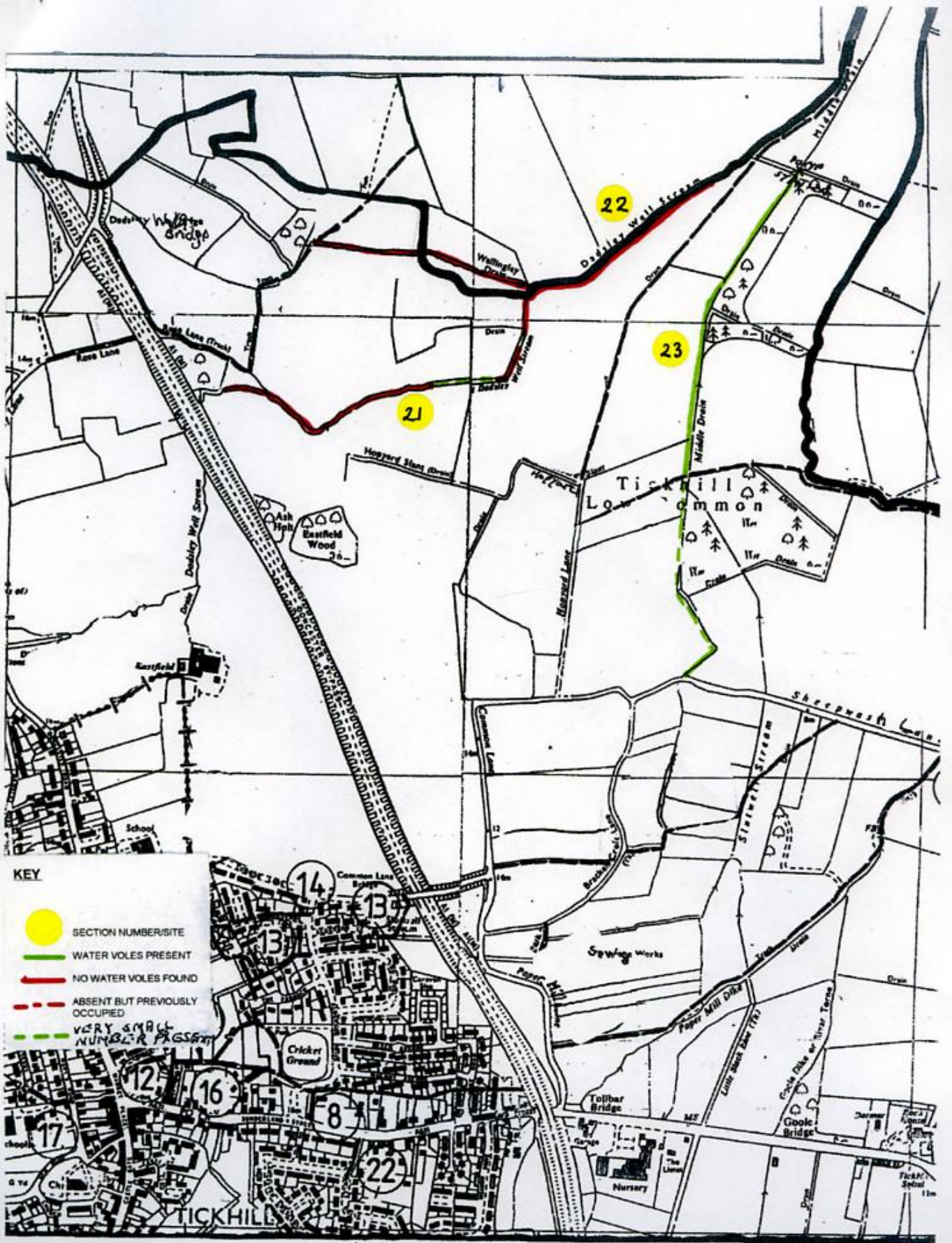
Size of Territory	Females	30 - 150metres, at least 1 female to 6 maintained latrines
	Males	60 - 300metres

Reference 1. Water Vole Conservation Handbook, Rob Strachan

APPENDIX 2 WATER VOLE SURVEY (SOUTH)

DETAILS OF NUMBERING - (Survey sheets on file)

1	Mill Stream	Weir to Water Lane - bordering Lindrick
2A		Lindrick to Ford - Water Lane
2B		Ford to Corner
3A		Corner to Footbridge
3B		Footbridge to River Torne - Whinny Haugh Lane
4	Bagley Dyke	
5	Bank Carr Drain	
6A	River Torne	A60 to Railway
6B		Railway to Bank Carr Drain
6C,D,E		Bank Carr Drain to Mill Stream
6F,G		Mill Stream to Castle Field Drain
7	not used	
8	Paper Mill Dyke	West of Mill Pond
9A	Paper Mill Dyke	Mill 'tunnel' to Stud Farm
9B		Stud Farm to Castle Field - West of Wood
9C		Wood
9D		East end of Wood to Castle Field Drain
10A	Castle Field Drain	Lancaster Crescent to Paper Mill Dyke
10B		Paper Mill Dyke to Castle Field Stile
10C,D		Stile to Crack Willow
10E		Willow to Footbridge
10F		Footbridge to River Torne
11	Willoughby Dyke	



WATER VOLE SURVEY (NORTH) 2006

Section 2. Previous Habitation

**SK 595 948

19.05.06

Site 21. Dadsley Well Stream. Motorway to Middle Drain.

Survey in late May hampered by growth of vegetation.
8 burrows were found in the middle stretch where banks are supported by vertical planks,
as on Middle Drain. Activity not confirmed by further field signs.

Section 3. No signs of Water Voles

**SK 597 951

Site 22. Wellingley Drain.

Very overgrown 19.05.06. Nothing seen.

Angela Firth
angela.firth@tesco.net
Survey co-ordinator