



River Chess Water Vole Recovery Project Update 2017

Long-term status: *Decline*

Short-term status: *Increase*

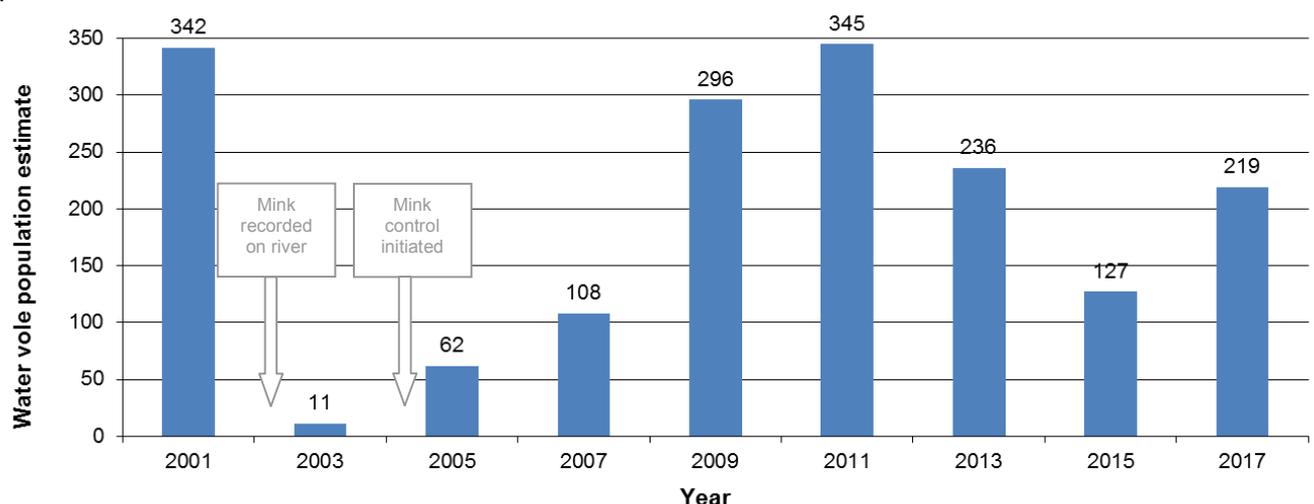
Mink control level: *Medium*

Background

Full water vole surveys of the River Chess have been conducted at 2-yearly intervals since 2001, with the number of water voles estimated from latrine counts. Between 2001 and 2003, a dramatic 97% decline in water voles was seen, this was attributed to mink dispersing along the watercourse and a mink control and habitat enhancement scheme was initiated. Surveys conducted between 2005 and 2009 showed the recovery of the water vole population with an increase in numbers each year. By 2011 the population had fully recovered to 2001 levels with an estimated 345 water voles. Subsequent surveys were co-ordinated by the River Chess Association (RCA) and carried out by trained volunteers and the Chilterns Chalk Streams Project (CCSP) Officer. Results showed a 32% decline in water vole activity in 2013 and a further 46% decline in 2015, with the population falling to 127 individuals (Map 1). This continued decline may in part be due to a natural fluctuation in water vole numbers but is also likely to be the effect of external factors such as mink predation or changes in habitat.

2017 Water Vole Survey Results

This year surveys were once again co-ordinated by the RCA. Trained volunteers and the CCSP Officer carried out 39 surveys on the River Chess and its tributaries between Chesham and Chorleywood. Water vole activity was recorded on 24 sections (Map 2). An extension of the range of the water vole population upstream of Latimer Park was seen.



The number of water voles present was once again calculated from a detailed latrine count and results showed that the population had increased significantly from 2015. Water vole numbers are estimated at 219 individuals, 64% of the 2001 population.

Mink Control

A mink control scheme was initiated in 2004 after mink were recorded on the river. During an audit of the mink rafts in 2015, it became apparent that monitoring and control efforts had dropped off and of the seventeen rafts installed on the river, only three were still functioning and being regularly monitored. In December 2015 mink prints were detected at Latimer and one adult mink was subsequently trapped. Efforts were made to extend the mink raft scheme and several Riverfly Monitors were recruited to help monitor new rafts. Nine mink rafts were in use on the river between July 2016- June 2017, mink prints were detected on one occasion but no mink were trapped (Map 2).

Habitat

The CCSP continues to work with landowners on local projects to enhance habitat within the Local Key Area. A 200m stretch of the river at Latimer has been fenced which will enhance habitat at a point not previously known to support water voles. The CCSP and RCA are also working in partnership with a local landowner and Chiltern Rangers to improve water vole habitat along a further 1km stretch of the river at Latimer. This will enhance the area for water voles and encourage the population present to expand into good habitat further upstream.

Recommendations

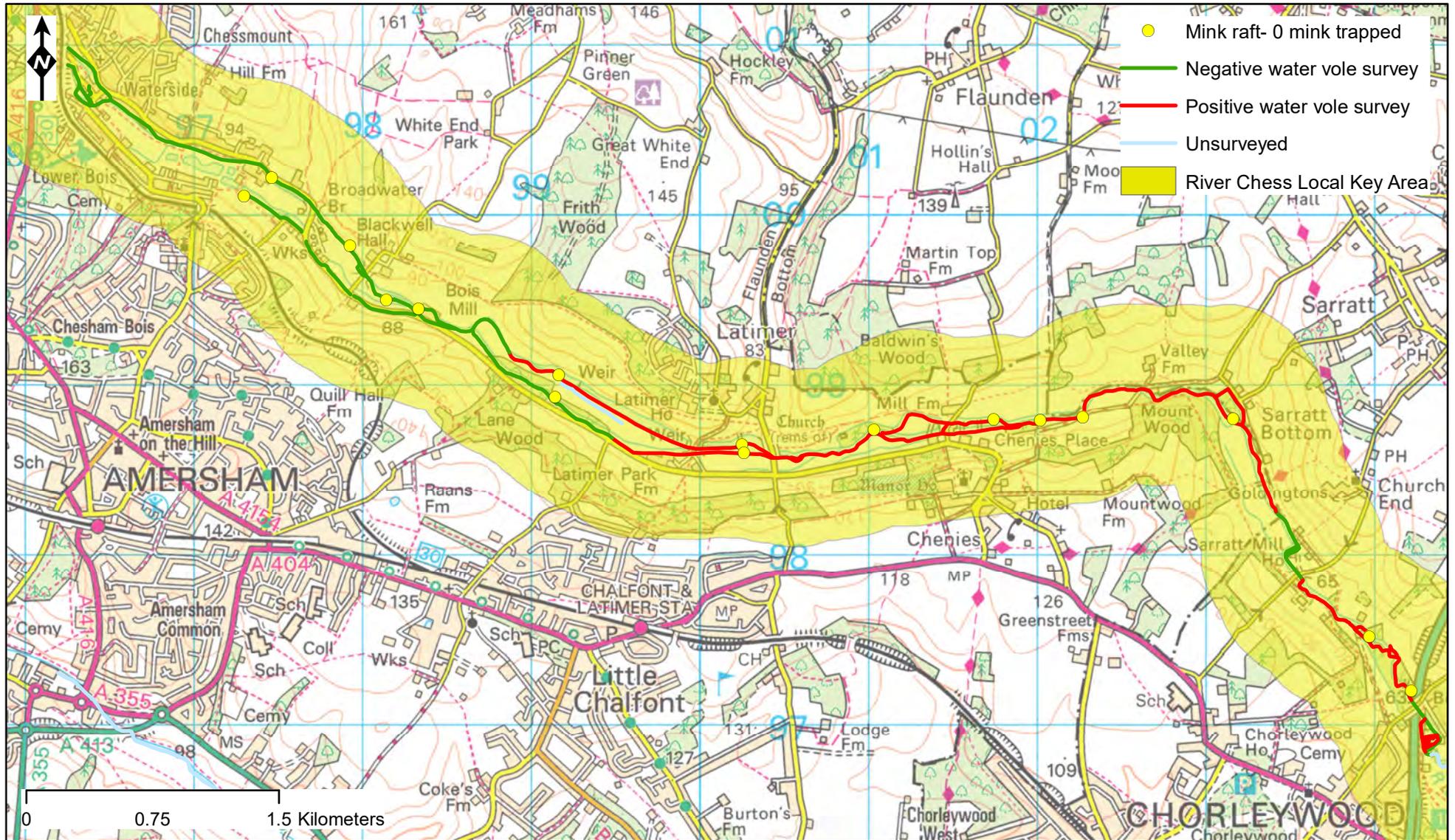
The increase in water vole numbers on the River Chess this year was very good news. Further efforts should still be made to increase the mink control scheme in order to protect the water vole population from predation, with the aim of installing mink rafts at roughly 1km intervals throughout the survey area. Particular effort should be made to reinstate mink control along the river downstream of Chenies in order to detect mink travelling upstream from the River Colne. The Water Vole Recovery Project should continue to work with the RCA and the CCSP on monitoring water voles, mink control and habitat enhancements. The upper River Chess should be surveyed again in 2019 in order to monitor the progress of the water vole population.

Ad-hoc records of water voles have been reported on the lower River Chess in recent years and surveys should be extended through Hertfordshire in 2018. The long-term aim is to ensure the survival of water voles on the Chess and facilitate their spread downstream to reach the River Colne. Here they could potentially link up with voles from the River Misbourne to create a large, more robust metapopulation.

Acknowledgements

Thanks to the River Chess Association, the Chilterns Chalk Streams Project, to landowners who allowed access to their land for the 2017 surveys and to those involved in the mink control scheme.

Map 1. Results of the 2015 water vole survey and mink control on the River Chess



Map 2. Results of the 2017 water vole survey and mink control on the River Chess

