Mammals

Small mammals such as harvest mouse, field vole and common shrew may use floodplain meadows during the spring, when the meadows are allowed to grow for hay. However, this provides only short-term opportunities as the subsequent cutting and grazing renders the habitat largely unsuitable; unless pockets of tussocky grassland and taller herbs are managed on a longer rotation within the mosaic, populations of small mammals are unlikely to remain after the hay cut. Grasses left to grow taller adjacent to hedges and water courses may be attractive to harvest mouse, which builds an aerial nest in common reed, reed canary-grass and cock's-foot.



A recent study in Suffolk found a strong association between rivers and the presence of harvest mouse in the landscape (Meek & Bullion, 2012) (photo: Mike Dodd).

The close proximity of rivers and their associated ditches and dykes provide a wellconnected network of riparian habitats that benefit otter, water vole and water shrew. Otter populations declined dramatically in the latter half of the 20th century, but their numbers are now recovering well in all but the south-east of England and there are good prospects for a full recovery in the next two decades (Crawford 2011). Otters use rivers for commuting and foraging. Whilst they feed mainly on fish, they are opportunistic hunters and the wetter areas of floodplain meadows are likely to support good numbers of frogs in spring, providing them with an alternative food source.

Prime sites for water voles occur along open grassy, vegetated banks of ditches, rivers and streams where water is present all year round. The introduction of the non-native American mink has had a serious impact upon water vole populations through predation (Halliwell & MacDonald, 1996), but they are also affected by fluctuating water levels and over-grazing of bankside vegetation. The provision of year-round refuge areas with a thick fringe of waterside plants will encourage healthy populations of water vole, particularly where mink numbers are restricted by trapping (Woodroffe 2006).



Photo: Mike Dodd

References

Crawford, A. (2011) Fifth Otter Survey of England 2009-2010. Environment Agency Bristol.

Halliwell, E.C. & Macdonald, D.W. (1996). American mink Mustela vison in the upper Thames catchment: Relationship with selected prey species and den availability. *Biological Conservation*, **76**, 51–56.

Meek, M. & Bullion, S. (2012) Can the Harvest Mouse survive in a modern arable landscape? A Suffolk case study. *British Wildlife*. **23**: 419-423.

Woodroffe, G. (2006) Riparian Mammals of the Lower Derwent Valley in *Land Use and Conservation in the Lower Derwent Valley.* edited by Tim Milsom. PLACE, York.

Acknowledgments

Many thanks to Simone Bullion for contributing to this text, lifted from Floodplain Meadows – Beauty and Utility. Chapter 2.

http://www.floodplainmeadows.org.uk/sites/www.floodplainmeadows.org.uk/files/Floodplain%20Meadows%20-%20Beauty%20and%20Utility%20A%20Technical%20Handbook.pdf