



MAMMAL NEWS

www.mammal.org.uk

Spring 2018 • Issue 180



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MOLE-RATS IN THE DESERT • LIVING WITH HYENAS • FINDING THE FOSSORIAL**

Finding the Fossorial

Finding Water voles “out of water” in Urban Glasgow

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Water voles, as their name suggests, are associated with water and their distribution is closely associated with watercourses. However, a discovery in the urban east end of Glasgow in 2008 has changed all that. This unusual population was discovered after local residents reported rats to the Council. Everyone was surprised when they were identified as water voles, living in a housing estate away from water. Since this first discovery water voles have been found at more and more grassland sites in the east end of the City and this population is now considered to be of national significance by Scottish Natural Heritage.

I was lucky enough to visit a selection of these sites accompanied by Cath Scott from Glasgow City Council, who was present at the first discovery and is working to protect these voles along with their habitat.

Our first site was a park in the shadow of several tower blocks, a thoroughfare for dog walkers and a short cut for people walking and cycling to work and school. About 70% of the park was short mowed grass, the rest was long grass and that area was full of burrows, latrines and the characteristic cut grass you would expect from water voles. We baited some burrows with apples and waited for our first sightings of both the black and brown forms. The short grass in the park was devoid of vole signs, apart from the occasional burrow, where perhaps a water vole had extended its burrow system in search of some more long grass. This site has been studied by the University of Glasgow and had the highest density of water voles recorded in the UK, so space is at a premium, and further habitat creation is planned, including both grassland and wetland creation.

During the morning we visited several sites in which water voles are present, the sites are all grassland of various types but are in completely different situations from a vertical bank alongside a motorway; a spectacular orchid-filled urban meadow in the shadow of tower blocks to a litter covered wasteland next to a shopping centre and everything else in between. At all these sites we found lots of signs of water voles and at one site we had good views of several water voles, so I spent the afternoon photographing the voles here.

All the sites visited had one thing in common: long grass which was relatively undisturbed. Maintaining areas of undisturbed long grass seems to be the key for the thriving vole colonies and Cath explained that this is one of the management difficulties, maintaining parks and verges for both voles and people. Further research is planned with the University of Glasgow to study the impacts of grass cutting, because if the areas are left unmanaged in the long term the habitat may become less suitable for water voles if succession occurs and the grasslands turn into woodlands. The disturbance caused by grass cutting to the legally protected vole needs to be carefully researched too, all research work is carried out in partnership with Scottish Natural Heritage and with licences in place where appropriate.

The origin of these voles is still not clear, but with another population on the small islands in the Sound of Jura there must be some link to those fossorial populations on the continent. Some recent genetic studies may shed some light on their origin. The water voles colonised the UK after the



last ice age, those in England and Wales are genetically closer to those in south east Europe, while those in Scotland are closer to those from Iberia, investigating these differing origins may hold the key.

Mink predation and fragmentation of aquatic habitats have reduced aquatic populations significantly in the last 50 years. Studies have shown that there is a healthy and growing population of fossorial water voles even in these marginal urban grasslands and this terrestrial setting may prevent them suffering from mink predation.

Living in an urban environment does have its threats, these come from disturbance from people, predation from dogs, cats, gulls and foxes. However, the biggest threat to the voles is development as many of these grasslands are brownfield sites marked for urban regeneration. Glasgow City Council, Seven Lochs Wetland Park, Scottish Natural Heritage and the University of Glasgow, RSPB Scotland and The Conservation Volunteers Scotland are working to protect their habitat, linking up areas of suitable habitat and populations of voles and ensuring developments are sympathetic with vole habitat and populations so their future appears to be safe.

Many thanks to Cath Scott, Biodiversity officer, Glasgow City Council for her help during my visit.

For more information visit:
<http://www.glasgow.gov.uk/watervoles>