

3. Habitat for the Species in the Biogeographic Region or Sea2.5

R. ferrumequinum mainly occupies altitudes from sea level and lowlands, usually below 800m. The species requires a mosaic of grazed pasture and woodlands within a radius of 4km from roost sites. This should provide enough food during the spring and summer months for pregnant and lactating females, as well as for the young on their early foraging flights; usually within 1km from the roost. The ideal habitat is a landscape of permanent pasture and ancient, deciduous woodland, linked with an abundance of tall bushy hedges with a good supply of insect food (Ransome 1997; 2000).

A study on the preferred habitat of *R. ferrumequinum* carried out over a number of different sites suggests in order of preference, habitats most often visited are: Cattle pastures (39%) > Ancient semi-natural woodland (19%) > Meadows (10%) = Other pastures (10%) > Broad leaved woodlands > Others (Ransome & McOwat 1994). The order of preference changes throughout the seasons with woodlands being utilised more frequently in cooler months, possibly as they maintain a 1 – 1.5°C higher temperature than open pasture which may be enough to encourage insect flight.

R. ferrumequinum has quite specific roosting requirements. Maternity roosts are usually in attics of old buildings, but also caves and mines will be utilised. The species hibernates underground in caves and disused mines and occasionally cellars and tunnels. It prefers warmer sites than those chosen by other bat species, 11°C in October down to 7°C in February (Ransome, 1990) ideally with a high humidity >90% (Harris et al. 1995). If the temperature fluctuates individuals will awake from hibernation to search for a more suitable site. When hibernating they are especially prone to arousal by lights or noises when at 9°C or above, or at dusk (Corbett & Harris 1992). *R. ferrumequinum* is very faithful to its roosts and hibernation sites are generally close to maternity roosts.

Abstract

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