BATS OVER BEVERLEY BECK:

AN IMPORTANT FEEDING HABITAT

Beverley Beck is a canalised stream approximately 1.2 kilometres long linking the River Hull, by means of a lock, with the town's industrial centre. Commercial barges no longer use the waterway, which now provides quiet moorings for pleasure craft.

The Beck has suffered from severe pollution from a number of sources over many years, with a now defunct tannery being the most persistent offender. Improvement in water quality, as judged by coarse fish recolonising the Beck from the River Hull, has steadily occurred over recent years. During the summer last year a large number of fish, including roach and bream, died due to an algal bloom. Nevertheless, shoals of fish were observed later in the year. The Beck supports a large number of waterfowl. Insectivorous birds such as swallows, martins and swifts can be seen feeding over the water in large numbers during the summer season.

The East Yorkshire Bat Group has started to study the bats using the waterway. To date, at least four bat species have been seen. Most prolific are pipistrelles (*Pipistrellus pipistrellus*), followed by whiskered bats (*Myotis spp.*) and noctules (*Nyctalus noctula*), with Daubenton's bat (*Myotis daubentoni*) being the least observed. From May onwards on suitable evenings spectacular displays of feeding birds can be seen, followed by bats later on. The bats apparently converge on the waterway from the town end (west), suggesting roosts in buildings. However, the noctules traverse Beverley Westwood and Beverley from tne west and may come from a tree roost in the oak woodland of Burton Bushes or even further afield.

Beverley Beck is crossed by the A1079 Beverley to Hull trunk road by means of a fly-over which is well lit, therefore bat-watching in the vicinity presents a rare opportunity for "floodlit" observations without disturbance to the feeding bats. Additionally, if there is any rain, there is ample shelter under the bridge for bat watchers.

Observations suggest that the bats will feed even when air temperatures are very low, providing that there are insects present. The Beck affords better windbreaks for insects to congregate at the town end, with many buildings, trees and hedgerows to attract feeding bats. In contrast, the lock end has few windbreaks and only attracts bats when there is little or no breeze. Beverley Beck has been shown to support a large number of bats and birds dependent on insects and is therefore an important habitat. Future studies will determine any improvements or otherwise in the Beck's water quality, its ability to sustain high levels of insect breeding and large populations of insect dependent animals.

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BATS AS PREY

At the 1990 bat conference at Leicester University, John Speakman gave a paper in which he posed the question 'Why don't bats fly during the day?' He suggested four possible reasons for this and listed them as the avoidance of: overheating, competition for food, mobbing and predation. He then discounted the first three and concluded that bats do not fly in the daytime purely in order to avoid predators.

This brought to mind an artcle that appeared in British Birds Volume 82 number 11 (Roworth and Wright, 1989) regarding a Sparrowhawk, *Accipiter nisus*, attacking a group of Noctule bats (*Nyctalus noctula*). Twelve bats left a roost in a small copse on 29th September 1986 at Illam, Staffordshire. It is interesting to note that the bats emerged at 15.00 GMT. It seems that they were not disturbed, but simply began feeding at a height of about 20m over an area of 0.5 ha of broadleaved trees and water. A Sparrowhawk flew through the bats and attempted to catch several of them but seemed confused in its initial attacks. The bats easily evaded the bird and 'continued feeding, apparently unconcerned about the potential predator amongst them'. The article then describes how the Sparrowhawk singled out one bat and made repeated attempts to catch it but each time the bat escaped. After several unsuccessful attempts, the Sparrowhawk flew away and the bat continued feeding with the rest of the group.

If Speakman's theory were correct and bats do not fly during the day due to the threat from predators, why did the bats emerge unnecessarily at such an early hour and why did they show no apparent fear of the predator even when being attacked? Sparrowhawks are known to have taken bats (*The Handbook; BWP; Newton 1986, The Sparrowhawk*) but this must be purely by chance if a bat emerges early or if a Sparrowhawk is out late. Having been a birdwatcher around Wakefield for some years, I have seen birds of prey attack bats or have been told of such instances. Many records cannot be dated and are merely recollections but are nevertheless worth relating. The first incident took place at Bretton Park and the rest at Wintersett Resevoir