Appendix 7 - Bat Survey Report

A77 Symington and Bogend Toll Bat Survey

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1 Background

Garry Nixon Consultants were asked to carry out a survey of the habitats on either side of the A77 between Monkton and Symington to determine the presence and abundance of bat species using the area.

The purpose of the survey was to determine whether or not were using the site at present and if so, for what reason. For example, to establish if the site contained roosts or was purely used as a foraging area.

2 Introduction

2.1 What are Bats

There are 16 species of British Bats, all of which are tiny compared to their cousins, the fruit bats. The smallest and most common British bat is the pipistrelle bat (*Pipistrellus pipistrellus*), which weighs just 4g. The largest British Bat is the Noctule Bat (*Nyctalus noctula*), which weighs about 40g.

Bats are mammals, i.e. they are warm-blooded, give birth and suckle their young. Each year, the females gather together in maternity roosts, where they give birth to one baby. They do not build nests. Instead they cluster together in trees, buildings, caves and under bridges. Roosts in buildings are temporary, seasonal roosts, which have been chosen carefully for the warmth and locality.

They are the only mammals capable of true flight. They are relatively long lived, intelligent, highly mobile and more agile in flight than most birds.

Bats fly and feed in the dark, which they are able to do by producing a stream of high-pitched calls and listening to the returning echoes which give a distinct sound picture of the surroundings. This is known as 'echolocation'. Bats echolocate at different frequencies, allowing batworkers to identify species of bat from the echolocation alone.

In Scotland, there are 8 different species of bat. These are Pipistrelle 45 (*Pipistrellus pipistrellus*), Pipistrelle 55 (*Pipistrellus pygmeaus*), Noctule (*Nyctalus noctula*), Natterers *(Myotis nattereri*), Daubenton's (*Myotis daubentonii*), Brown Long-eared (*Plecotus auritus*), Leislers (*Nyctalus leisleri*) and Whiskered (*Myotis mystacinus*). There may also be the very rare Nathusius Pipistrelle *(Pipistrellus nathusii*).

All British Bats are insect eating.

2.2 Bats and the Law

All 16 species of British bats are protected by the Wildlife and Countryside Act 1981 through inclusion in schedule 5. The Conservation Regulations 1992 (schedule 2) reinforces this Act. These make it illegal to:

- kill, injure, capture or disturb bats
- obstruct access to bat roosts
- damage or destroy bat roosts

Although defences are provided by the Act so that building, maintenance or remedial operations can be carried out in places used by bats, these cannot be relied on unless Scottish Natural Heritage (or the relevant Statutory Nature Conservation Organisation) has been notified and allowed time to advise on whether or not the operation should be carried out, and if so, the method and timing.

Under the law a roost is any structure or place used by bats for shelter or protection. Because bats tend to re-use the same roosts year after year, the roost is protected whether the bats are present or not.

3 Methodology

The survey area was split into eight sections and was surveyed over four nights. Linear transects along the hedgerows and woodland edges were carried out using specialized electronic bat detectors, which allow for the echolocation calls of feeding, socialising and passing bats to be recorded and identified.

Individual inspections of bridges and watercourses were also carried out.

4 Results

The first night included Monkton and extended to Low Wexford Farm. In Monkton, Pipistrelle 45 bat passes were recorded in low numbers. They were moving in the direction of Southwoods Road in Troon. Pipistrell 55 bats were recorded along the edges of Blackside Wood. They were showing signs indicative of breeding behaviour as social calls were detected at around 22 KHz.

On the second night, the southern side of the road was surveyed and extended to Pow Bridge. Much of this included surveys around Rose Mount Estate. Pipistrelle 55 bats were noted feeding throughout the area, but no roosting activity was recorded. The Pow Bridge is not suitable as a roosting site as it has been pointed and is in sound condition and the watercourse is too narrow.

On the third night, the survey area included Hansel Village and Symington. 8 pipstrelle 55 bat passes were recorded around Hansel Village, moving from Hansel Village in a southern direction. On the other side of the A77, the fields are too open to sustain enough feeding ground for bats. The hedgerows were investigated, but nothing was found.

In Symington itself, there was a higher level of bat activity and several of the buildings were identified as being suitable roosting sites, although no roosts were recorded.

On the final night, the area between Symington and including Coodham was surveyed. Most of the bat activity was centred around Coodham Estate. Three species of bat were recorded here. Pipistrelle 55 bats were recorded throughout the site, but in low numbers. A few Daubenton bat passes were recorded over Coodham Lake. Brown Long Eared bats were visually recorded, gleaning insects from the vegetation around Coodham Lake.

The level of bat activity in this area is lower than would be expected during the summer months and although no roosting behaviour was recorded during this survey, historical records indicate that there are bat roosts in this area and that five species of bats have previously been detected.

It should be noted that the time of year that this survey was carried out is not the most advantageous time of year to record bats or to identify roosts.

5 Recommendations

- Any trees that are to be felled should be inspected by a licenced batworker prior to work commencing.
- Any demolition of buildings and structures should take place between November and March.
- Due to the nature of bats, they can be found in trees and structures at any time of the year. Therefore, due care and attention should be taken at all times and if bats are found, work should stop immediately and the Scottish Natural Heritage contacted.
- A hedgerow planting scheme could be incorporated into the project to mitigate against the potential loss of habitat.

6 Conclusion

In conclusion, most of the bat activity is focused around the woodland areas outlined above. Although the hedgerows provide an important role in migration between feeding areas. It is likely that Coodham Estate, Symington and Rosemount Estate will have the highest density of bats throughout the year and provide the most suitable location for roost sites.

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