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Report for

Carlton Grange, Carlton, Leicestershire
Protected Species (Bats) Survey

Date of Report – 29th August 2009

Proprietors

Bern Gibney (Ecologist) – 07875 484342 (mob)
Karen Headley (Ecologist) – 07913 873904 (mob)
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Protected Species Survey at Carlton Grange, Carlton

Name of Client: Mr B. Harvey

Address of Client: Carlton Grange, Congerstone Lane, Carlton, Nr Nuneaton Warwickshire, CV13 0BU

Name of Agent: Gordon, White & Hood Ltd

Address of Agent: Beresford House, 1 Newtown House, Leicester, LE1 6WH

Date and time of Survey: 28th August 2009

Weather Conditions: 80% cloud, still, windy, showers, warm 20^0C.

Address of survey site: Carlton Grange, Congerstone Lane, Carlton, Nr Nuneaton Warwickshire, CV13 0BU

Planning Application Number: 09/00411/FUL

Grid Reference of survey site: SK 3920 0495

Names of Surveyors: A.B.Gibney BSc (Hons), MIEEM

Licence Numbers: Bat 20083261 issued by Natural England to A.B. Gibney.

1) Background

1.1 Reason for survey

It is proposed to extend the existing main house, and re-roofing it, and joining the extension roof into the existing roof. Also it is proposed to demolish the detached outhouses to the east of the main house. The extension will be of a similar design, with a large open unoccupied roof void. A protected species (particularly bats) survey was requested as part of the Planning Permission to carry on the development. The main roof to the house is to remain unaltered after completion of the extension.

1.2 Description of site

The site was in a rural setting on the outskirts of a village, and consisted of a two-storey detached house. There was also a range of outbuildings, garages, workshops, stables etc, which it is proposed to demolish. It was surrounded by a large garden, which was a mix of mown lawn, shrub/herbaceous borders and hardstanding (gravel drive, blue brick pavers and slabs). The surrounding area was agricultural, being a mix of arable and permanent grass, and there were also hedges, mainly hawthorn *Cretaegus monogyna* and small copses of trees and other small plantations. There were no ponds on the site. There was vegetation to be removed within the area of the proposed development, which were mainly garden shrubs.

1.3 The Building

The building was a two-storey detached house with brick walls and a slate roof (flat welsh slates). The walls were solid, three bricks thick.



Photo 1: Carlton Grange, showing area of proposed extension to right of picture

The roof was a series of two parallel hipped roofs, with a valley between the roof sections. The roof sections had equal pitches either side. The roof was supported by timber beams, purlins and rafters. The beams had mortised joints and was in a 'queen-post pattern, but these were tight fitting and covered in spiders' webs. The slates had no backing, but there was some old cement torching, which had mostly fallen out. There was a loft space, which was fully accessible for survey. There were many webs on the roof timbers, particularly on the ridge board, but sections of the ridge boards were clear of webs. There were bargeboards present, supporting the guttering. There were no gaps under the eaves of the roof, between the slates and the wall plate, as this space had been sealed with paint. There were gaps under some ridge tiles, plus there were gaps where lead flashing covered some of the ridges, mainly on the hipped sections of roof. No slates were missing, but some had slipped, but the roof was generally in good condition and watertight.
There were signs of birds nesting on the southern side of the building, which were active. These were identified as house martin *Delichon urbica* nests, however there are no plans to alter this section of the building.



Photo 2: Carlton Grange, from front

There was a range of outbuildings, which it is proposed to demolish.



Photo 2: Outbuildings, viewed from south

The buildings were single-storey detached outhouses with brick walls and a slate roof (flat welsh slates). The walls were solid. The roof was at different heights, with gable ends. The roof sections were in part with equal pitches either side, and in part a single pitch lean-too roof. Timber beams, purlins and rafters supported the roofs. The beams had mortised joints and was in a 'queen-post pattern, but these were tight fitting and covered in spiders' webs. The slates had roof felt backing, and appeared to have been recently replaced. One section of roof was a lean-too with corrugated composite sheets. There was a loft space in part, which was fully accessible for survey. There were many webs on the roof timbers, particularly on the ridge board. There were bargeboards present, supporting the guttering. There were no gaps under the eaves of the roof, between the slates and the wall plate, as this space had been sealed with paint. There were no gaps under the ridge tiles. No slates were missing, but some had slipped, but the roof was generally in good condition and watertight.

There were signs of birds nesting in the open stables to the rear of the block of outbuildings, which were active. These were identified as swallows *Hirundo rustica* nests. These buildings will be replaced with other stables.



Photo 3: Outbuildings, viewed from north

2) Survey Methods

The building was searched in a systematic pattern, all available spaces were searched, looking for signs of bats, in particular droppings, insect remains (where bats have fed), lack of spiders' webs (where bats have roosted), the bats themselves and body oils stains (where bats have squeezed through gaps). Particular attention was paid to undisturbed surfaces, walls (where bat droppings sometimes stick) and window sills (both inside and outside the buildings). The search was carried out with a high power torch inside the building and binoculars on the outside (particularly searching under eaves and ridge tiles). All cavities were checked using an endoscope to establish if anything was within them, or if there were any signs (droppings etc) of use by a protected species. Bats would be active at this time of year and a detector was on all the time that the survey was taking place, in case the light from the torch disturbed bats.

Signs of birds were also noted, particularly old nests. Birds would be nesting at the time of the year when the survey was undertaken.

A note was made of any signs of other protected species, or whether there was any appropriate habitat for other protected species.

3) Results

3.1 Bats – There were bat droppings found during the inspection survey, these were scattered throughout the loft space of the main house, particularly under the ridge boards and under the beams. There were concentrations in the area of the chimney in the northwest quarter of the roof (this is the chimney where the central heating boiler exhausts) and around the chimney in the northeast quarter, where the aga cooker exhausts. In both of these places there were hundreds of droppings, some old and some from this year. There was another build up of droppings around the roof hatch. These were identified as long-eared bat (most likely, brown long-eared *Plecotus auritus*). The droppings did not appear to be very fresh, and there did not appear to be any bats present. The total number of droppings found would be 1500+. The only points of entry, which were located during the survey, appeared to be under the ridge tiles near the chimney, and under the main ridges and the ridge of the hipped section. There did not appear to be any points of entry on the side of the building where the extension is proposed.

There were a few scattered droppings found in the loft of one of the outhouses, these were identified as pipistrelle droppings *Pipistrellus* sp. These appeared to be recent, within the last week. There was no other evidence of bats found in the outbuildings, and the buildings did not appear to be suitable as a roost site, being cold and draughty.

3.2 Birds – There were several nests in the open outbuildings, which were identified as swallow nests, they were active. There were several house martin nests under the eaves on the south side of the main house, but none on the side of the building, that is to be extended. There were no nests in the vegetation, which is to be removed in the area of the proposed extension.

3.3 There was no evidence of any other protected species on the site, and there did not appear to be any habitat suitable for other protected species.

4) Conclusions

4.1 The loft of the house had been used by bats (probably brown long-eared) as a roost site, but none were currently using the loft when the survey was undertaken. The amount of droppings present would indicate a medium number of bats using the roost (15-20). The bats are unlikely to be present in the winter months, as the orientation of the roof would mean that the roof would tend to get very hot, even in the winter, when the sun shines on it, plus the location of the chimneys, which would also heat the loft space. These sites are usually unsuitable for bats to hibernate in, as they prefer hibernation sites to

remain at a constant cold temperature without large fluctuations of temperature. There did not appear to be any bats present in the loft, when the survey was undertaken, however further surveys would need to be undertaken to establish when bats were present, so that appropriate mitigation measures could be incorporated into the method statement.

The entrance points to this roost appeared to be under the ridge tiles, particularly near the chimneys, and there did not appear to be any points of entry on the side of the building where the extension is proposed.

The loft of one of the outbuildings had been used by bats (probably a pipistrelle species) as a feeding/foraging site, but none were currently using the loft when the survey was undertaken. The amount of droppings present would indicate a small number of bats using the loft on an ad hoc basis as a feeding roost during the night. The remainder of the outbuildings had no evidence in them to indicate that bats were using them as a roost site

4.2 Both house martin and swallow nests were found during the survey. Both were currently active.

4.3 There were no indications of any other protected species on the site.

5) Legislation

Bats: Bats and their roosts are protected under the Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000), and by the European Habitats Regulations 1994. To summarise; it is an offence to damage or destroy any place of shelter and protection used by bats (their roosts); deliberately, intentionally or recklessly obstruct a bat roost; deliberately, intentionally or recklessly disturb a bat; or intentionally kill, injure or take any bat.

Nesting Birds: Nesting Birds are protected under the Wildlife and Countryside Act 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for some rarer species (listed on Schedule 1 of the Act), it is an offence to intentionally or recklessly disturb them while they are nest building or, at or near a nest with eggs or young, or to disturb the dependent young of such a bird.

6) Recommendations and Mitigations

- **Main House: Licensing**- The development is unlikely to require a European Protected Species Licence to carry out the works, as the roost will remain after the works are completed. There would be a temporary disturbance to the roof space when the re-roofing and joining the extension roof to the main roof works are undertaken, but providing an alternative access is provided into the roof, when it is re-roofed, the roost will be maintained.
- All roofing works should be carried out when bats are not present, then ddisturbance would not have a significant adverse effect on the bats using the roof. The bats would not be present and the roof would only be temporarily disturbed while the works are undertaken. Following completion of the works, the roof would remain as it had always been and so no biologically meaningful disturbance would have occurred.
- Also the disturbance would have no significant impact on the local distribution or abundance of the species as following completion of the works, the roof would remain as it had always been. Therefore no offence would be committed under the current legislation (Habitats Regulations 39 (1)), while undertaking the proposed works, and so no licence would be required.
- **Timing of the Works**- To establish the best time to carry out the works to join the extension roof to the main roof, a full bat survey should be undertaken. This involves carrying out 3 bat emergence/re-entry surveys at the proposed development site, over the bat's active period, between May and September. The

surveys should be equally spaced over this active period. The surveys will consist of a mixture of dusk emergence surveys and dawn re-entry surveys (at least one should be a dusk and dawn survey within the same 24 hour period). The building works can continue while these surveys are undertaken, providing that the joining of the extension roof into the existing roof is not undertaken until the results of the full survey are known, and an appropriate method statement written on how and when the works should progress.

- **Watching Brief**- Although planning permission may not be required to undertake the re-roofing works, it would be advisable to have the roof space checked by a suitably licensed person prior to commencing the re-roofing works, and also for a watching brief to be maintained throughout the roofing works, to make sure that bats are not present or disturbed through the operations. Bat access points must be incorporated into the roof (details in appendices). This will allow bats to access the roof when they return. Modern roof lining material can be unsuitable for bats, so the area around the entrances, where the lining material is cut away to allow access, should be covered over with rough timber planks. It would also be advisable that a similar watching brief is undertaken by a suitably licenced person, when the extension roof is joined to the main roof.
- **Mitigation**- In the long-term, the development is likely to benefit the bats, as there will be more roof space available to them once the works are completed, and so no further mitigation is required to provide a suitable roost.

- **Outbuildings: Licensing**- This development would not require a European Protected Species Licence to carry out the works, as the bat roost is a temporary night time feeding roost. There is no requirement to provide any mitigation or time constraints on such a roost. However incorporating some bat boxes into any new buildings would provide suitable roosting opportunities for any disturbance caused to bats due to the loss of a temporary roost site. Boxes should be placed on different sides of the building to give the bats a choice of roost sites, with different aspects and therefore different climatic conditions.
- Although no evidence of a permanent bat roost was found during the outbuilding survey, bats are highly mobile animals that change roosts regularly, and it is advised that prior to the work being undertaken, the contractors should be informed of what to do if one is found during the course of the demolition works. If a bat is discovered during the building work, the work needs to cease immediately and Natural England should be contacted for further advice. Work on the area where the bat was found (should one be found) should not recommence until such advice is received from Natural England.

- **Birds** – It is recommended that active birds nests are not disturbed when any vegetation is removed, or demolition or building works are undertaken. It is recommended that these works are scheduled outside the bird nesting season (normally considered to be March-August, although this can be extended with certain species and due to climate change factors). If there is any doubt as to whether birds are nesting, it is advised to get the area checked by a suitably qualified ecologist. Should an active nest be found, the nest must remain undisturbed until the young birds have fledged, which may cause a delay in the proposed works.

- **Contact Number:** Natural England: 01476 584800, Address: The Maltings, Wharf Road, Grantham, Lincs. NG31 6BH

References and Bibliography

Mitchell-Jones, A.J. & McLeish, A.P. [ed.] (1999) *The Bat Workers' Manual* JNCC

Mitchell-Jones, A.J. (2004) *Bat Mitigation Guidelines)* English Nature

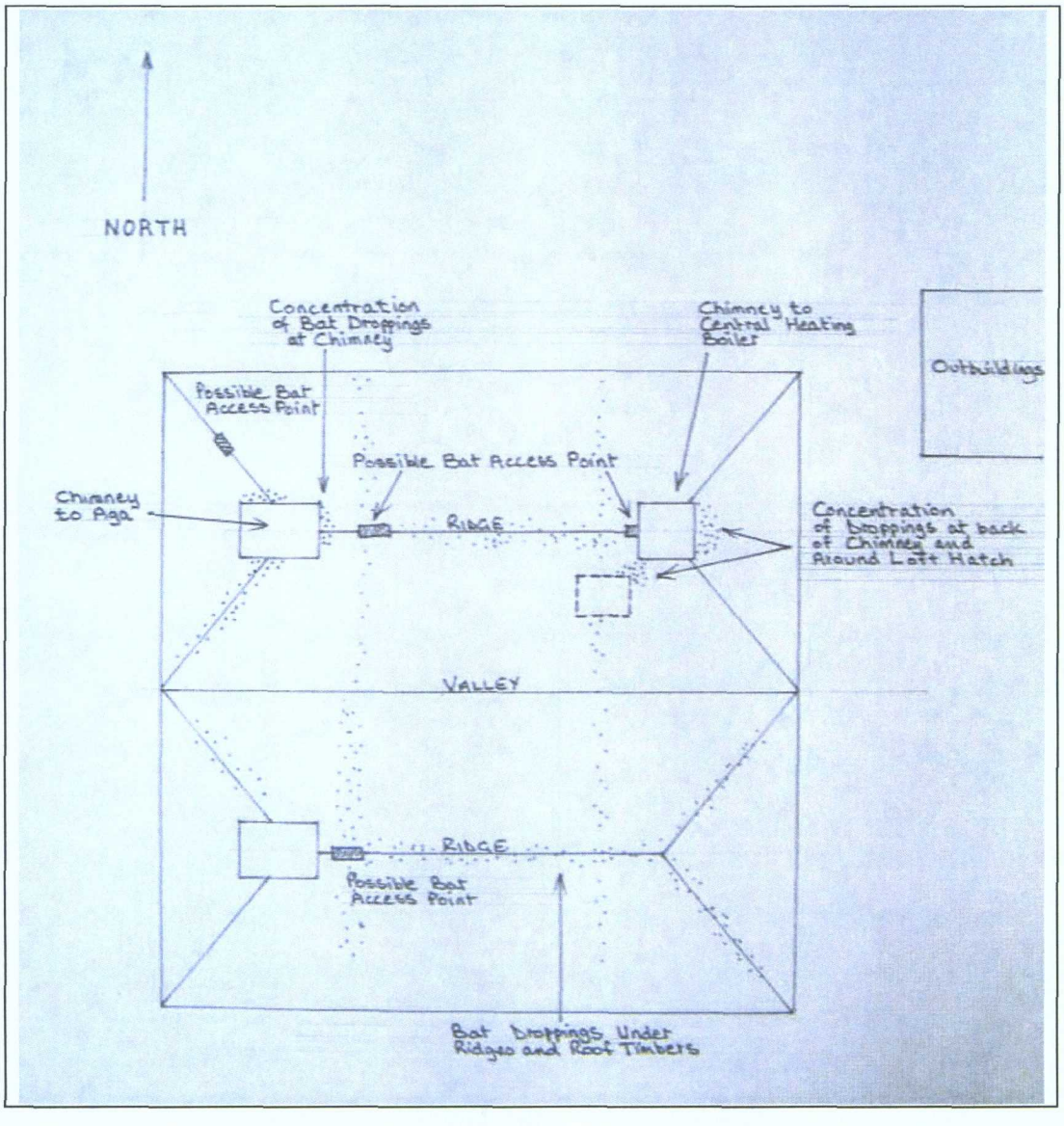
K.Parsons (ed.) (2007) *Bat Surveys Good Practice Guidelines* Bat Conservation Trust

Hill, D., Fasham, M., Tucker, G., Shewry, M. & Shaw, P. (Eds) (2006) *Handbook of Biodiversity Methods: Survey, Evaluation & Monitoring* Cambridge

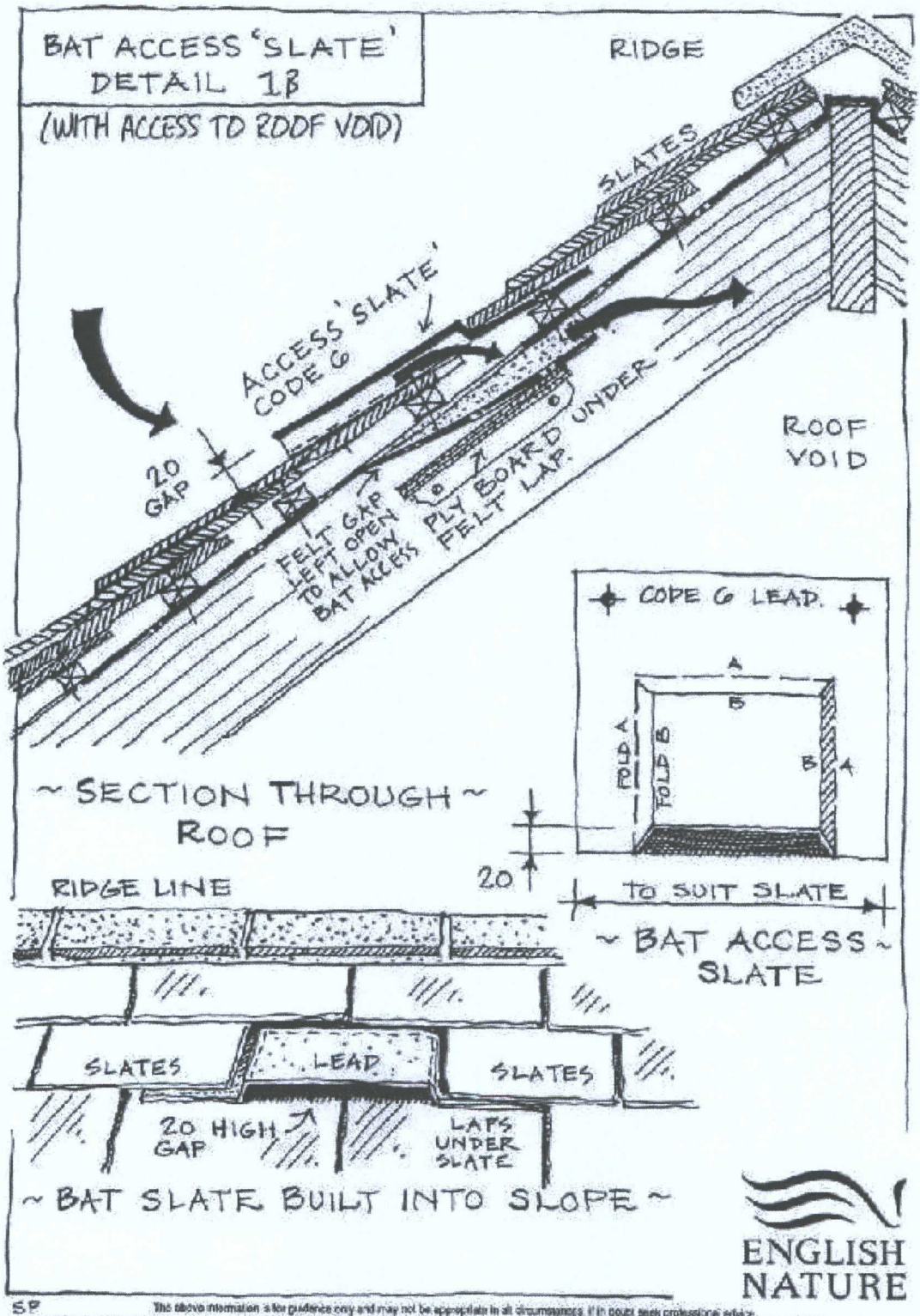
Betts, C.J. (2001) *Checklist of Protected British Species* Christopher Betts Environmental Biology

Report Produced by
Alan Bernard Gibney BSc (Hons), MIEEM - Ecologist (Curious Ecologists)

Appendix 1: Plan of loft space, showing position of droppings



Appendix 3: Bat Access Plans



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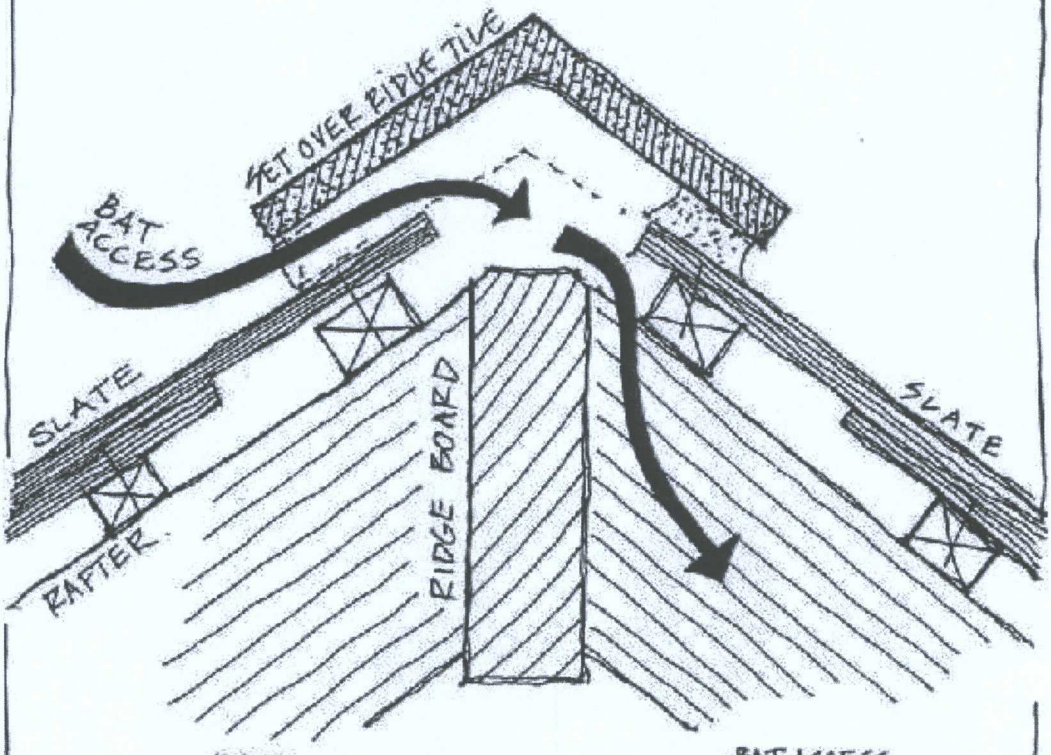
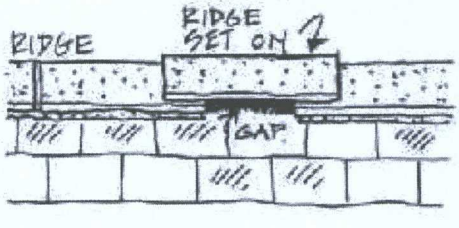
The above information is for guidance only and may not be appropriate in all circumstances. If in doubt seek professional advice.

English Nature Cumbria Team, Juniper House, Murley Moss, Oxenholme Road, Kendal LA9 7RL. Tel: 01539 792800 Fax: 01539 792830 Email: cumbria@english-nature.org.uk

RIDGE TILE ACCESS DETAIL 4B

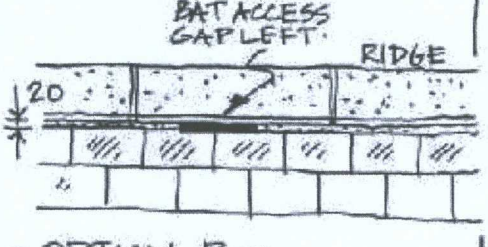
(WITH ACCESS TO ROOF VOID)





~ OPTION A ~

ROOF RIDGE SET ON TOP OF GENERAL RIDGE TILES TO FORM BAT ACCESS GAP.



~ OPTION B ~

MAINTAIN 20mm MORTAR GAP. & LEAVE A SECTION OUT.

ENGLISH NATURE

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