

## Experience in bat mitigation: guidance for ecologists



### 1. Aims of this note:

- To help ecological consultants to assess their skills and experience levels before applying for a mitigation licence as an appointed ecologist.
- To guide ecologists when assessing the skills and experience levels of accredited agents or assistants employed on mitigation schemes.
- To guide referees when writing references on behalf of the ecologist.

Developers need to be confident that ecologists they appoint have relevant experience. Guidance on choosing a consultant is provided within our advice document on “How to get a licence”

[http://www.naturalengland.org.uk/Images/WML-G12%20How%20to%20get%20a%20licence\\_tcm6-9850.pdf](http://www.naturalengland.org.uk/Images/WML-G12%20How%20to%20get%20a%20licence_tcm6-9850.pdf)

Preparing a mitigation scheme for bats requires a range of skills to ensure that a proposed activity can proceed lawfully and without adversely affecting the favourable conservation status of the species of bats concerned. Proposals vary in complexity and in their potential impacts on the bats. It is the responsibility of the ecologist to ensure that he/she has the relevant skills, knowledge and experience to design and implement an appropriate method statement for each application. It should be remembered that a licence does not constitute a qualification or accreditation and should not be used as one.

The first requirement for assessing the impacts of a proposed activity on a population of bats is a survey. A sound survey, including an assessment of all available evidence, will enable any impacts at site level and in a wider perspective to be accurately assessed. It is also crucial for the subsequent design and implementation of appropriate and proportionate mitigation measures. Hence, to become a good surveyor, there is a need for a substantial amount of fieldwork experience.

Bat mitigation plans for a particular scheme must be clear, achievable and discussed fully with planners and developers. A sound understanding of the planning system and construction industry is therefore essential to avoid misunderstandings and to ensure the delivery of realistic and proportionate mitigation schemes.

## 2. Skills and experience required

### 2.1. Ecological consultants

Skills are gained through training, experience, keeping abreast of the literature and giving due attention to details of survey, impact assessment and mitigation design and implementation. It is expected that a new applicant will have an understanding of the guidance given in the *Bat Mitigation Guidelines* (English Nature 2004), *The Bat Workers Manual* (JNCC 2004), *Bat Surveys – Good Practice Guidelines* (Bat Conservation Trust 2007) and the various guidance available on the Natural England internet site.

#### (a) Essential skills

The following table identifies the skills and experience required to successfully carry out a mitigation scheme. A new applicant should satisfy Natural England that he/she has achieved at least the minimum standard for each skill by providing brief, written evidence based on the guidance in the second column. Ecologists who have not held a mitigation licence in the last three years are also expected to provide evidence of their more recent bat experience using this table as a guide. Similarly, applicants applying for additional species should use this table as a guide and provide evidence of their experience with the species in question. For example, if you have had licences for common bat species previously, but now wish to obtain a licence for rarer species of bats, you must demonstrate that you have the appropriate experience.

Skills and experience	Evidence
Understanding of bat biology, ecology and conservation.	Roost visitor (Conservation) licence <b>or</b> survey (Science and Education) licence <b>and</b> evidence of understanding of bat ecology from a range of field experience, literature, and attending training courses and conferences.
Identification of all bats likely to be encountered in a range of situations.	Roost visitor (Conservation) licence <b>or</b> survey (Science and Education) licence <b>and</b> evidence of field experience of identifying bats. At least two years experience with a range of species.
Experience in handling and examining bats.	Roost visitor (Conservation) licence <b>or</b> survey (Science and Education) licence to take or disturb bats by hand or static net at roosts. Evidence from at least five sites over a two year period.
Working knowledge of survey methods and site assessment.	Held own survey (Science and Education) licence to disturb bats and take bats by hand or static net for

	identification and release for at least two years. Surveyed a minimum of five sites in these two years including both crevice and void-dwelling bats. Give details of species encountered and roost types surveyed. Give details of any courses attended.
Working knowledge of the structure and terminology of buildings: dwellings, barns, churches, bridges and other structures and trees.	Knowledge gained from field experience, literature, training courses. Give details of any courses attended.
Identifying bats using bat detectors	Competent in the use of a range of bat detectors and analysing sonograms.
Understanding of impact assessment for the range of bat species likely to be encountered in development schemes.	Work on, or study of, a range of at least three licensed projects. Give details of species and scale of main impacts of these developments.
Working knowledge of Local Authority planning, European Protected Species legislation and licensing process:- assessing risks of committing offences, avoidance measures and planning effective, pragmatic and proportionate mitigation strategies.	Work on at least three licensed bat projects including both crevice and void-dwelling bats.
Working knowledge of roost destruction techniques, roost creation, restoration and enhancement for species commonly encountered in mitigation	Good understanding of implementing mitigation schemes and ability to supervise construction staff on details of mitigation. Involvement in at least three licensed bat projects. Give brief details of species encountered and mitigation provided.
Planning and implementing long-term habitat management, maintenance and monitoring.	Work on, or study of, method statements for at least three licensed projects where this has been/is required.

Occasionally, it is evident that although an applicant can demonstrate all of the above, he/she submits an application that is substantially below the standard required. In such cases, we may decide the applicant does not demonstrate adequate application of experience.

**(b) Additional skills**

Natural England expects ecological consultants to have the following skills but does not need supporting evidence:

- Welfare of bats during survey, building works and mitigation.
- Communication skills, to allow effective liaison with planners, developers, landowners and others.
- Organisational and report writing skills.
- Flexibility and problem-solving skills, to deal effectively with unexpected challenges.

## **2.2. Employing accredited agents and assistants**

The difference between an accredited agent and an assistant is important. Agents are appointed by the ecological consultant and can work independently on site without supervision whereas assistants require supervision at all times by either the consultant or agent. Please note that the named ecologist is expected to have the full range of skills and experience *and* the appropriate licence(s) (Conservation or Science and Education) for all methods and activities included within each application. For example, it is not appropriate to rely on an accredited agent being able to handle bats if the named ecologist cannot; the named ecologist is responsible for all the work carried out and must therefore be capable of conducting the work themselves.

Agents and assistants do not need the same level of skills and experience as an appointed ecologist because they will be working under either direction or supervision of the ecologist. Employment as an accredited agent or assistant can be viewed as training to becoming an appointed ecologist on a mitigation licence. An accredited agent is expected to have wider experience than an assistant, who must work under the direct supervision of the appointed ecologist or the agent. The appointed ecologist should decide on the necessary level of supervision of the agent, depending on the significance and complexity of the task. Appointed ecologists are responsible for all ecological work carried out under the licences, including that carried out by accredited agents and assistants. It is therefore the responsibility of appointed ecologists to ensure anyone they employ has the appropriate skills and experience. Natural England does not require evidence for accredited agents or assistants, but as a guide, each should have the following key skills:

### **Accredited Agent key skills**

- Identification of bats likely to be encountered in development schemes in the hand. Experience in identifying bats using a bat detector. Own survey licence and/or roost visitor licence (which includes the relevant activities & methods, e.g. take by hand/static hand net).
- Understanding of bat ecology
- Basic knowledge of legislation and licensing process
- Understanding of bat welfare issues
- Record keeping

- Good understanding of the structure and terminology of buildings, barns, bridges and other structures, and trees
- Good understanding of implementing mitigation schemes and ability to supervise construction staff on detail of mitigation
- Good working knowledge of construction practices
- Should an accredited agent apply for their own mitigation licence as an ecologist in the future they should give details of their experience including the reference numbers of the licences that they have worked under.

### **Assistant key skills**

- Gaining skills in bat identification and the use of bat detectors
- Bat welfare issues
- Basic knowledge of bat ecology
- Basic knowledge of construction practices
- Record keeping
- Basic knowledge of implementing mitigation schemes
- Training in progress towards own survey licence/roost visitor licence preferable

### **3. Suggested ways of gaining experience**

- Attend training courses run for example by Bat Conservation Trust (BCT), Institute of Ecologists and Environmental Managers (IEEM), Wildlife Trusts (WTs), Field Studies Council (FSC), etc.
- Work as a volunteer for a conservation body such as a Bat Group or County Wildlife Trust.
- Train as a Natural England volunteer bat warden.
- Work as an assistant or accredited agent on a variety of mitigation schemes.
- Attend conferences such as BCT National Bat Conferences, Mammal Society conferences and IEEM conferences.

### **4. Refereeing appointed ecologists**

Two references are needed for ecologists who have not previously held a bat licence for a mitigation scheme or been an appointed ecologist under the current licensing procedure.

References need not be lengthy but should contain sufficient, specific information to support the ecologist's experience in relation to the proposed scheme and more widely.

In general, a referee should hold relevant bat licences (e.g. roost visitor, survey, development) and have worked on mitigation projects with the appointed ecologist, or be able to vouch for their competence through other bat work or training undertaken. A brief outline of the referee's own bat experience should be included and the length of time he/she has known the

new appointed ecologist in relation to work with bats. If possible, the ecologist's trainer should be a referee. At least one referee must have held a bat mitigation licence in the last three years.

As mitigation schemes vary in complexity, the referee should be satisfied that the appointed ecologist has the necessary survey and mitigation design and implementation skills for a range of projects involving the relevant species of bats and the methods and activities to be undertaken on the application site. Wider experience (of both the applicant and the referee) will be needed for projects involving rarer bats or less widely distributed bats. Experience must include high welfare standards.

If the referee has worked with the appointed ecologist on other mitigation projects, brief details of the mitigation methods and level of responsibility held by the appointed ecologist are needed. It may be that the appointed ecologist has worked as an assistant or accredited agent under other licences and has gained experience in areas such as project management or the designing of mitigation schemes. This information would be welcomed together with EPSL/EPSM reference numbers from the licences.

If the appointed ecologist has attended any relevant training courses these should also be mentioned.

The information and evidence of experience provided by the applicant, the references and the quality and standard of the Method Statement will taken into account by the Wildlife Adviser in determining whether a new applicant is suitably experienced.

## **5. Further reading**

Mitchell-Jones, A., 2004. Bat mitigation guidelines. English Nature.

Bat Conservation Trust, 2007. Bat surveys – good practice guidelines.

Joint Nature Conservation Committee, 2004. Bat Workers Manual.

Altringham, J. D. (2003). British Bats. The New Naturalist Library, Volume 93. Harper Collins, London.