







Engaging with Volunteers

Setting up and managing volunteer networks





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Dormouse nestbox checking. © Frank Bell
Volunteer carrying out the National Bat Monitoring Programme Daubenton's Bat Survey. © BCT
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Tracking Mammals Partnership and National Biodiversity Network Trust

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1. The Advantages and Disadvantages of Engaging Volunteers

1.1 Introduction

Most biological recording, surveillance and monitoring in the UK is carried out by volunteers, operating under the auspices of various societies or recording schemes. All of these voluntary groups and individuals carry on their work in broadly similar ways, although precise needs will vary. Simple field survey may not require very much in the way of organisational support, but more complex surveillance and monitoring tasks will involve more input from both the volunteers and the organisations running surveillance and monitoring schemes.

Nationwide surveys, surveillance or monitoring programmes require a long-term commitment from the organisations operating them in terms of funding, data collection and management. Part of this commitment must be to operate the necessary recording networks efficiently and professionally. Some organisations, such as the British Trust for Ornithology (BTO), have been engaging large teams of volunteers for many years, while others have taken on this role in an organised way more recently. The growth in number and size of more complex surveillance programmes has also increased the need for greater professionalism on the part of programme organisers. Engaging with volunteers requires thought, time and effort, to ensure that volunteers understand how important they are, continue to be happy and safe in what they are doing, provide good information to the survey scheme, and continue to participate in future years.

The recently established Tracking Mammals Partnership (TMP) has taken the decision to engage volunteers to carry out its survey work wherever possible, in a similar way to the BTO. The TMP recognised that large numbers of volunteers would need to be engaged, and their support and interest maintained for as long as possible, so the Partnership decided to prepare a general handbook to help its many member organisations to carry out such coordination. Consultations were undertaken between TMP organisations and experts in volunteer network management and health and safety, in collaboration with the National Biodiversity Network Trust (NBNT), and the resulting handbook is seen as generally useful to organisations throughout the Network.

1.2 The advantages of engaging volunteers

What is a volunteer? The word volunteer comes from the Latin word voler = to wish or to want. A volunteer is a person who makes a voluntary offer of services or offers to undertake a task. Therefore, we are dependent on their goodwill alone. There are several advantages in engaging volunteers rather than employing professionals when carrying out surveys.

Site coverage. Volunteers are collectively able to cover a large number of sites in a short period. Most surveillance schemes run annually and very often such surveillance needs to be undertaken in short periods — often two weeks to a month during a particular season (e.g. during early summer to assess pre-breeding numbers of some species). Counts of species or field signs might need to be carried out at the same time across a whole survey sample, which could be several thousand km squares, and repeated during the same period in subsequent years. This level of simultaneous coverage would be prohibitively expensive if professional surveyors were employed.

Volunteer motivation. Volunteers tend to be more highly motivated than professionals. They must want to do the survey in order to participate in the first place, because they are giving their time freely.

Local knowledge. Volunteers often have local knowledge of the area they are surveying and have contacts with local land owners and naturalists. This provides a network of knowledgeable people who can contribute information in other areas of wildlife conservation, not only for the survey they are currently engaged in.

Funding opportunities. Engaging volunteers across a wide spectrum of society potentially broadens the funding base available to organisations. For example, Heritage Lottery Funding bids are more likely to be successful if a project has wide public participation.

The economics of engaging volunteers. Generally it is very cost effective to ask volunteers to collect data rather than pay professionals to do the job. This means that organisations are able to run surveys that would otherwise not be possible and to ensure effective use of available funds. It has been estimated that if volunteers had to be paid to do surveys, it would cost between 10 and 40 times more (Battersby & Greenwood, 2004). Furthermore, volunteers are often extremely generous and pay towards the travel costs of their fieldwork as well as on occasions directly contributing to the costs of employing staff to manage the surveys, through subscriptions and donations. Thus, the BTO Garden BirdWatch is largely funded through the subscriptions of its participants.

1.3 The potential disadvantages of engaging volunteers

There are, however, some potential disadvantages of engaging volunteers.

Levels of uncertainty increase. There is no control over whether volunteers return data or not. There is no formal contract between an organisation and its volunteer workforce so it is impossible to ensure the data they have collected are returned for analysis. It is also impossible to know, when survey forms are sent out, how many will be returned and from which sites. This introduces a level of uncertainty into the process that can be difficult to manage.

More intensive management is required. Volunteers, quite rightly, expect more information fed back to them than professionals. Because of time constraints and level of expertise, they may have more problems in carrying out the survey in question.

Volunteers can lack basic field skills. The level of knowledge of some volunteers can be extremely high, as good as or better than professionals. However, the majority of volunteers will have lower field-craft abilities than professionals. This can be rectified somewhat through good training courses.

Time limits for volunteers. The more time required to carry out surveys, and the greater the complexity of surveys, the less likely volunteers are to engage in them. This may be related to feelings about their own abilities to carry out complex surveys. It may also be related to restrictions on their personal time. This means that survey methods must be as simple as possible and there may be a 'trade-off' between data quality and quantity.

Volunteer motivation. If volunteers are asked to survey randomly-selected poor quality sites where they seldom see anything, they can become disillusioned about the survey work. This can result in

lack of coverage of low interest sites, which are important to provide representative data. Therefore, survey design must be interesting in order to maintain volunteer motivation. A mixture of volunteer and professional surveyors could help to rectify this problem.

The list of advantages shows that volunteers have a great deal to contribute and indeed most surveys could not operate without their participation. The disadvantages indicate that engaging volunteers in surveys and maintaining their interest and participation over time can be a difficult and time-consuming process. However, most of the disadvantages, once recognised, can be overcome with careful management. This manual provides advice to any organisation wishing to engage volunteers in surveys.

2. Setting up a Volunteer Network

2.1 Introduction

Once the decision has been taken to engage volunteers in survey work, there are a number of things to bear in mind. Volunteers, because they are not employed professionally to do the work, usually have a limited amount of time and, because a survey may not be within their field of expertise, their knowledge may be limited as well. Therefore, surveys should be designed to take these things into account, wherever possible. It is important at the outset to decide on the survey design that is going to be carried out, whether it is appropriate for volunteer participation and, if not, whether it can be adapted without affecting the quality of the data being collected. Linked to these decisions are the design of survey forms and the whole process of advertising the survey in order to obtain maximum interest. Finally, it is important to consider how the initial interest of volunteers can be maintained in the long-term.

2.2 Engaging the volunteers

Mass participation surveys The best way of engaging large numbers of volunteers in the short-term is through simple, mass-participation surveys, where the instructions given and the information required are very simple and relatively easy to obtain. Examples include:

- The Great Nut Hunt. These surveys were run by Mammals Trust UK (MTUK), Center Parks, Countryside Council for Wales (CCW), English Nature and Royal Holloway, University of London (RHUL) in 1993 and 2001, with thousands of volunteers checking hundreds of local woodlands across the UK for nuts nibbled by dormice. Over 50,000 hazel nutshells and fragments were sent for expert identification.
- Stag Beetle National Surveys in 1998 and 2002. These national surveys were run by the People's Trust for Endangered Species (PTES) on behalf of a partnership of organisations. Volunteer surveyors were simply asked to look out for stag beetles during the summer and send any sighting information to PTES. In 1998, 7,000 people collected 11,000 records of stag beetles, with 3,000 records returned in the repeat survey of 2002.
- Garden Butterflies Count 2002. This short-term project, run by Butterfly Conservation, was the biggest survey of butterflies and moths ever undertaken in the UK. More than 30,000 people counted the numbers of butterflies and moths seen in their gardens throughout summer 2002.
- Living with Mammals is a pilot survey scheme, run by MTUK with assistance from RHUL. The scheme was launched in 2003 and aims to assess abundance and population trends of mammals near built land. Volunteer surveyors are provided with a small booklet of information on UK mammals to aid identification and are asked to record the maximum number of each mammal species seen together at a site each week in April, May and June. During the two years that the survey has been running, 1,200 people have participated.

- Mammals in your Garden? is a questionnaire based survey run by The Mammal Society, first carried out in 2002 with over 4,000 volunteers taking part, to assess the use of gardens by mammals. The survey is being adapted to monitor numbers of mammals in gardens across the UK.
- Garden BirdWatch is a scheme run by the BTO and supported by CJ WildBird Foods. Funded by participants' contributions it aims to collect information on common garden bird species but now also collects information on a range of mammal species using participants' gardens, from 6-8,000 gardens nationwide. Volunteers are asked to record the presence of birds, mammals and other species in their garden throughout the summer months, using a simple survey form, and can return information via the internet.

Survey simplicity. Surveys should be kept as simple and focused as possible. There may be a trade-off between asking volunteers to collect extra data by carrying out complex habitat recording, and maintaining the sample size for essential data. Volunteers may quickly lose interest and drop out of the scheme if they are asked to do too much and to collect what they might see as 'pointless' data. The collection of simple habitat data is likely to be more accurate than complex information and probably more likely to be useful in the long-term.

Survey objectives. Surveys should have clear objectives and these should be communicated to the volunteers on a frequent basis. For example:

- There must be a very clear reason for asking volunteers to give their time they should know why they are being recruited.
- It should be clear to the volunteers exactly what they are being asked to do.
- From the point of view of the survey organiser, it is usually important to know how many people are required to do the survey and where they are needed, so that recruitment can be targeted.
- It is important to identify the knowledge and skills requirement for the survey in question and ensure that volunteers are provided with all the necessary information on identification skills, equipment, training etc.

Survey duration. Surveys should take as little time as possible and be as flexible in terms of time restrictions as possible. If volunteers are being asked to carry out a long survey once a year they may well be prepared to do it, but less so if it has to be repeated two or three times. However, short easy surveys, such as garden observation surveys, could be repeated many times without volunteers feeling overloaded. There should also be flexible survey time windows. Allowing volunteers a week or a month in which to carry out the survey is better than specifying an exact time or day. However, it may be important in some surveys to collect data at a particular time.

2.3 Advertising the survey

Potential audience When thinking about advertising a survey it is important to identify the potential audience. For simple surveys, extensive advertising to get maximum coverage may be best to ensure equality of opportunity for all members of the general public to take part. Once volunteers have tried a survey and found it easy and rewarding, they are likely to be prepared to try something more difficult.

Broad advertising can be expensive, however, and if funds are limited and the survey is complex, or only a small sample size is required, it may be better to target advertising at specific groups. For example, surveys can be advertised in specialist literature that is more likely to go to a readership already informed and interested in a particular subject. Information can be circulated via the membership of interested organisations, again reaching those most likely to be motivated to carry out the surveys.

Websites can be used very effectively to advertise surveys, both mass participation and more specialist ones. They can also be used very effectively to capture the data collected by volunteers and provide almost instant feedback, a very important consideration in maintaining volunteer participation. Some organisations have a regional set-up, with regional groups or representatives, and these contacts could be asked to locate volunteers in their local area. Making the existence of websites known may be difficult, unless some effort is made for them to be indexed by good search engines. Website URLs can be advertised through existing generally-known organisations, such as the Wildlife Trusts, or the National Biodiversity Network.

Volunteers could be encouraged to participate with the offer of free training and/or equipment, provided it is directly linked to the survey in question. This approach should be carefully considered because of the possibility of an implied contract with the volunteer and the health and safety, as well as insurance implications this would entail (see section 6 on health and safety).

FREEPOST returns. It can be a good idea to provide a FREEPOST postcard (Figure 2.1) so that it is easy to respond to the initial enquiry, but this may depend on the commitment required. When resources are limited it is important to save on costs wherever possible, including sending out survey forms that are unlikely to be returned. It is, therefore, important to provide sufficient information in the first instance to enable volunteers to make informed decisions on the likelihood of their participation.

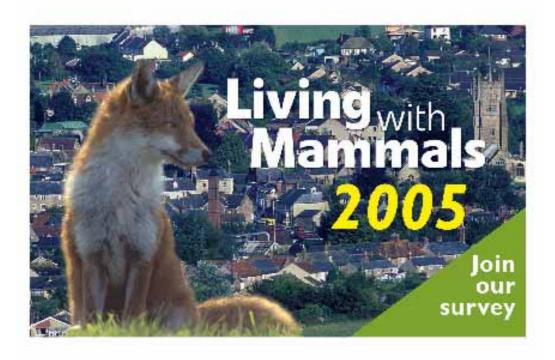


Figure 2.1 Postcard advertising the MTUK Living with Mammals survey. © MTUK

2.4 Survey design

Data quantity versus data quality. A key factor to consider when designing a survey where volunteers will be collecting the data is that there will be a trade-off between the quantity and quality of data required and what is reasonable to expect from volunteers. The longer a survey takes to complete and the more detailed the information required, the greater the likelihood of high turn-over of volunteers and possible difficulty in recruiting new ones. Simple survey design, simple survey forms and instructions, and collection of essential data only are important things to remember. The decision on the degree of simplicity versus sample size will have to rest with the organisation running the survey.

Selection of survey sites. Is the survey going to involve general coverage or should survey sites be randomly or self-selected? General coverage may require long-term commitment from a larger range of people. There is also greater volunteer turnover with randomly selected sites as compared with self-selected sites because they may be further away from the volunteer's home, not known to the volunteer, or may be poor sites for observations. However, for surveillance and monitoring, random selection is better scientifically and fewer sites are required in order to produce statistically robust information. A decision needs to be taken on the best approach for the survey in question, with a full understanding of the trade-offs between the larger sample sizes likely to be obtained if volunteers can select their own sites to survey, but that results of non-random selection, will give a less representative survey with less robust data.

Sample sizes. Especially for surveillance and monitoring surveys, it is important to know what sample sizes are required to provide the necessary information and then assess the best strategy for obtaining them. If the survey is difficult to carry out, it is likely that sample sizes will be small as a result. However, the volunteers collecting the data are likely to be dedicated and they could be asked to repeat the survey, which will increase the sample size and make the survey more robust.

Design of survey forms. Careful consideration should be given to the layout of survey forms. They should be designed to identify essential information required and instructions should be eyecatching, informative and to the point. Simplicity reduces errors and encourages volunteers to feel more confident. Volunteers can be discouraged by something that looks too complicated (*e.g.* computerised, optically read forms with lots of boxes), and long, rambling notes with too much technical information may discourage them. The main message is to simplify wherever possible and to use readable font sizes and attractive, colourful designs (see Figures 2.2a and 2.2b).

Providing additional information leaflets on the species volunteers might see and any other relevant information of interest is likely to encourage and help people to participate.

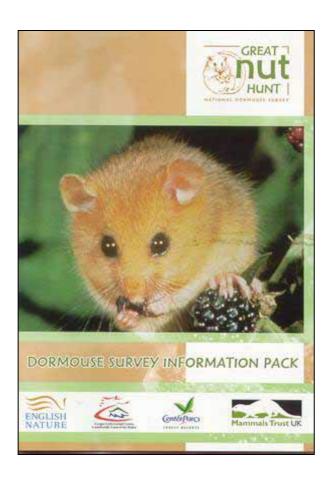


Figure 2.2a Survey information for the Great Nut Hunt dormouse survey. © PTES



Figure 2.2b Survey information for the Great Stag Hunt survey. © PTES

3. General Management of the Network

3.1 Introduction

When the survey has been set-up and the volunteers recruited, there may be a temptation to sit back and think that the job is done. However, recruiting volunteers is only a small part of managing a surveillance scheme. Retaining volunteers and ensuring the long-term maintenance of the scheme are the most challenging aspects of managing a volunteer network.

3.2 Long-term sustainability

A major factor in survey, surveillance and monitoring work is ensuring that the survey can occur for many years. Surveys may operate long-term or over short periods to give a picture of occurrence; surveillance and monitoring are carried out to ascertain trends in population size over time and also possible causal factors of those trends. By its very nature the latter type of work is long-term and must be carried out on a regular basis before reliable trends can be detected. Two main factors are maintaining funding and the volunteer network.

3.2.1 Maintaining funding

One of the most difficult aspects of carrying out surveillance is securing long-term funding commitments. Many potential funders are prepared to put relatively large sums of money into surveys that are time limited to periods of between one and three years, but are unwilling or unable to commit funds for longer. This can be overcome by seeking diverse funding sources. One way of doing this may be to have partnerships of organisations that have a variety of reasons for wanting the information and may each be prepared to commit a smaller amount of money on a long-term basis. Partnerships also involve an element of commitment to the other organisations involved.

A management or steering group should be formed that meets fairly frequently and has a responsibility to manage the future of the surveillance project, including assessing whether objectives are being met and whether future funding has been secured.

3.2.2 Maintaining a volunteer network

The long-term maintenance of a volunteer network involves recruiting new volunteers and retaining existing ones. With the best will in the world, most volunteers will not be able to participate indefinitely and there will be an annual turnover, the level of which will depend on the project and how it is run. It may also be important to increase the size of the volunteer network in order to increase the sample size of the survey. Under these circumstances it is important to be proactive in recruiting new volunteers and to target recruitment where it is most needed, which will involve studying the patterns of volunteer behaviour across the survey area. For example, some UK wide surveys find it very difficult to recruit volunteers in the Scottish highlands, because of low population levels and the motivational problems involved in survey of random plots in difficult terrain.

It is important to be flexible and to be prepared to try a variety of methods to recruit new volunteers. Valuable techniques include:

- advertising in new places;
- running training schemes in areas where there are few volunteers;
- using existing volunteers to recruit new people;
- providing opportunities for observers to do new projects and different surveys.

Retaining existing volunteers is certainly as important as recruiting new ones. Experienced volunteers are a very valuable resource because if they carry out a survey for more than two years they are more likely to continue doing the survey in the future. They may have received training, at their own or the organisation's expense, and they will be providing repeat data from their survey site, which for surveillance purposes is extremely valuable. The best way to retain existing volunteers is to show them how much they and the data they collect are valued. There are several ways of doing this:

- Thanking them for their participation, sincerely and frequently. Volunteers should be among the first to hear of any important results from their survey.
- Producing frequent and rapid feedback on the value of the information they have provided. The best way to do this is to show how the data they have collected are being used and what the results mean. Feedback should be given as quickly as possible after they have provided the data, in the form of free newsletters, web-based news items, online access to survey results and annual progress reports (Figures 3.1a -3.1e).
- The feedback provided should show volunteers how the project is developing and where their data are helping to provide information. Newsletters containing only current year results are of limited value if the project has been operating for several years.
- It is important that volunteers are able to contact someone from the organisation who will provide personal communication. Managing volunteers is a two-way process and there will be a great deal to learn from their experiences. Questionnaires circulated to the volunteers periodically, asking them how things could be improved is a good way of engaging their interest and finding out about dissatisfaction.

Figures 3.1a - 3.1e Examples of newsletters and other feedback for volunteers

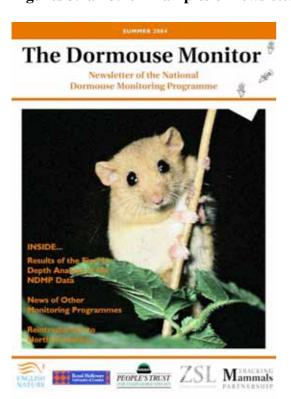


Figure 3.1a "The Dormouse Monitor" is circulated twice yearly to all volunteers who participate in the National Dormouse Monitoring Programme. © PTES



Figure 3.1b The "Mammals on Roads Newsletter" is circulated annually to all volunteers who have participated in the survey. © Nida Al Fulaij/MTUK.

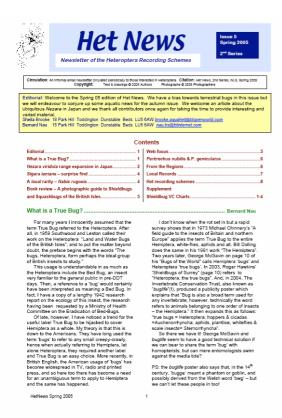


Figure 3.1c "Het News" is the newsletter of the joint aquatic and terrestrial Heteroptera bug recording schemes, and is circulated, generally via email, to a relatively small band of people working on these insects.

© Sheila Brookes.

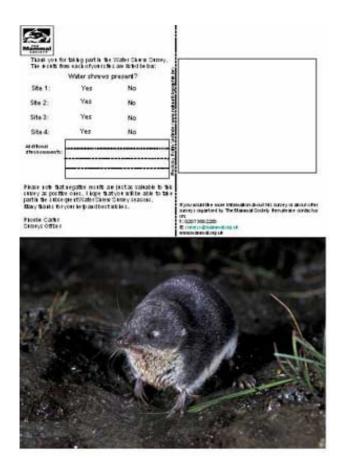


Figure 3.1d The Mammal Society provides rapid feedback to volunteers collecting data in the Water Shrew Survey by means of a postcard returned to each volunteer shortly after receipt of their survey forms.

© The Mammal Society.



Figure 3.1e "Shrew News" is circulated to all volunteers who have taken part in the survey. © The Mammal Society.

3.3 Co-ordinating volunteer effort

Existing surveillance programmes have different ways of co-ordinating their volunteer networks. Some, such as the BTO/RSPB/JNCC Breeding Bird Survey (BBS), have a regional network with Regional Organisers whose job it is to recruit volunteers locally, assign survey sites, and ensure that completed forms or electronic submissions are returned and forwarded to the national organiser. Others, such as the Bat Conservation Trust's (BCT) National Bat Monitoring Programme (NBMP) have a national network with central co-ordination by one or two people at the organisation headquarters. All survey information is distributed and processed centrally (see chapter 7.1, the BBS case study, for 'pros and cons' of the two methods of organisation).

Both systems work well and it can depend on circumstances and choice as to which system would work best for a particular survey. Regional co-ordination has a local focus and engenders a community spirit with more personal feedback and better local knowledge of volunteers and their capabilities. However, good survey coverage is very much dependent on the quality of the local/regional organiser. This usually relates to the amount of time that they have available, and their interest in, and commitment to the survey. Central co-ordination has a national focus, is more standardised because everything is done by a few people, and is more reactive. Probably the best system uses a combination of both methods, *e.g.* the NBMP has central co-ordination, but is developing a network of regional trainers.

3.4 Data management

Managing data is probably one of the most difficult and time consuming aspects of running a surveillance scheme. It is essential to have a database for volunteer contact details, including names and addresses, which survey they are participating in, which site they are surveying, *etc*. It is also essential to have a database of survey results that can be easily accessed and the results analysed. The nature of the database should be decided before commencing a scheme so that resources, both in time and money, are used most efficiently. Some of the main issues to consider are listed below.

Database requirements. What will be the present and future requirements of the database? What information will need to be stored and in what format. The format may be determined by the type of analysis that will be carried out on the data.

Database compatibility. It may be that exchange of data with others is not a consideration, but the National Biodiversity Network has been set-up to facilitate information exchange, and sharing data and information with others has much greater conservation and research potential than keeping data sets in isolation. Building a database that allows for easy information exchange, *i.e.* is compatible and compliant with databases held by other organisations, will save time and money in the long run. More information is available through the NBN website www.nbn.org.uk.

The Data Protection Act. Many wildlife records have personal data associated with them - information relating to living individuals. In most circumstances this is just a name, but their contact details may also be included or at least held separately by the data holder. Personal data held by anyone (in paper or electronic format) must be managed in accordance with the requirements of the Data Protection Act 1998 (DPA). There are quite a number of rules and regulations concerning

the DPA, and it is important that they are understood by both the volunteers and the organisation. More information is available through the NBN website www.nbn.org.uk.

Quality control of data. Raw data will be collected by the volunteers and there may be some concern over the accuracy of the information provided, particularly by inexperienced volunteers. There will need to be a process of data validation put in place when entering the data electronically, so that the accuracy can be checked. More information is available through the NBN website www.nbn.org.uk.

Data entry. A decision should be taken on how to enter the data. There are several options, including manual entry by the survey organiser, scanning information using Optical Mark Readers, paying for professional data entry or asking the volunteers to enter the data through a website. All the methods have their advantages and disadvantages in terms of cost, time required, and accuracy.

Data needs versus running costs. It is most effective to keep data as simple as possible for a required purpose. Having clear objectives for the collection and use of data will be essential, but so will having a clear understanding of the way those data are to be entered and manipulated before the data management system is set up. Being clear and economical about such things as the flow of data (who does what and in which order), and balancing the complexity of data being collected against the future time and effort needed to analyse them are just two examples.

Bespoke versus custom-built databases. A bespoke database may be cheap and readily set up, but it may not manage data in a way that is compatible with the needs of the survey or any product from it. On the other hand, a purpose-built database may have all the detail that the survey organiser considers relevant, but may not be properly supported, and may be difficult to use.

Count data held separately. It may be that the survey involves data on both distribution and abundances, or the survey data are held separately from the personal information on surveyors. While better bespoke databases are able to take quite sophisticated count data attached to survey points, it may be necessary to set up dual data management systems that can be tailored to such uses, e.g. a specific database for the counts to allow statistical analysis. In any case, it will be necessary to ensure that different datasets are clearly linked so that the relationship between them is not lost.

Data security & accessibility. Consideration needs to be given to the long-term security of data. This needs to include both manual and electronic data, ranging from original field survey data sheets, through to electronic archiving of the final databases. The first of these is often forgotten in the process of computerisation, but may be essential for data validation in the future. The latter presents a raft of its own problems, not least the longevity of storage media and the timescale of updating information systems. There are a range of sources of information on this topic, such as the Digital Preservation Coalition (www.dpconline.org/). Having a view as to longer-term accessibility of data is also important. For example, it is often a good idea to deposit a copy of data with a public body of some kind.

Web developments. Making data available to users may entail not only direct one-to-one communication of the results or publication, but also considering publishing data and other information on the Internet. This may range from a dedicated website, through to communicating data through the National Biodiversity Network or the Global Biodiversity Information Facility (GBIF). It is, for example, becoming possible to use the mechanisms behind the NBN Gateway to produce specific presentations of data within other websites.

4. Training Volunteers

4.1 Reasons for training

There are a number of reasons for providing training to volunteers.

Volunteer capabilities. Organisations that run training courses find that trained volunteers are more committed, more skilled and as a result gather better quality data. Training helps to maintain volunteer interest by increasing skills and abilities and widening the volunteer's capacity to provide useful results. Training also builds confidence, producing volunteers who feel more competent to carry out the work.

Volunteer interaction. Training courses provide a way of meeting and interacting with others who have similar interests and may give a sense of belonging to a particular group. This in turn could produce a source of people to act as 'buddies' when carrying out fieldwork. Training also helps to broaden experience and can be very enjoyable. Sometimes training is directly requested by volunteers, so that they are more competent to carry out surveys.

Survey standardisation. Well-planned single surveys, as well as long-term surveillance and monitoring schemes use standardised methods and survey techniques to collect the data to enable future comparisons of the results. It is therefore quite important that volunteers carrying out a particular survey are doing it in the same way from year to year and training new volunteers in survey techniques helps to ensure standardisation. Furthermore, some surveys may require the use of specialist equipment, e.g. bat detectors, Longworth traps, flight interception traps, and training in the use of this equipment is essential if good results are to be obtained.

Wide-ranging benefits. Training volunteers potentially benefits everyone by teaching transferable skills that could be used by all organisations carrying out similar work. Training helps to raise general awareness of conservation and wildlife issues, which in turn will help to raise the awareness and enthusiasm of volunteers to the reasons for carrying out surveys. Trained volunteers are a real asset and their value should not be underestimated.

** General note: With ongoing, mass-participation surveys, the costs of training enough new volunteers to replace those retiring each year, might be prohibitive. Training courses targeted in areas with poor coverage, might be more productive.

4.2 Barriers to training

There are several barriers to organisations and volunteers in providing training.

Time commitment. Workshops and training courses usually last several days so there is staff time involved in developing and running the training course, and the cost of providing insurance for trainees. Volunteers have to be able to set aside the time to participate. They may also have to pay for some training courses, buy special equipment and travel some distance to get to the training centre. However, there is some evidence that volunteers may value training courses that they have paid for more than courses that are provided free of charge, particularly if they receive some sort of certification at the end of the course.

Volunteers with special needs Some volunteers may have special needs and requirements, and may consider it too difficult to attend training courses, particularly residential ones. There may be negative perceptions about training, including fear of meeting people from different walks of life, or being less experienced than others on the course.

Charging for training courses The issue of whether or not volunteers should pay for training they receive is difficult to resolve. There is no doubt that training is expensive for the organisations involved and adds to the cost of running a surveillance scheme. Very often volunteers do not object to paying for training and may feel that they are getting something more valuable if they pay for it. Paying may also increase their commitment because they have invested something in the survey. However, volunteers are giving their time free of charge and it may seem unfair to charge them to learn things that they need to know in order to carry out the survey properly. Furthermore, charging for training may exclude people who are unable to pay the costs.

General guidelines might include considering providing some training free, *e.g.* information packs, but charging for more intensive face-to-face training. It may also depend on the target audience. If training sessions are being run for a wide spectrum of people, including the general public and active volunteers, then the general public might pay, but active volunteers might receive the training for free. Subsidising training should be considered in the costs of setting up a survey.

Barriers to training can be overcome with careful consideration and the right kind of advertising, but it is important to recognise that these barriers may exist and may be preventing sections of society from participating in training and in the surveys.

4.3 Types of training

Face-to-face. This can be fieldwork or classroom based, *e.g.* The Mammal Society's training courses; or the National Bat Monitoring Programme (NBMP) bat detector workshops. Other subject areas, such as invertebrate identification might require more resources, such as access to collections, microscopes *etc.* Carrying out training in association with organisations like the Field Studies Council may also be a preferred option. The advantages of this type of training are that the trainer is able to convey enthusiasm and that there is two-way communication and personal connection. It allows for practical demonstrations and hands-on practice on the part of the volunteer, with instant feedback. It is a very effective way of learning and has a very high rate of volunteer retention. However, there is quite a high time commitment from both sides and costs to both the organisation running the training course and the volunteers as described in 4.2.

A more intensive face-to-face training is provided by individual coaching or shadowing of inexperienced volunteers by experienced surveyors. This can be a very effective form of training but it can also be expensive and time consuming.

Web-based training. This is a growing area because of the versatility of products, the ability to reach a wide audience and the low maintenance costs involved. Training products can be in the form of question and answer sessions, information leaflets that can be downloaded, identification keys *etc*. Websites are accessible 24 hours a day, but they are not yet accessible to everyone, either at home or work, although they should be accessible at local libraries. They are also more detached than face-to-face learning and it is difficult to ask questions.

Information packs. Those containing identification aids and audio visual aids, such as CDs and videos can be very helpful because they are portable, so can be used while carrying out fieldwork and they provide a permanent reference collection. They can be useful in supplementing other types of learning and are usually fairly cheap to produce. However, they generally have limited application and are impersonal, so may provide less effective learning if used on their own.

All the training methods described have their advantages and disadvantages. However, probably the best way of providing comprehensive training is to first decide what is necessary and then combine all or some of the methods and keep adapting to the changing needs of the volunteers. Providing training for volunteer surveyors is an ongoing commitment and not something that happens only at the beginning of a project. It is an important part of any surveillance scheme, even if the level of training is very basic. It provides a way of maintaining communication with the volunteers and a means of keeping them up-to-date with developments in survey methods. It can also be seen as part of an ongoing development process for the volunteers and as a reward for their participation in the survey.

5. Assessing Volunteer Capabilities

5.1 Introduction

It is important to be able to assess the quality of the information collected by volunteer surveyors and to be able to answer certain questions, such as: how good are volunteers at collecting the required data - do they miss a significant proportion of field signs/sightings? Are there any major differences between data collected by volunteers and professionals? Does the ability of volunteers improve with experience and/or training?

Providing answers to these questions will enable the partnership to improve the quality of data collected in surveys and the validity of the results. Assessing volunteer input gives an idea of the level of error in data collection and where the main mistakes are being made. Mistakes may not be uniform across all species or surveys and assessing the error rate enables survey organisers to attach a reliability level to the data being provided.

5.2 Methods of assessing volunteer input

There are several ways of assessing the quality of data provided by volunteers.

Train volunteers to a given 'standard'. This can be achieved through training courses that have a test or exam at the end and provide a certificate of some kind, akin to the licensing system for protected species, but at a simpler level. The Mammal Society provides training courses in mammal identification and survey methods, with an optional test and certification at the end of the courses. Other identification qualifications have been provided through the Natural History Museum's "IDQ" programme, or the University of Birmingham's "Identification Masterclasses", taught in conjunction with the Field Studies Council. The assumption is that a certain level of accuracy will be achieved in the field, but this may or may not be the case in practice.

Accompany a proportion of volunteers. Trained professional surveyors can accompany a random selection of volunteers, and check the results they have obtained. Volunteers act differently when being 'observed', so it may be better to go back shortly afterwards to check the reliability / accuracy of the data, before conditions change.

Compare 'professional' to volunteer performance. Surveys can be set up so that there can be a direct comparison between volunteers and professionals, and the results checked. This provides information on the strengths and weaknesses of volunteers compared with professionals, where errors are likely to occur in surveys conducted by volunteers, and to some extent the magnitude of those errors (see section 5.3.1 on Wytham Woods for further information on this method).

Using standard data recording/entry formats to simplify validation. Errors made by volunteers can be as simple as entering grid references incorrectly or putting in the wrong date or site information *etc*. Standardisation of survey form layout and data entry procedures can save a huge amount of time and effort. Where a regional network exists some regional/area validation can take place before submission to a central database for assessment. However, all completed forms must be checked by the survey organiser. This ensures consistency in any changes made to the entries.

5.3 Assessment examples

5.3.1 Monitoring in Wytham Woods

The Wildlife Conservation Research Unit (WildCRU) at Oxford University has been running a project at Wytham Woods, Oxfordshire, for a number of years, collecting data on the ecology, behaviour and changing abundance of a number of species, including several mammals. The extensive knowledge of the area has provided a very good backdrop against which to test the abilities of volunteers under various conditions and in April 2000 WildCRU, the Earthwatch Institute and the People's Trust for Endangered Species (PTES) began a collaborative project to monitor the populations of mammals and the involvement of volunteers at Wytham Woods.

As well as integrating and co-ordinating ongoing mammal studies, the programme's long-term objectives extend beyond the site's 1000 acres, by developing, calibrating and validating easy-to-use, yet accurate mammal monitoring techniques that could be used by volunteers nationwide.

The mammal communities in Wytham have been monitored by professional scientists and students since the 1940s and extensive data exist on the population trends there. However, multi-species monitoring is a demanding task, and this project relies upon the commitment, time and effort of keen volunteers to get the work done. Teams of volunteers are recruited by the Earthwatch Institute and assist the project for 6-10 days. To date over 400 Earthwatch volunteers have helped with the study. By comparing the results of more sophisticated methods used by experienced scientists with those from surveys by volunteers it has been possible to establish which techniques are most reliable and appropriate for volunteers to use.

The stated objectives of the project include:

- Developing methodologies which will benefit from the work of volunteers to collect important monitoring data, and will provide training in appropriate monitoring techniques.
- Providing an opportunity to calibrate and test the validity of specific survey methods.

More information on the project can be found at the WildCRU website: http://www.wildcru.org/research/other/mammalmon.htm



Figure 5.1 A team helps to prepare Longworth traps ready for small mammal surveys © Jasper de Trafford



Figure 5.2 The team checking the traps the next day and examining the mice and voles caught for data-collection, prior to release back to the wild

© Jasper de Trafford

Information gained from the experiments carried out at Wytham Woods shows that:

- Volunteers have high quality standards and their abilities should not be underestimated. They can have just as high if not higher standards than paid professionals. They are there because they want to be and may well have enormous personal knowledge.
- Volunteers can provide detailed data, particularly in terms of presence / absence information. For abundance information the situation can be more complex. The methods should be designed with volunteers in mind and be as basic as possible and easy to follow. For example, using bat detectors (as long as volunteers are trained) is an easy way of collecting data on bat abundance. Consider volume *vs.* detail can you expect detailed information in one year or could it be built up over a number of years?
- The ability of volunteers improves with experience and / or training. There is an optimum amount of training that is needed in order to do the task effectively. Everyone benefits from training, but it is possible for volunteers to become blasé and think they have learned everything, and they can also suffer from information overload. It is important to ensure maintenance of interest.
- The quality of the data collected by volunteers and the amount of information they miss varies greatly and depends on the nature of the task, the species (the skill level required), motivation of the volunteers and the training required, and the output of the survey required (e.g. presence / absence or abundance).
- In a comparison between professionals and volunteers, professionals were quicker and more consistent (reliable), but volunteers were prepared to take a long time and were reasonably accurate. Professionals may also have some preconceptions about what they should be finding and may not appreciate being given guidance on how to conduct a survey.

5.3.2 National Bat Monitoring Programme (NBMP): assessing echolocation identification

The NBMP carried out a small survey to assess level of correct identification of echolocation calls for two bat species, the common pipistrelle and the soprano pipistrelle. These two species are very closely related and their echolocation calls are very similar, with the possibility for volunteers to make mistakes in identification. Most volunteers use a heterodyne bat detector in the field surveys, which picks up the calls of bats when tuned to set frequencies by the surveyor. Identification depends on surveyor knowledge and cannot be checked at a later date. Frequency division detectors pick up bat calls across a wide range of frequencies and can record the calls, replay them and sonograms can be produced so that the bat identification can be confirmed. A small number of surveyors was asked to take both types of detector with them while carrying out a field survey and record all the pipistrelle calls they encountered.

The results (Table 5.1) showed that volunteers were not mistaking common pipistrelles for soprano pipistrelles or *vice versa*. The frequency division calibration exercise suggested some differences in recording and identification between the two methods, but suggested that overall identification of the two pipistrelles, using volunteers with heterodyne detectors, was quite robust.

Table 5.1 National Bat Monitoring Programme data validation exercise for pipistrelle species identification – results from 12 survey nights

Detector type		Analysis with frequency division detector				
	Species (Sample size)	Soprano	Common	Unidentified pipistrelle	Not recorded	Other species
heterodyne detector	Soprano (12)	11	0	1	0	0
	Common (42)	0	30	5	6	1
	Unidentified pipistrelle (33)	3	7	14	5	4
	Not recorded (50)	5	6	23	-	16
	Other species (0)	0	0	0	0	0

In conclusion, assessing the data provided by volunteers is a very important part of any surveillance scheme. It ensures that the data used for analysis are as accurate as possible and it enables an estimate of the kind and level of errors made by volunteers. Training is an important part of ensuring that the data are correct and assessing volunteers may help in making appropriate changes to training courses, to assist volunteers to collect accurate and comprehensive data.

6. Health and Safety and Volunteers

6.1 Introduction

The Tracking Mammals Partnership (TMP), for whom this manual was originally produced, has taken the decision to engage volunteers to collect surveillance and monitoring data. This effectively means asking large numbers of people to go out into the countryside and into urban environments to look for signs of mammal presence, and to record any mammals they see. Asking volunteers to do this type of work has raised several issues regarding health and safety of volunteers, and the nature of the relationship between organisations that conduct the surveys and the volunteers that collect the data on their behalf. These issues are not restricted to mammal surveillance, thus the information here will be of value to all who are operating surveys using volunteers.

Consideration of health and safety is important for all organisations or groups that engage volunteers to collect biological information. Some organisations have potentially thousands of volunteers collecting field data on their behalf on a very occasional basis. The majority of organisations engaged in this type of activity have very limited resources; many are charities carrying out the work for the purposes of conservation, and have been concerned to ascertain the level of their liability towards their volunteer workers under UK Health and Safety legislation.

A workshop for the TMP was held in 2004 to address these issues and agree a reasonable approach to the legislation, ensuring that 'duty of care' towards volunteers is discharged, while not incurring unworkable practices for the organisations involved in terms of financial cost or staff and volunteer workloads. Following is a summary of the information provided at the workshop, which covers most of the important health and safety issues with regard to volunteers. The presentations from the workshop are provided in chapter 8 of the manual.

6.2 The legal position regarding Health and Safety legislation

There are two major areas of law that are of importance; a) the Health and Safety at Work Act etc. 1974 (H&SWA) and regulations passed under it, relevant to both civil and criminal liability; and b) common law duty of care.

The status of a person as either an employee or a volunteer is important for deciding what legal liabilities an organisation might have over using them in its work. For a person to be considered by the courts as an employee there are various facets that need to be considered. These include the degree of control the organisation has over that person, whether they must provide a service or not, whether there is remuneration and how it is paid to that person and whether there is a duty for that person to turn up for work (and a duty of the organisation to provide work).

• Generally persons are not employees for the purpose of health and safety law unless they have a contract; but this may be written or oral and may be implied from the circumstances. In any event, the legislation stipulates that organisations owe a duty to ensure, so far as is reasonably practicable, that persons who are not employees are not exposed to risks to their health and safety arising out of the organisation's activities under section 3 of the Health and Safety at Work Act etc., 1974. In addition, organisations may well owe a common law duty of care to take reasonable care of persons who are not employees – for example, to warn them of known risks. In general terms the organisation's responsibility depends on the

level of control the organisation has over a volunteer's activities: the greater the control, the greater the duty of care that is owed.

It is therefore important to ensure that volunteers are aware:

- That they are volunteers and they are not obliged to undertake the voluntary work (and nor is the organisation obliged to offer them any work), but if they do undertake the work, they have to follow the relevant organisation's health and safety procedures.
- That volunteers are warned about known hazards and risks and advised about the precautions to take.

Organisations have to adopt a much higher duty of care for minors, as under 18 year-olds are seen in the eyes of the law as 'inexperienced', so any advice and warnings given to them are likely to be less effective.

If volunteers are paid more than their 'actual expenses' then their status as a volunteer may be called into question and the minimum wage may need to be paid to them. Or, if the payments are deemed taxable, then the volunteer's state benefit income may be affected. See Table 6.1 for a list of payments that are deemed acceptable and not acceptable by the Inland Revenue.

Table 6.1 Taxable and non-taxable payments to volunteers

Acceptable expenses allowed by the	_		
Inland Revenue	some circumstances these may be seen to		
	contribute to the creation of a 'contractual relationship'*.		
Actual costs of travel (fares or mileage	Additional training not pertinent to the role		
within rates) as a direct consequence of			
volunteering			
Actual cost of specialist clothing required	Discounts, especially if regular and substantial		
for the work.			
Actual cost of materials/services required	Accommodation if not required for the role.		
to do the work			
Actual cost of meals taken while			
volunteering			
Actual cost of child care incurred in being			
available for volunteering			

A contract of employment does not have to be written down. It is defined by the relationship that exists between employer and worker / employee, based on mutual expectation, obligation and intention. This is an area which is constantly being challenged at Employment Tribunals and so is subject to a great deal of uncertainty. For more information on this see the Volunteering England information sheets on expenses, minimum wage and other related topics. These are available on their website at www.volunteering.org.uk

If volunteers are reimbursed for their genuinely incurred expenses then this is not taxable, it does not create a contractual relationship and will not affect the volunteers' state benefits. However, actual expenses incurred by a volunteer can be reimbursed only for necessary travel, food during the course of volunteering, over-night accommodation only when necessary, and equipment and

clothing required for the work, and also the costs of childcare while volunteering, so long as all the above have auditable paper work. Privilege pay, such as reduced membership fees, honoraria and additional training not pertinent to the role can be viewed by the Inland Revenue as taxable and it may affect, for example, a volunteer's state benefit income if they are in receipt of it, or the organisation could be forced to pay volunteers the minimum wage.

**Note: privilege pay may encourage an employee-employer relationship to be created, therefore entitling the volunteer to employee rights, such as unfair dismissal.

Summary:

- Volunteers are not generally regarded as employees, provided certain guidelines are followed.
- Organisations have a duty of care to their volunteers, which increases with increasing control over the work being carried out.
- Organisations have a greater duty of care to under-18s.

To avoid volunteers falling under employee status, ensure that:

- They are not paid, other than actual expenses incurred.
- Any remuneration for expenses is not paid using the PAYE system.
- Make clear, in writing, to them that they do not have a duty to turn up for work and the organisation is under no duty to offer them work.
- They use their own equipment where possible.
- It is always clearly stated that they are volunteers.

6.3 What is 'reasonable' duty of care for organisations

The qualification of 'reasonable' to the duty of care allows a court to have regard, to some extent, to the resources of an employer. Therefore, organisations are expected to take reasonable steps to ensure the health and safety of volunteers within their means

The more control an organisation has over volunteers the higher the duty of care owed. It is, therefore, important to consider how much control is being exerted. For example, volunteers who submit their data without a remit of a structured co-ordinated survey have a much lower level of care owed to them than those who are assigned a specific area and target.

An example of minimal control is BTO's BirdTrack, in which anyone can enter bird observation data, the only constraints being that they record the hectad in which the birds were recorded, the date and the species of birds seen. They may optionally record the amount of time spent and the numbers of birds of each species seen. In such instances the courts would probably deem that the organisation's duty of care was very low and therefore there would be minimal responsibility. But this would not excuse, of course, failing to warn volunteers of known risks and failing to advise them of what precautions to take.

If instructions are given as to how and when to make survey observations, then this would probably be considered to be increasing the level of control over a volunteer, and the duty of care that is owed is correspondingly higher. A court would expect the system of work which is put in place to be reasonably safe in the circumstances. The extent of the duty owed will depend on the level of

responsibilities that the volunteers have; but as a general rule risk assessments may be advisable if volunteers are asked to participate in a survey – they should at least highlight any obvious risks.

Organisations should consider the different abilities and aptitudes of volunteers as this may place them at greater risk for certain surveys; e.g. those with poor eyesight or who are epileptic might need to be advised that certain surveys are not suitable for them. However, it might be very difficult, to obtain 'health' information about volunteers before they undertake survey work, often at very short notice.

Organisations can increase their level of knowledge of the risks volunteers are exposed to in the field by asking volunteers to fill in a general information box on survey forms which would allow feedback on site specific issues.

Consideration should be given to whether volunteers are using equipment provided by the organisation, whether they have to be supervised, or whether there are vulnerable persons or children. In all these cases there is a higher duty of care owed. All equipment owned by organisations should be well maintained and regularly checked.

6.4 Level of health and safety information to provide to volunteers

Do not use disclaimers because they are unlikely to be legally effective. Disclaimers or exclusion of liability notices are very unlikely to stand up in court; they merely point out that you are aware of the hazards but have not taken reasonable care to reduce these. A typical disclaimer might be:

"Fieldworkers should not put themselves in a position that could place them, or others, in danger. The Trust does not take any responsibility or liability for any actions and subsequent consequences from the activities of fieldworkers."

The first sentence is of merit, but the rest of the disclaimer is of no value. A much better approach would be to send generic advice to all volunteers on how to avoid the hazards and to inform them of any risks identified in a risk assessment. It should be clearly stated that if they are in any doubt, or wish not to take part, they do not have to.

Organisations should provide guidance on all known risks that volunteers are likely to encounter during the course of their activities. This information should be generic, applied to particular surveys and supplied to all participating individuals. In the case that certain known sites have additional hazards, site specific guidance should be issued.

For voluntary work carried out on organisations' premises, volunteers should be treated to the same standards of health and safety as employees, as well as receive the same level of protection with adequate preventative measures taken to ensure any volunteer's safety.

An organisation should be careful that any equipment it supplies to volunteers is safe. It should also ask volunteers to check their own equipment and not to use equipment which may be unsafe. You should consider giving specific advice if equipment involves particular risks (e.g. ladders). Generally, volunteers should be encouraged to use their own equipment. Under 1998 Regulations (see 8.5), organisations are not responsible for faulty equipment owned by volunteers, but they may be responsible under their common law duty as to how that equipment is used, because it is

expected that advice, training and warnings on the proper use of equipment and safe working practices will be given. Therefore, there is a need to consider specific hazardous situations.

There can be a bit of a dilemma in providing health and safety advice and training in that not providing any advice can be considered negligent, but the more training and advice that are given, the more an organisation can be held liable if something goes wrong. There is an optimum balance, in that organisations have a duty of care to their volunteers to ensure that they are aware of, or have access to accurate health and safety advice. Generic health and safety advice should be given, as well as details of where to find further information. However, if training provided for volunteers is not sufficient, then the organisation may be liable in the case of an accident. It is extremely important to stress that the volunteer is under no obligation to carry out the work and that they should not do anything that they consider will put themselves or anyone else at risk.

6.5 Risk Assessments

Risk assessments should be carried out and should be survey, task and scheme specific. However, rather than fill out a risk assessment for each volunteer, the organisations should produce guidance, perhaps in the form of a checklist, and encourage the volunteers to assess their own risks. A generic risk assessment could be based on the Health and Safety Executive's advice on countryside hazards and should be seen as guidance to volunteers to undertake their own risk assessment, but it should not be implied that this a complete list and organisations should advise on where further information can be sought.

A survey-wide risk assessment for individual surveys would form part of the generic risk assessment and allow volunteers to assess what hazards are involved in the survey that they are being asked to do, and allow them to make an informed decision on whether or not they wish to participate (which would encourage the volunteer to take personal responsibility for acting safely and reduce the organisation's duty of care).

It must be made clear to the volunteers that they are under no obligation to carry out the voluntary work and that it is their decision to undertake any voluntary role. It should be pointed out explicitly that it is acceptable for them to make their own judgement as they see fit, and not carry out the work.

Volunteers can be advised to study a map of the area they are being asked to survey and to identify any site specific hazards they may encounter, prior to visiting the site.

When survey information is sent out to volunteers, it should cover all aspects of the volunteer's role as appropriate to that survey, whilst allowing the volunteers to assess what additional risks they may choose to put themselves under. It would probably be best to advise volunteers that, along with having no obligation to undertake the volunteer work, they should not put themselves in undue danger. This will reduce the liability of organisations where volunteers may be engaging in particular hazardous activities that are not required in the survey, but which they choose to carry out anyway and which are known to the organisation in question. If volunteers are choosing to carry out activities without any instructions, then the courts would say that the organisation's duty of care and responsibility is very low.

There are several important things to consider regarding the use of equipment when carrying out surveys. As already stated, volunteers should be encouraged to use their own equipment and

organisations are not responsible for volunteers' own faulty equipment under 1998 Regulations (criminal law), but are expected under common law duty to give warnings, advice and training on the proper use of equipment and safe working practices. Therefore, it is important to think about specific hazardous situations. If the organisation knows that a volunteer is using faulty equipment then they should be advised against using it. Clear warnings and guidance on best practice should be provided and steps taken to ensure their safety.

Note that in law, 'Reasonably practicable' includes a cost analysis, so small NGOs could be shown to do what is reasonably practicable **within their means**.

Monitoring the use of risk assessments and guidance by volunteers may equate to a contract of employment, because the role of the volunteer is being assessed. However, there are planned changes to the current system (2010 Health and Safety Documents) as the current 'blame culture' has made the old system deemed legally unworkable.

Different localities, habitats and survey objectives pose different problems. Mammals, muddy streams and rivers, for example, all pose a risk of disease for which a quick diagnosis is essential for rapid and effective treatment. The identification of diseases is already part of generic risk assessments for some organisations, but volunteers could carry the equivalent of a yellow card that states what species they have been studying and the likely diseases they may have come into contact with, to enable their GP to make an early diagnosis in the event that they become ill.

In order to carry out survey work, many volunteers require access to private land. The Countryside and Rights of Way Act 2000 protects the interests of land owners, but there is still a need to carry out a risk assessment for the role of the volunteer to incorporate the aspects of going onto someone else's land. Furthermore, the landowners may need evidence that the volunteers are adequately insured.

6.6 Insurance and volunteers

Much will depend on the scale of the survey and the nature of the voluntary activity envisaged. For insurance purposes organisations need to ensure that the third party clauses of their public and, where relevant, employer's liability cover volunteers and their work, and look at the implications of volunteers injuring someone else. Therefore, in addition to building and vehicle insurance it may also be necessary to consider:

- Personal accident, including loss of life
- Professional indemnity
- Special events
- Fidelity (dishonest acts)
- Trustee indemnity

It is the duty of the co-ordinating organisation to ensure that the end users are protected, especially vulnerable people, such as those under the age of 18, and for such work the organisations will have a higher duty of care. Note that volunteers can be selected for specific tasks. Selection does not blur the line of volunteer / employee and in some cases it is best practice.

Many surveys are carried out by volunteers who may not be known to the organisers (even after their results have been submitted). Public liability insurance will still provide cover even if the volunteers are not known personally. The reasonable duty of care laws do allow for fiscal considerations, so small NGOs undertake this duty within their means, implying that knowing thousands of individual volunteers could not be reasonably expected.

Organisations can take out insurance for all those undertaking research / survey work on their behalf. The insurance can cover death, injury and property damage to either the volunteers or third parties. An issue to consider is the insurance status of groups of volunteers, working under the auspices of the umbrella organisation, *e.g.* regional bird groups carrying out BTO's ornithological work, county bat groups affiliated to the BCT. It has been suggested that any such groups (formal or informal) *could* be held liable (rather than the umbrella organisation) for the consequences of activities organised by themselves as part of the work of the umbrella organisation.

In such cases it is possible to have policies that cover the groups, even those with their own constitution. If this type of cover is not taken out by the umbrella organisation then there is an obligation to point out that the group(s) may not be covered under the insurance policy and would be wise to take out their own insurance, although the cost of this may be prohibitive and cause the group to disband. Organisations should look to periodically update the insurance information given out to their volunteers and their groups; this should be checked with the insurers first, and could be incorporated in survey mail outs.

Some groups that need access to private land may need to reassure the land owner that they are insured in the case of any incident and third party damage. This can be done in the form of a covering letter. The organisation must first ensure that their volunteers, if belonging to a group, are insured, then the decision to send out a letter is a matter of discretion and may depend on circumstance. Some organisations, such as the Bat Conservation Trust, send out a standard letter containing insurance information as a matter of course with the survey mail outs. There are risks in this method in that the letter could be used to gain access to land for other purposes, so as a precaution it may be necessary to specify the dates for which the insurance applies, i.e. the duration of the survey.

Some volunteers may undertake work that is linked to, but not fully part of an organisation's programme. For example, ringers are encouraged to put rings on nestlings. Some of them climb down dangerous cliffs in order to get to the nests of certain species – but the BTO does not encourage them to do this specific activity (nor discourage them). In cases like this, where the organisation knows about the activity and is providing equipment (rings) and insurance, they are liable in the case of an accident.

7. Case studies

7.1 The Breeding Bird Survey (BBS)

Background. The Breeding Bird Survey (BBS) is a national survey that monitors the populations of common and widespread bird species in the UK. BBS started in 1994 after two pilot years in 1992 and 1993. Between 1994 and 2000 the BBS ran alongside the Common Bird Census (CBC), until replacing it in 2001. In 1995 observers were asked to record mammals also (voluntarily). The BBS surveys over 2,000 randomly selected 1km sites across the UK, from the Channel and Scilly Isles in the south to Shetland in the north. One of the main changes from the CBC was that BBS sites are randomly selected by computer.

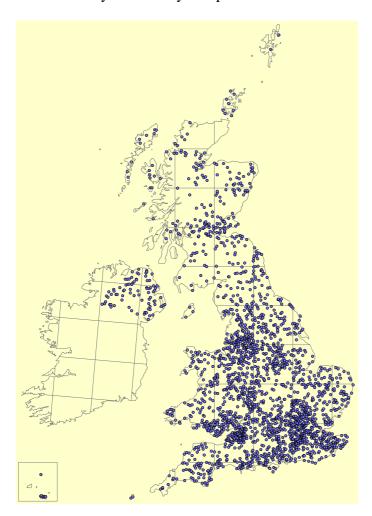
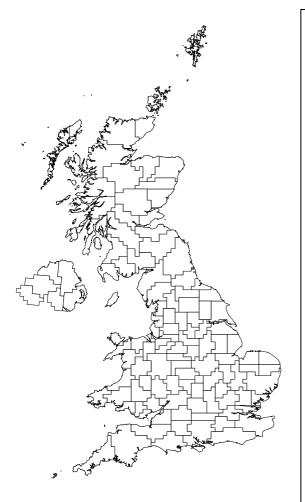


Figure 7.1 Distribution of BBS survey sites. Over 2,000 randomly selected sites covered from the Scilly Isles to the Shetlands.

BBS Organisation. Nearly all BBS observers are volunteers (>99%). Some professional coverage has been used in Scotland in the past and now in Northern Ireland (52 squares in 2003), funded by the Environment and Heritage Service of N.I. The BBS uses the British Trust for Ornithology's network of Regional Representatives (RRs) for much of the recruitment and organisation of the scheme.

The random location of sites means that people have to be found to survey squares in both remote uplands areas and 'less-than-interesting' habitats, such as urban and arable farmland. This is not always easy to do.

The BTO's Regional Network. There are 124 BTO Regions (Figure 7.2). These regions are primarily defined by 10km squares, and fit roughly around the county borders. A Regional Representative (RR) is assigned to look after one, occasionally two BTO Regions. Usually the RR is also the BBS Regional Organiser (RO). BTO Regions without a current RO are administered by the National Organiser. In 2004 there were around 9 vacant regions, and this is fairly typical.



BBS Regional Organiser's Role

A variable number of BBS squares (up to 100) are issued to the RO each year

The Regional Organiser's main responsibilities are to:

- Find new BBS observers to cover the squares
- Vet suitability of new observers
- Send out BBS forms and collect in and chase completed forms and electronic submissions
- Provide general advice about the BBS and it's methodology
- Promote the scheme, using links to the local bird club network

Some ROs organise training workshops and gettogethers for their volunteers. Some ROs check the completed BBS forms. The way the RO promotes the scheme and recruits new BBS observers is largely left to them. Additional help in volunteer recruitment is provided by the National Organiser where an RO is either struggling to find observers (e.g. in remote areas) or is having difficulty finding the time to do it. BTO RRs/ROs are assessed each year by the BTO on their performance.

Figure 7.2 BTO Regions across the UK

The National Organiser:

- Is based at BTO HQ in Thetford.
- Provides support to RRs (in the case of BBS they are known as Regional Organisers or ROs).
- Produces annual reports, publishes results, manages the BBS database.
- Promotes the scheme at a national scale.

Regional Organisers – advantages:

- Provide a link between the observers and BTO staff.
- Provide a link between the bird clubs and BTO staff.
- Act as a local contact for BBS observers (often they know each other already).
- Better able to assess the competence of their observers.
- Have better local bird knowledge.
- Know their local BBS squares so are better at finding suitable volunteers for a particular square.
- Save money in BTO staff time.

Regional Organisers – disadvantages:

- BBS is totally reliant on the efforts, skills and time commitments of the RO for volunteer recruitment; a bad RO = poor coverage.
- This leads to uneven coverage across the country.
- Some ROs can get into local bird-club politics, leading to problems, although this is rare.
- ROs must adhere to BBS sampling strategy.
- Must maintain RO interest in survey.

The National Organiser must spend a lot of time 'looking after' the ROs, keeping their morale high and maintaining their interest in the survey. The new BBS-online web application provides the RO with up-to-date information about the survey, and BBS results at a BTO regional or county scale. The system provides facilities to help the RO manage their volunteers and enables them to find out who has submitted data from which square. The National Organiser is responsible for the running and maintenance of the online system.

BBS observers, what is required from them? BBS is a simple design that requires only 4-5 hours of fieldwork each season. It is a simple, non-time-consuming fieldwork, which enables a large number of volunteers to be recruited and become involved in the survey. By comparison the CBC required c.30 hours of fieldwork and covered only 200 sites per annum. There are two survey and one reconnaissance visits to the survey site each year, generally between early April and the end of June. Each visit involves walking two 1km transects and recording all the birds heard and seen in three distance categories.

On the two survey visits, mammal species seen are also counted. Additional mammal species are also noted if:

- Field signs are seen during the two visits (e.g. badger setts, droppings/scats, hair, etc.).
- Dead animals are seen on the two visits.
- Other species are seen or heard on additional visits to that square during that fieldwork season.
- Additional local knowledge suggests the species is present, *e.g.* from farmers or gamekeepers, *etc*.
- Volunteers also record habitat details on the first bird count visit, or if it is the first year a site has been surveyed, on a separate visit.
- Access permissions are obtained by the observer, who is recommended to visit the landowner(s) in person. Problems with access refusal are relatively rare considering the sample size, but do occur. The vast majority of the 1,700 different observers involved each year in the scheme cover a single square (83%).

Advantages and disadvantages of using volunteers

Advantages:

- There are lots of volunteers enabling a large sample size to be obtained.
- Volunteers can be found to survey sites across the whole country.
- The same volunteers return year after year, even though there is a turnover rate. This means that Regional Organisers get to know the volunteers who provide good data. This is not the case with professionals who change year by year.
- Volunteers will return to the same site year after year. This creates a loyalty between the
 volunteer and their site, thus helping to maintain interest in the survey and provide better
 results.
- Engaging volunteers allows access to a wider non-professional audience.
- Volunteers are better at getting access to land / permissions and can get access to sites where it would not normally be possible.

Disadvantages:

- Coverage is largely dependent on the number of birdwatchers/volunteers in a particular area. This is usually linked to population size and leads to uneven coverage.
- There is a limit to what you can ask a volunteer to do the survey has to be interesting and not over-complicated.
- It is not possible to ask volunteers to cover difficult sites or areas. Random sites can turn up anywhere, with some of them on remote islands, airport runways, or on the M25.
- Remote areas are a problem. It is unreasonable to ask volunteers to travel large distances.
- There are relatively large drop out rates with volunteers.
- Volunteers do not always adhere to the standard survey methodology.
- The quality of the form-filling is highly variable. This will result in extra time spent checking data and preparing forms for outside data entry.
- Considerable time needs to be spent maintaining volunteer interest. This involves plenty of good quality feedback. The new BBS-online provides Web-using observers with additional feedback. It is important to make volunteers feel part of the survey.

Difficulties experienced by BBS National Organiser regarding volunteer observers:

- Land access is refused or is difficult to obtain.
- Terrain difficult: route has to be changed.
- Volunteers want to survey their own 'favourite site' not a randomly selected one.
- Do not want to travel large distances from home to site (less than 20 miles).
- Habitat recording can be very subjective.
- Late forms delay production of results. Getting some people to send their forms back is very difficult.
- Quality of form-filling and observations varies greatly, even with vetting.

Feedback to volunteers. Each year BBS observers and Regional Organisers receive a copy of the annual BBS report in addition to the acknowledgements they receive from their RO and National Organiser. BBS observers using BBS-online can view historical data for their squares as well as entering their BBS mammal, bird and habitat data online. All visitors to the BBS web pages can view information about the survey, including survey coverage, species distribution maps, county and regional summaries, population trends, research work undertaken using BBS data and details on how to participate.

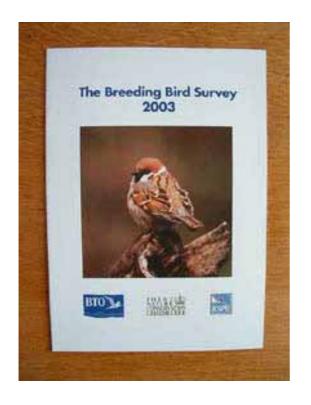
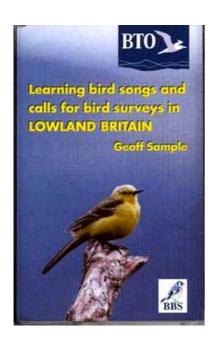


Figure 7.3 The BBS Annual Report. © BTO



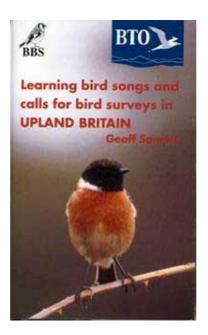


Figure 7.4 A set of two professionally produced bird song and call training tapes is available to all new **BBS** observers and existing ones on request.

7.2 The National Bat Monitoring Programme

Background. The NBMP was established in 1996 by the Bat Conservation Trust, aimed at developing a volunteer network-based strategy to monitor bat population trends at a UK level. The NBMP has been operating as an established surveillance programme since 2000, in partnership with the JNCC, and aims eventually to provide population trend information for all UK resident bat species.

Survey methods. The NBMP currently uses three methods to monitor bat populations, but is always investigating new surveillance methods in order to incorporate the more difficult and rarer species into the programme.

- Colony counts. Bats tend to form maternity colonies, groups of mainly females, during the summer months, in order to give birth and raise their young. Many of the known roost sites are in occupied buildings and volunteers are asked to count the bats during evening emergence from these sites across the UK in May and June. It is not a random selection of sites and may not be representative of the total population, but the survey is easy to carry out and sample sizes are relatively high.
- Hibernation counts. Bats hibernate during the winter months and skilled volunteers are asked to count the bats in known hibernation sites across the UK on two occasions between December and February.
- Field transect surveys. Trained volunteers are asked to visit randomly selected 1km squares across the UK with a bat detector and record when, where, how many times and which bat species they hear. For Daubenton's bat, a species known to forage predominantly over water, 1km transects are selected along water courses and torches as well as bat detectors are used for species identification.

This is the most statistically robust of the three methods, because the sites are randomly selected and because there has been some testing of the data that have been collected, using different types of detector, in order to validate the results (see section 5). It is the most difficult of the three surveys and requires a high degree of skill. For these reasons sample sizes are smaller than for the other two methods and the turnover of volunteers participating is quite high. However, the results from this survey are very encouraging and sample sizes are large enough to show population change.

Volunteer participation. The NBMP puts great value on the participation of volunteers and has devoted time and effort to organising and maintaining the volunteer network. Unlike BTO, the volunteers are centrally managed from the NBMP HQ in London. The development of the volunteer network is carried out by the survey co-ordinator and the training officer. Much of the survey work for bats requires identification skills and the ability to use a bat detector. Training is provided free of charge to active volunteers. Support materials are provided, including CDs and bat detector manuals. Contact with the training officer results in a personal rapport with the volunteers. The NBMP is in the process of developing a regional network of trainers, to provide some local focus and reduce the costs of travel and time for the national training officer.

Some facts about the NBMP:

- Now has 2276 volunteers registered.
- An annual recruitment rate of 300-400 people.
- In 2003 801 volunteers took part in the surveys.
- Return rates on survey forms are approximately 50% across all surveys.
- Over 120 training workshops have been held, across the UK, since 1997 (Figure 7.5).
- 16 training workshops were held across the UK in 2002 with approximately 400 people trained in the use of bat detectors and species identification.
- Feedback is provided to the volunteers in the form of an annual newsletter The Bat Monitoring Post available on the website.
- Future training trainers.
- NBMP has a group of liaison officers 13 in England, 4 in Scotland, 2 in Wales.

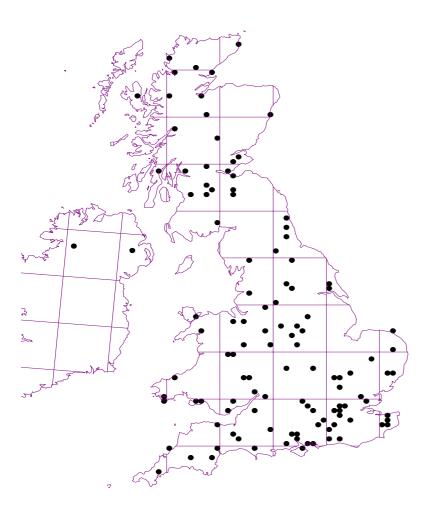


Figure 7.5 Distribution of NBMP workshops carried out between 1996 and 2002. Over 120 workshops run.

7.3 Survey of the Bryophytes of Arable Land (SBAL)

Background. Bryophytes are the group of non-vascular land plants comprising the mosses, liverworts and hornworts. The British Bryological Society (also with initials BBS) is the national society devoted to their study. Arable land has a distinctive bryophyte flora, which has often been neglected in the past. Harold Whitehouse (1917-2000) took a keen interest in arable bryophytes from the late 1950s. He often astonished bryologists on excursions to rich areas of the north and west by examining the local arable fields. Few other bryologists were so keen on the arable habitat, with the result that we now have little idea of how its bryophyte flora is changing.

In 2000, R.D.Porley reviewed the current state of knowledge and proposed a nationwide survey of bryophytes on arable land. The Bryological Society endorsed Porley's proposals. During 2001, an informal Steering Group was set up. From autumn 2001 to spring 2002, the methodology was tried out and a sampling scheme proposed. SBAL was the result of these deliberations.

Organisation of the survey. The season for arable bryophytes starts after harvest and lasts from October to April. Following a pilot year up to April 2002, the project was designed to run for three full seasons, starting in October 2002 and ending in April 2005. Training for recorders was provided at field meetings in November 2002 and October 2003. Data were submitted on record cards, and entered onto computer at the Biological Records Centre, Monks Wood. Full information about the project is available from its website:

http://www.jonathan.sleath.bt internet.co.uk/SBAL/intro.htm.

Sample design. The main national survey comprised three classes of field, for which data were to be collected together using the same methodology.

- Class 1 Fields located in a random selection of tetrads (2-km squares) distributed in the main arable areas of Britain (Figure. 7.6). The aim was to sample 2 fields in each random tetrad.
- Class 2 Fields located anywhere in Britain, selected because they were in a suitable condition for bryophyte recording.
- Class 3 Fields selected for specific attributes, such as having wet hollows or being used for special crops or organic farming.

In practice, relatively few fields were selected in Class 3, but a large number were recorded in Class 2. This meant that a good sample of fields was available from parts of the country with little arable, notably south Wales and Cornwall.

Sampling methodology in the field.

Selecting a field. A field was in suitable condition when it was:-

- 1. Arable or in set-aside following arable use.
- 2. Either the bryophytes were large enough for most of them to be identified or (a rare case) there were none, but the surveyor judged from the time of year that they ought to be identifiable if they were there.

Searching for bryophytes. Searching was by a 'random walk', stopping at intervals and getting down on hands and knees to examine what was there. In most fields, surveyors were to spend about 30 minutes, but it partly depended on how many people were present. Surveyors were to identify as much as possible in the field. However, many bryophytes of arable fields require microscopic examination, especially of their 'tubers', or underground organs of perennation. An identification pack was supplied to participants.

Recording the field environment. Recorders were asked to record soil types in simple categories such as 'sandy loam'. Three small soil samples were used to measure soil pH. The Bryological Society purchased 10 pH meters for use in the survey. The crop and its condition were recorded, noting if the land was in set-aside or if a second crop had been planted by direct drilling.

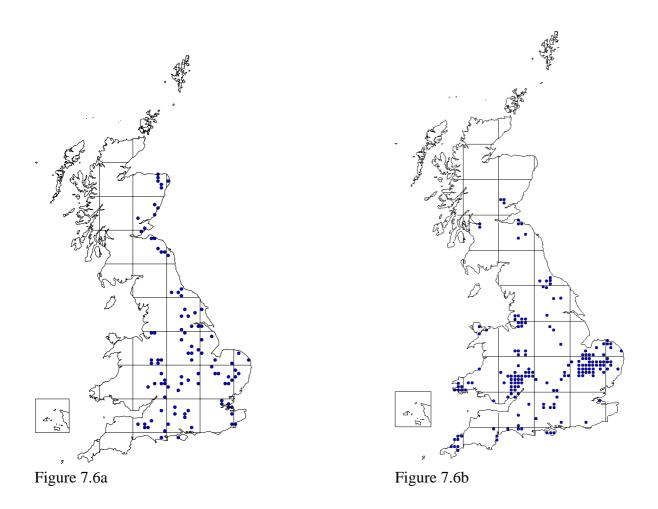


Figure 7.6 Distribution (a) of 2-km squares selected randomly from the arable area of Great Britain and (b) of 2-km squares that had been visited at the end of the second season.

Data entry and analysis. A special data entry program was written so that data were entered directly into a relational database in Microsoft Access. Analysis would aim to reveal how bryophytes respond to environmental factors such as time of year, soil texture, soil pH, part of the country, previous crop and vascular plant cover. The aim would be particularly to determine the factors that promote bryophyte survival, so that measures to promote bryophyte conservation could be recommended.

Volunteer participation The British Bryological Society, with about 600 members, is sufficiently small that it can function effectively without any paid officers. All members of the Society are therefore volunteers, although several active members belong either to the UK conservation agencies, biology departments in universities or environmental research establishments. In practice,

most of the volunteers were already keen bryologists, many of whom were working on local floras or other recording projects. Arable bryophytes had been a neglected group, and volunteers were able to make a number of notable records. Indeed, the UK BAP species *Didymodon tomaculosus* was found on the first training day for SBAL in one of the random tetrads.

The level of training required for the project was not high, but it required recorders to learn skills that they did not previously have. They were asked to identify crop plants from their seedlings, to identify soil types, to estimate vascular plant cover by eye, and to take soil samples and measure their pH. In the event, almost all the participants had either attended one of the training days or gone into the field with an experienced SBAL recorder. It was not necessary for all volunteers to measure the pH of soils. Those recording relatively few sites sent soil samples to other participants with pH meters.

Although the project did not receive any direct funding, it received several indirect benefits from publicly-funded sources. The project was originally championed by a member of English Nature (Ron Porley). Information packs were produced through a project based at the Natural History Museum. Project planning, survey design, cards and data entry were provided by the Biological Records Centre.

A targeted survey such as SBAL cannot appeal to all members of the Bryological Society. SBAL volunteers often found the project rewarding. There were some disappointments, especially in the dry autumn of 2003, when recorders were required to fill in a card and measure the pH even for fields where bryophytes were lacking. In general, satisfaction levels were high. It soon became clear that SBAL was uncovering species that had previously been overlooked and the project would provide a solid basis of information for the future.

8. Presentations from the Workshop on Health and Safety

8.1 Health and safety law with regard to volunteers. Dick Langridge, Canterbury Council

Duty of volunteer co-ordinators and volunteers. The Health and Safety at Work etc. Act, 1974 (H&SWA) was introduced to encompass all work situations, replacing several different pieces of legislation that were specific to different workplaces.

The H&SWA establishes the duties of people. It specifies the duties owed by employers to employees and to persons who may be affected by the employer's work activities. Under the legislation, if one or more people are paid in your organisation then you are an employer.

There are two types of duty for the employer:

Under Section 2 – to ensure, so far as is reasonably practicable the health, safety and welfare of their employees.

Under Section 3 – to conduct their undertakings in a way that ensures, so far as reasonably practicable, that people other than their employees are not exposed to risks to their health and safety.

If there is some sort of 'contract', either written or verbal, that you have signed or agreed then you are an 'employee' and Section 2 duty applies to you. Section 3 duty is directed at the 'work place' and other activities of organisations, and requires them in general terms to take reasonable care to ensure the health and safety of all persons, by not exposing them to risks.

Volunteers would fall under Section 3 duty as they are unlikely to be employees, unless there is some sort of contractual agreement. Society accepts that work as a volunteer offers a lot of challenging enjoyment and may be fun for the participants, but it also expects that those who organise the work do so safely and without risks to health. The purpose of this workshop is to discuss 'how we reasonably fulfil that duty'.

A Health and Safety Enforcer would expect that volunteers are treated in accordance with similar standards to those owed to employees, as well as receiving the same level of protection. For any additional roles and associated risks that they may encounter there should be adequate protective and preventative measures taken to ensure volunteer safety.

In an employer / employee relationship, the **employee** must cooperate with the **employer** on health and safety matters, and has a duty to himself / herself, other employees, the employer and to other persons. However, as volunteers are not considered employees, they have no duty to the organisation / volunteer co-ordinator under the H&SW Act.

Fortunately there is other legislation under civil law (H&SW Act falls under criminal law) which is the civil duty of care, by which (in general terms) everybody has a duty to take reasonable care of others who are affected by their activities, which everyone has to abide by, including volunteers. In addition there are regulations passed under the H&SW Act which give rise to civil and criminal liability and which address specific risks arising from work. These include, for example, the Manual Handling Regulations and the Provision and Use of Work Equipment Regulations; some of the

duties in the regulations are owed only to employees but others are owed to others too (see 8.5 below).

Identifying risks. Risk exists in every area of life and cannot be taken away, but it can be reduced. If you have volunteers they should be incorporated into health and safety policy and management, such as including volunteers in the organisation's risk assessment process. It is important to consider carefully where volunteers' roles differ from employees' and whether they will be working remotely from you.

Questions should be asked of volunteers about their suitability to carry out a particular role e.g. are they epileptics, diabetics or do they have poor eyesight? These are aspects that increase risks to the volunteer, particularly in certain scenarios. Although this would require a lot of vetting and may well put off volunteers, it is worth considering that, for the more demanding situations, there would be a process to select the most appropriate volunteer candidates for the role.

Risk assessments need not be very complicated, but neither should they underestimate hazards and potential for human error. Work out a simple approach by looking at hazards and asking:

- What could cause harm to our volunteers?
- Have I spoken to experienced volunteers to check what risks they have encountered and how they dealt with them?
- Do I know enough about the people we are using?
- Do I know enough about the places where they are going?

Consider how serious an incident might be, how much harm it could do and whether harm could be caused to people other than volunteers. When assessing risks do not focus on minutiae – deal with the main hazards first. Reduce the risks to the lowest possible level by controlling them. This can include giving advice, generic guidance, training or initiating a buddy system with experienced and inexperienced volunteers. Mandatory controls may also be applicable.

Risk assessments and their good practice are not immovable. Develop feedback to ensure that everyone is as up-to-date as possible. Keep thinking and asking questions to ensure you have thought of all scenarios. You can also approach council enforcers (Environmental Health Officers) for further information. They are also available for guidance and best practice advice.

In the case of a serious accident to a volunteer it must be reported if the person goes to hospital. If an accident involving a volunteer occurs at another workplace, the occupier of that location will need to notify the correct authorities. There is no obligation to report other types of accident, because volunteers are not regarded as employees. Again there is free advice available on these regulations (RIDDOR – Reporting of Injuries, Diseases & Dangerous Occurrences Regulations, 1995), telling you what to report and how. A council enforcer may conduct routine checks to ensure best practice is being adhered to, but they may also investigate any incidents which will highlight how effective your health and safety management is, and could lead to:

- Further advice or requirements.
- Service of Improvement Notices.
- Service of Prohibition Notices.
- Legal action.

However, provided that you do take these steps and do what is 'reasonably practicable' to reduce risks to your volunteers they can enjoy their work whilst not being harmed.

8.2 Health and safety policy – lessons learned from bats and rabies: informing policy for all volunteers. Amy Coyte, Bat Conservation Trust

The Bat Conservation Trust (BCT) approaches the issue of health and safety from the desire to actively ensure the well being of volunteers, rather than doing only what it is legally obliged to do. All volunteers who may handle bats are asked to follow the BCT Good Practice Guidelines (the BCT equivalent of generic risk assessments) and only vaccinated volunteers are asked to go out to situations where they are likely to handle a bat.

Bat rabies - European Bat Lyssavirus (EBLV). The risk of developing rabies as a result of being bitten by a bat is 'vanishingly small' yet the outcome is extremely serious. By introducing good practice and effective health and safety policy the existing very small risk can be further minimised.

EBLV was first recognised in Europe in the 1980s, but it was not until 1996 that a bat was found carrying EBLV2 in the UK, in Sussex. The conclusion at the time was that this was a migrant bat from the continent, but guidance was issued for all bat handlers to have pre-exposure rabies vaccination treatment. By 2002, following another finding of a bat carrying EBLV2, it was established that EBLV2 was present in some UK bats. Tragically, in November of that year a bat worker in Scotland, who was not vaccinated and did not receive post-exposure treatment, contracted bat rabies and died after being bitten by a Daubenton's bat.

This incident should not happen again, by ensuring proper precautions are in place. Primarily this is extremely important from the point of view of the welfare and health and safety of bat workers, but also because of the effect such a tragedy could have on attitudes to bat conservation in the UK.

BCT called for joined up thinking with regard to bats and rabies issues and has worked with the Department of Health, Defra, Scottish Executive, Scottish Health Department, the Health Protection Agency and the country statutory nature conservation organisations (SNCO) to clarify legal and ethical obligations for future bat conservation work, to provide up-to-date information about the issues and to ensure that all parties are sending out the same clear and accurate advice to anyone with a concern.

BCT took the decision to make the risks clear to all who receive information from them. Core to this is the "Good Practice Guidelines", produced by BCT and agreed by the government agencies; a Bat Helpline that has been set up with assistance from the Government to provide advice to members of the public; and ensuring that all bat workers registered to carry out work on behalf of BCT are up-to-date with rabies vaccinations.

The good news is that the public is putting the risk into perspective and bat groups and bat workers are following the "Good Practice Guidelines".

Informing policy. As a result of the situation with EBLVs, BCT has recognised that attaching a disclaimer to survey forms *etc*. is not good enough to show 'duty of care' for bat handlers and surveyors, and does not cover the organisation legally. Instead, volunteers who may handle bats are provided with comprehensive health and safety information including the BCT "Good Practice Guidelines", and asked to follow them. However, extending the same level of health and safety information to volunteers who participate in monitoring and surveillance projects is beyond present resources. Instead systems have been put in place to provide guidance to volunteers on conducting their own risk assessments together with common sense advice.

BCT's new health and safety policy in relation to EBLVs has raised some important questions generically for small non-Governmental organisations (NGOs) with potentially large numbers of volunteer workers out in the field, but with very limited available funds. The operational costs of such a policy have to be considered, from setting up the policy through consensus, monitoring and checking the effectiveness of the policy, ongoing procedures, checking for proof of vaccination from volunteers and managing them indirectly, as well as monitoring other organisations that may issue conflicting advice.

NGOs need to find the balance between providing 'reasonable care' to all volunteers in the field whilst ensuring volunteer programmes are still being financially viable. Organisations need to be transparent, ensuring that people take part knowing the risks and that volunteers are aware that they are volunteers and are under no obligation to carry out the work.

A co-ordinated approach between organisations who are involved with volunteer management will help ensure there is a consistent, best practice approach to health and safety, and that risks to volunteers are minimised.

8.3 The legal context of volunteering. Caty Collier, The Wildlife Trusts

There is no legal definition of volunteering or a volunteer as such. The Home Office in their publication "Volunteering – a Code of Good Practice", 2001 refer to it as "An activity that involves spending time, unpaid, doing something that aims to benefit the environment or someone (individuals or groups) other than, or in addition to, close relatives", and as "undertaken freely and by choice without concern for financial gain". The key aspects of a volunteer's role are:

- Unpaid, and without expectation of payment.
- Done with own free will and choice, with no coercion.
- For the wider social, public, environmental benefit.
- At the direction of and on behalf of the organisation.
- Not legally binding.

Safety and protection. Important considerations to take on board when working with volunteers are that all individuals have a duty of care, the Health and Safety at Work Act 1974, and that corresponding regulations do apply to all work-based scenarios despite volunteers not being considered to be employees (see 8.1). If your organisation decides to take on volunteers you will require insurance and need to ensure that service users are kept safe.

While volunteers do have the right to volunteer in a safe environment, they also have responsibilities under the civil duty of care. Under this general principle, everyone has a responsibility to take 'reasonable' steps to prevent injury, loss or damage to anyone or anything. If there is an incident within an organisation the ultimate responsibility would rest with the governing body of the organisation. Therefore, it is important to keep accurate records of health and safety measures taken and any incident that occurs.

Basic requirements of health and safety legislation include:

- Safe premises.
- Maintenance of equipment.
- Knowing how to use equipment.
- First aid person designated.
- Written health and safety policy (where there are five staff or more).
- Carry out risk assessments.
- People aware of their responsibilities, and their rights.

Insurance. Organisations do need to ensure that volunteers are covered by their public and / or employer's liability insurance. In addition to buildings and vehicle insurance, it may also be worth considering other forms of insurance depending on the context in which volunteers work:

- Personal accident, including loss of life.
- Professional indemnity.
- Special events.
- Fidelity (dishonest acts).
- Trustee indemnity.

Protecting service users. Use the same safe working procedures for volunteers and employees, particularly with regard to when volunteers might be working with vulnerable service users, for example young people or people with learning disabilities. Volunteers in roles with a high degree of responsibility need to have clear procedures to work to, clear boundaries and clear lines of supervision and support. It is perfectly acceptable to involve volunteers in a responsible role and to expect high standards from them, as long as the organisation is prepared to invest the same level of support and back-up as it would for a staff member in that situation. This should not, in itself, create a contractual relationship. It is simply about providing a working environment which enables volunteers to fulfil their role appropriately.

Using formal selection procedures to establish potential volunteers' suitability for certain roles should not blur the line between volunteer and employee, and is a matter of good practice, particularly when working with vulnerable members of the public. For more detailed information contact Volunteering England (www.volunteering.org.uk) or Sandy Adirondack for updates in the law that affect the voluntary sector (www.sandy-a.co.uk/legal).

Payments and rewards. Issues arise when volunteers are paid more than just reimbursement of actual 'out of pocket' expenses, which need to be fully supported by auditable paper work and receipts. Payments or rewards, reduced membership or entrance fees etc. may sometimes be considered as income and therefore taxable, or could lead to the volunteer being regarded as 'workers' or 'employees' (contractual relationship) and therefore entitled to the minimum wage and other rights, or may affect their state benefits.

Acceptable expenses allowed by the Inland Revenue	Other rewards or 'perks' to consider. (In some circumstances these may be seen to contribute to the creation of a 'contractual relationship')*.
Actual costs of travel (fares or mileage	Additional training not pertinent to the role
within rates) as a direct consequence of	
volunteering	
Actual cost of specialist clothing required	Discounts, especially if regular and substantial
for the work.	
Actual cost of materials/services required	Accommodation if not required for the role.
to do the work	
Actual cost of meals taken while	
volunteering	
Actual cost of child care incurred in being	
available for volunteering	

^{*} A contract of employment does not have to be written down. It is defined by the relationship that exists between employer and worker / employee, based on mutual expectation, obligation and intention. This is an area which is constantly being challenged at Employment Tribunal and so is subject to a great deal of uncertainty. For more information on this see the Volunteering England information sheets on Expenses, Minimum Wage and other related topics. These are available on their website at www.volunteering.org.uk.

When volunteers are reimbursed for their actual (receipted) expenses, incurred as a result of volunteering, this should not be taxable. It should not create a contractual relationship and it should not affect the volunteers' state benefits.

Question: If you select volunteers are you perceived as 'employing' them?

Answer: No. It is best practice to use appropriate methods of selection when engaging volunteers especially with respect to work involving under-18s. It is also important to ensure you get a good match between the volunteer and the role they need to perform. Selection is as much about the volunteer deciding if the role is for them (self-selection), as it is about establishing their suitability.

8.4 Bringing environmental understanding to all. Rob Lucas, Field Studies Council

The best advice for conscientious organisations that want to ensure safe working practices for persons under their care, from employees to volunteers, is to follow the Health and Safety Executive (HSE) guidelines with regards to risk assessments.

There are five simple steps:

- Look for hazards.
- Decide who might be harmed & how.
- Evaluate the risk and if necessary remove or control it.
- Record the findings.
- Review / revise your assessment.

What is a hazard? A "hazard" could be described as a danger that could reasonably be expected to cause harm e.g. chemicals, electricity, machinery, sharp objects, stranger danger, uneven surfaces, vehicles, water, darkness. Many people are quite bad at identifying hazards. You need to consider all variables from light conditions to relative safety of the site and the nature of the work to be undertaken. Look for all potential hazards and decide which might reasonably cause harm to put together a risk assessment. But remember that risk assessments are not closed documents. They must be readable and user friendly so that they can be updated. A good example of making them more readable is to group the hazards by their outcomes.

Hazards that are frequently forgotten are:

- Site specific
- Time specific
- Resource specific
- External non-specific
- Staff / volunteer specific

Generic risk assessments may not go into enough detail on site specifics: *e.g.* a site might be at the bottom of a cliff face, in which case an employee may be needed to assess the suitability of the site for any voluntary work to take place. If volunteers have to use equipment, think about the transportability of that equipment. Is there any less dangerous equipment that would do? There are always things that you cannot predict such as the health of the volunteer, car parking issues *etc*. You should be conscious that the more enthusiastic volunteers think less of health and safety and more of the jobs they will be undertaking.

What is a risk? A "risk" is the chance, great or small, that someone will be harmed by the hazard. Many risks are very small, but you need a way to assess them objectively.

Ask questions like:

- How likely is it to occur?
- What is the likely severity of outcome?
- Is the risk acceptable?

To answer that last question we need to have a way of measuring risk. This can be done more objectively by applying the following scales to each risk in turn:

Likelihood of occurrence:

- 1. Highly unlikely ever to occur.
- 2. May occur but rarely.
- 3. Does occur but only rarely.
- 4. Occurs from time to time.
- 5. Likely to occur often.

Likely severity of outcome:

- 1 Slight inconvenience.
- 2 Minor injury requiring first aid.
- 3 Medical attention required.
- 4 Major injury requiring hospitalisation.
- 5 Fatality or serious injury leading to disability.

Then, by using the equation $\mathbf{Risk} = \mathbf{Likelihood} \times \mathbf{Severity}$, we can calculate whether the risk is acceptable or not.

A score of 8–10 – the risk could be deemed acceptable. Bring to the attention of all concerned or manage the risk by other means if practicable.

A score of <8 – the risk is acceptable. Need only to find ways of reducing the inconvenience and minor injuries these hazards may cause.

This system will only work once tried and tested. Different types of voluntary work have a naturally higher risk involved, such as bat workers and rabies. Ensure that the system works by making sure it is being cascaded down to those who operate it. Get volunteers to feed back into the process. You need to analyse incidents and accidents to see if the scale is correct, so although volunteers do not need to fill out accident forms, it would be in the organisation's best interests to see where the system is failing.

8.5 The law in practice. Michael Ford, Barrister, Old Square Chambers

Health and safety duties are imposed by legislation, a breach of which may give rise to criminal convictions and / or civil liability (principally claims for compensation as a result of personal injury). In addition the common law imposes duties in negligence, which can be summarised as a duty to take reasonable care for others' health and safety. If a breach causes personal injury, civil liability to pay compensation may result. It is rare for the criminal law to be applicable in relation to volunteers. In practice civil law claims relate to breach of health and safety regulations or breach of the common law duty in negligence. This is expanded below.

The status of volunteers. The legal duties in this area have traditionally focused on the employer - employee relationship, although this is now changing because of developments in how work is organised (see below). But still (i) many of the duties under legislation apply only to employees and (ii) the duty of care in negligence owed to employees is generally (though not invariably) higher than the duty owed to others.

Volunteers may or may not be employees. The legal test for whether someone is an employee involves considering numerous factors, none of which is decisive. These include matters such as (i) the degree of control, (ii) whether the worker must provide his / her own services, (iii) whether there is remuneration and how it is paid, and (iv) whether there is "mutuality of obligation" (that is, a duty on the employer to provide work and on the employee to turn up to work). A volunteer, depending upon the circumstances, may owe a duty to work personally: see *e.g.*: *Murray v Newhan CAB* [2001] ICR 708. As a general rule, it will be hard for a volunteer to be categorised as an employee.

Legislation. There is an enormous amount of health and safety legislation, now mostly introduced under the umbrella of the Health and Safety at Work etc. Act 1974 ("H&SWA"). For the purposes of environmental organisations the following are probably the key provisions:

<u>The general duties in sections 2-3 H&SWA</u>. These require an employer to ensure, so far as is reasonably practicable, the health and safety of its employees (s.3) and to conduct its undertaking so

¹ Note this was a case under the Disability Discrimination Act 1995 which applies to persons who contract personally to provide their services - a wider category than employees.

as to ensure, so far as is reasonably practicable, that other persons are not exposed to risks to their health and safety.

Note: An "undertaking" is unlikely to be restricted to commercial ventures.

A breach of the provisions *only* gives rise to <u>criminal</u> liability; a breach does not give rise to civil claims: see s.47(1). In practice the Health and Safety Executive or other relevant enforcement authority tends to advise rather than prosecute (but not always).

The qualification of "reasonably practicable" allows a court to have regard to the resources of an employer.

Key regulations. The following are probably the most important regulations passed under the H&SWA for the purpose of voluntary organisations.

Note: A breach of any of the provisions of these regulations in theory is a criminal offence; but a breach of most (but not all²) of the regulations also gives rise to potential civil claims for compensation if "damage" - typically personal injury - is caused (compared to the general duties in the H&SWA itself).³ In practice criminal prosecutions are dwarfed by civil claims.

Many of the duties are owed only to persons who are employees, defined in s.53(1) H&SWA to mean persons who work under a contract of employment, but this is not always so. Some examples of the extension of duties to non-employees are identified below.

The key regulations are:

(1) The Management of Health and Safety at Work Regulations 1999. These require employers to make a suitable and sufficient assessment of the risks to their employees (reg. 3) and e.g. to ensure employees have adequate training (reg. 13). Strict duties are owed in relation to the employment of young persons, who are to be protected from risks arising from their lack of experience or age (reg. 19). As a result of an amendment to these regulations made in 2003, a breach of the provisions gives rise to civil liability in relation to employees but not in relation to persons not employed by the employer.).

This highlights the need to conduct a risk assessment and it is a good idea to highlight the critical risks. However, breach of this does not necessarily give rise to a civil claim.

(2) The Manual Handling Operations Regulations 1992. These lay down duties in relation to "manual handling operations", which are of wide scope, including that an employer takes appropriate steps to reduce the risk of injury. The duties are only owed by an employer to its employees.

These regulations apply to anything involving equipment at the place of work, principally only for employees but it may be deemed that volunteers are covered by these regulations too.

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² No civil claim lies for a breach of most of the regulations in the Management of Health and Safety at Work Regulations 1999:

 $^{^{3}}$ See s.47(2).

- (3) The Provision and Use of Work Equipment Regulations 1998. These impose requirements in relation to "work equipment", which is widely defined to include any machinery, appliance, apparatus, tool or installation for use at work (reg. 2(1)). The duties include ensuring that equipment is suitable and is maintained in good working order, and that persons who use equipment receive adequate health and safety training. Note the duties apply to employers in relation to their employees and to a person who has control to any extent (i) over work equipment, (ii) over a person at work⁴ who uses, supervises or manages the use of equipment, or (iii) over the way in which work equipment is used at work. The duty applies "to the extent of his control" (reg. 3(3)). Hence the duties may apply to volunteers, even if they are not employees.
- (4) The Health and Safety (Display Screen Equipment) Regulations 1992. These lay down duties in relation to display screen equipment, including as to the kind of equipment and the provision of training. The duties are generally owed by an employer to "users", defined as employees who habitually use display screen equipment as a significant part of their normal work (reg. 1). But some duties are also owed to "operators", defined to mean self-employed persons who habitually use display screen equipment as a significant part of their work.⁵
- (5) The Workplace (Health, Safety and Welfare) Regulations 1992. These apply, in general terms, to the physical state of the workplace, defined as premises which are made available to persons as a place of work. The duties extend to those who have control over a workplace (see reg. 4(2)).

The Workplace Regulations may generally apply to non-employees within the buildings of an organisation, e.g. routes taken about a building (traffic routes) can be made unsafe by bags blocking entrances etc.

(6) The Personal Protective Equipment at Work Regulations 1992. These regulations, which lay down duties to provide personal protective equipment (e.g. goggles) and to ensure it is safe, are generally restricted to employees. But they may be useful in informing the standard of care at common law expected in providing equipment.

The above list is not exhaustive, but it probably reflects the most important regulations. There exist many other specific regulations - e.g. the Control of Substances Hazardous to Health Regulations 1999. For a more comprehensive list and best practice guidance visit the Health and Safety Executive website.

Common law duties. An employer owes a duty at common law to take reasonable care for the health and safety of its employees. This duty, which gives rise to a potential claim in negligence if a breach causes personal injury, is of general application. It includes duties to provide reasonably safe premises and equipment, to maintain that equipment in proper working order and, importantly, to set up and enforce a safe system of work. An employer will generally be liable if injury is caused to one employee by another employee acting negligently.

The application of these duties to non-employees is not as clearly developed as it is in relation to employees. The law, however, increasingly recognises a similar duty of care owed in relation to those whose work is controlled by another. But the standard of care owed under the duty is flexible, and depends upon all the circumstances. The more an undertaking controls how a person works, the

⁴ Note that "work" means work as an employee or self-employed person: see s. 52(1) H&SWA.

⁵ See e.g. duties as to workstations (reg. 3) and to provide information (reg. 7).

more likely it is that it will owe that person duties similar to those owed to employees. See e.g. Leach v Chief Constable of Gloucestershire⁶: police did not owe duty to protect volunteer who attended interviews from psychiatric harm but did owe duty to provide counselling services because police assumed responsibility to her. Conversely, the less an organisation is in a position to set up and monitor a system of working, the less likely that organisation will be deemed to have assumed responsibility for the safety of work and consequently the lower the duties owed to those working for it. (Other common law duties apply to volunteers e.g. the duty of care owed to "visitors" to a person's premises. In practice, however, these amount to little more than a duty to take reasonable care.)

Therefore consider how much someone is under your control, this will depend on their role: e.g. the more they use your equipment, or have to be supervised, vulnerable persons or children, and as such you may have a higher duty of care for them, as in the example above, where the police should have provided counselling to the volunteer worker.

Avoiding breaches of the law. There are, of course, various means by which organisations can seek to ensure that there is no breach of the law in relation to volunteers. One technique that will not work, however, is to try to exclude liability by using a clause stating, *e.g.*: "The organisation will not be liable to you if you are injured". Exclusion clauses of this sort cannot exclude liability for negligence at common law under the Unfair Contract Terms Act 1977; nor can duties under the H&SWA be excluded in this way.

Use of disclaimers or exclusion of liability notices do not stand up in court. They just show that you are aware of the issues but have not taken due care to remediate or reduce the hazards.

The following are suggested as other options in relation to volunteers:

- 1. If the intention is that volunteers are not employees, this should be spelt out. One means to do so is to make clear to volunteers that they are not employees and, because the label alone is not decisive, that they have, for example, no obligation to turn up for work and the organisation is under no obligation to offer them work.
- 2. Where practicable, volunteers should be given information similar to that provided to employees. This may be important in relation to some hazardous kinds of work (*e.g.*: working with ladders). Training is more problematic, and providing it may have the paradoxical result of tending to increase the duty of care owed (*e.g.*: if the training is inadequate, the organisation may well be liable).
- 3. In relation to those few regulatory duties which do apply to non-employees, it may be worthwhile checking the duties in a little detail and thinking about what practical steps to take. For example, it may be sensible not to provide equipment or control how that equipment is used, as otherwise the 1998 Regulations will bite. The HSE Guidance to the above regulations is often helpful, and more accessible than (most) legal texts. But if equipment is provided, then the organisation should take steps to ensure that it is properly used and that it is safe for the purpose for which it is used.

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⁶ [1999] 1 WLR 1421.

- 4. In relation to common law duties, instead of simply excluding the duty (which is legally ineffective), it can be made clear to volunteers that they are to be responsible for organising how work is done, what equipment is to be used etc. No doubt this advice should warn them to take care of their health and safety, should incorporate appropriate warnings and advice and should tell them that if they are at all in doubt about the safety of work they should not do it but should seek advice. Warnings before the event are more effective than attempts to exclude liability afterwards: the courts are not unsympathetic to the resources available to an organisation in assessing the standard of care owed by it.
- 5. Courts are less likely to be impressed, of course, by warnings and advice given to young persons. Because of their inexperience *etc.*, the duty owed to them is likely to be seen as reasonably high.

The information to be provided to volunteers depends, of course, on the work they are to do. Perhaps thought can be given to (i) general warnings about safety at work and (ii) specific information sheets for specific risks to be met by volunteers.

9. Useful References

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Tracking Mammals Partnership Member Organisations

Bat Conservation Trust www.bats.org.uk **Bristol University** www.bris.ac.uk www.basc.org.uk British Association for Shooting and Conservation **British Trust for Ornithology** www.bto.org **British Deer Society** www.bds.org.uk www.csl.gov.uk Central Science Laboratory Countryside Council for Wales www.ccw.gov.uk Deer Commission for Scotland www.dcs.gov.uk

Deer Initiative <u>www.thedeerinitiative.co.uk</u>

Defra www.defra.gov.uk

English Nature www.english-nature.org.uk
Environment Agency www.environment-agency.gov.uk

Environment and Heritage Service www.ehsni.gov.uk
Forestry Commission www.forestry.gov.uk
Game Conservancy Trust www.gct.org.uk
Joint Nature Conservation Committee www.incc.gov.uk

The Mammal Society <u>www.abdn.ac.uk/mammal/</u>

People's Trust for Endangered Species/Mammals Trust UK www.ptes.org www.mtuk.org

Queen's University, Belfastwww.qub.ac.ukRoyal Holloway University of Londonwww.rhul.ac.ukScottish Natural Heritagewww.snh.gov.ukWelsh Assembly Governmentwww.wales.gov.ukThe Wildlife Trustswww.wildlifetrusts.orgWildlife CRU, University of Oxfordwww.wildcru.org.uk

Also participating

National Biodiversity Network Trust www.nbn.org.uk