‘THE GREENING OF SPORTING EVENTS’: PRODUCTION OF ENVIRONMENTAL MANAGEMENT GUIDELINES FOR EVENTING

by

Alexis Huggins

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School of Environmental Sciences
University of East Anglia
University Plain
Norwich
NR4 7TJ

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Abstract

Questionnaires, visits to case study locations and communication with the governing bodies of Eventing and Equestrian sport were used to identify environmental impacts associated with Eventing and assess the current environmental awareness and management practices of event organizers.

Results showed that Eventing has both positive and negative impacts on the environment, with one-day-events and three-day-events showing similar impacts. Key impact areas were identified as transport, waste and purchasing; with additional impacts spreading to the local environment and the wider world. Questionnaire responses and interviews indicated that the industry has common attitudes in relation to Environmental Management. The majority of respondents believed that Environmental Management was unnecessary and would create too great a burden on organizers. The industry was also found to be under strain at the present time due to recently enforced health and safety regulations and financial difficulties.

Overall common impacts and attitudes enabled the production of Environmental Management Guidelines for Eventing. These guidelines aim to reduce the environmental impacts associated with the sport, with a focus on training and commitment to environmental improvement.

Finally, the aims and objectives of the study have been met, although limitations have been identified, and the potential for future study has been recognised.
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1 Introduction

This research will focus on the impacts of Eventing, with the aim of producing Environmental Management Guidelines in order to reduce the environmental impacts associated with horse trials. The sport of Eventing is one of the three Equestrian sports represented at the Olympic Games and seeks to test the horse and rider in three different aspects of horsemanship, dressage, cross country and show-jumping. At the Olympic and three-day-events the tests are severe and run on three consecutive days. One-day-events have developed as a training ground, for horses and riders to gain experience. Currently the environment is given little consideration when planning competitions (FEI 2003b, BEF 2003b, BE 2003b) despite the presence of a Code of Conduct towards the Environment produced by the international governing body of equestrian sport, the Federation Equestre Internationale (FEI 2003a).

The benefits of Environmental Management have only recently spread to the sports industry in general, with the ‘Commited to Green’ Foundation having set up Environmental Management Systems (EMS) on golf courses (Stubbs 1997). Additionally other sporting events such as the Ryder Cup 1997 and the Sydney Olympic Games 2000 have incorporated environmental considerations into their plans (Commited to Green Foundation 2003) and U.K Sport have recently produced Environmental Guidelines for World Class Events (U.K Sport 2002).

Pressure is increasing for organizations in general to manage and improve their environmental performance, with opportunities and benefits potentially being large and the risk of non-compliance high (Gilbert 1993). Due to the increase in Environmental Management Systems within organizations, doing nothing is no longer an option for businesses (Fay in Hillary 2000). Likewise with environmental considerations likely to increasingly become a determining factor in the future and success of sporting events (Commited to Green Foundation 2003) the environment is an issue which organizers of sporting events, including those involved with Eventing, must start to take into account.
Attitudes and current awareness of the industry towards the environment will be important with regard to the acceptance of Environmental Management Guidelines and therefore these need to be assessed along with a study of the environmental impacts of Eventing. This is the first time that environmental issues have been researched in the sport of Eventing. The research will help to identify the important environmental impacts to address, formulate guidelines to improve environmental performance and research potential channels for dissemination of the guidelines.

1.1 Rationale for research

In a typical year there are approximately eight three-day-events scheduled, with a further 165 one-day events. Badminton Horse Trials represent Europe’s biggest sporting event with regards to attendance, second in the World only to Indianapolis 500 in the USA, and attract 250,000 people over the duration of the event (British Eventing 2003a). Many horse trials take place in the grounds of stately homes or in areas of rich countryside and the temporary arrival of large crowds and the necessary support infrastructure of media, catering, merchandise and transportation (Photograph 1) have huge implications for the environment in terms of consumption of resources, production of waste, and degradation of the natural environment.

Photograph 1) Scale of impacts at Badminton Horse Trials

Before explaining the aims and objectives of the study (section 3) and the methods used to achieve these (section 4), it is important to investigate environmental concerns in business in general and then look more specifically at environmental impacts
associated with the sports industry. This will enable any similarities to be identified and will isolate any examples of good practice which may be adapted to the sport of Eventing. Following this, the relationship between the governing bodies of Eventing will be researched in order to understand communication links and possible channels to aid dissemination of information.
2 Review of current literature

2.1 Environmental concerns for businesses
In recent times, businesses, particularly those in the industrial sector, have increasingly begun to realise that they must take environmental issues into account (Welford & Gouldson 1993). Pressure to address adverse environmental impacts has arisen due to attention from environment groups, and increasingly stringent legislation (Welford & Gouldson 1993). One way of integrating environmental issues into the management function of an organization is by means of an Environmental Management System (EMS). Environmental Management Systems have also extended to other areas of business such as local authorities under EMAS (Netherland & Shayler 1998), and service industries such as hotels under the ISO14000 series (Gilmour 2000).

Through the implementation of Environmental Management Systems, such as ISO 14001 and EMAS, some believe it is possible to consider the environment whilst making cost savings, increasing efficiency, conserving resources, minimising risks, improving health and safety standards and presenting a ‘green’ image helping with public relations (Morrow & Rondinelli 2002). This may be true in some cases, however, it is difficult to convince small to medium size businesses (SMEs), companies with less than 250 employees and an annual turnover of less than £2 million (Burr 2003), to take up EMS as they feel it may lead to increased paperwork and cost to the firm (Welford & Gouldson 1993). It is even more difficult in tertiary industries such as sport. In many ways, the sport industry has much in common with SMEs with similar barriers to EMS implementation. These barriers may include perceived irrelevance of environmental impacts, lack of knowledge, lack of resources in terms of people, money and time, fear of bureaucracy and documentation and the fact that it is hard to make cost savings, especially in the short term (Burr 2003).

In spite of these barriers, many systems have been developed in order to help SMEs improve their environmental performance often involving the use of business support systems including Business links, Training and Enterprise Councils (TECs), business environment associations and links with academic institutions (Smith et al 2000). In many areas local authorities and organizations such as the Groundwork Trust will
help to carry out reviews of businesses at small charges (O’Laoire & Welford in Welford 1998). Additionally it is possible for businesses in the same area to work together or get involved with local initiatives such as Business and Environment Forums, or with the Acorn Project set up by IEMA specifically to engage SMEs in EMS. If similar support were given to sport (Committed to Green Foundation 2003, U.K Sport 2002), it is hoped that it would be possible to take environmental considerations into account when hosting all sporting events.

2.2 Environmental Management Systems & Sport
Although the sport industry is used by a large proportion of the public and interacts with the environment in a number of ways, in the past environmental concerns have been largely ignored (Chernushenko 1994). Currently it is starting to be recognised that sports facilities and events have a significant impact on the environment (Chernushenko 1994, Stubbs 1997, Committed to Green Foundation 2003). Common ways in which sport affects the environment have been identified as development of fragile or scarce land types, pollution from liquid spills (fuels, cleaners, solvents etc), noise and light pollution, consumption of non-renewable resources (fuel, metals etc), consumption of natural resources (water, wood, paper, etc), creation of greenhouse gases by consuming electricity and fuel, ozone layer depletion, soil and water pollution from pesticide use, soil erosion and compaction during construction and from spectators, waste sent to landfill, incinerator and sewerage plant, paper consumption by media and officials and waste generated from signs, food services, banners and temporary booths (United Nations Environment Programme 2003).

The concept of environmental impacts related to sports was first raised in association to golf courses. It was recognised that golf courses are often located in sensitive areas, can have large water usage for irrigation and make extensive use of pesticides. Due to these factors the European Golf Association Ecology unit launched ‘Committed to Green’, a practical Environmental Management and accreditation programme for golf courses (Stubbs 1997). Since then, the Committed to Green Foundation has implemented Environmental Management Systems at a number of golf courses in the EU, with golf courses in other continents showing interest in the scheme (Committed to Green Foundation 2003). A study into how far the Committed to Green scheme has worked in the European Golf Industry showed that, where implemented,
environmental impacts have been reduced, but improvement is hindered by lack of knowledge (Sanchez 1998). This result shows similarities to barriers shown by SMEs in relation to EMS implementation and highlights the importance of raising awareness of environmental issues and providing information and support to organizations implementing an EMS.

The sport industry has also started to consider environmental impacts in relation to the development or relocation of sports facilities, with many environmental statements being produced. An example of this is the development of a new football stadium e.g. that of Bristol Rovers (UEA 1990). Additionally motor racing circuits have looked at their environmental impacts in terms of water usage, noise and landscape impacts, with an environmental statement being produced for Deene Raceway (UEA 1992). Despite the fact that Eventing would rarely, if ever, require the building of permanent facilities, a public entertainment license may be required in order for the event to run (Broadland District Council 2003) and noise pollution and traffic congestion are often important considerations (Hadaway 2003).

Although these are all important beginnings for the consideration of the environment in relation to sport, the main advances in recent years have come as a result of the Sydney Olympic Games in 2000 (Stubbs 2001). The games were dubbed ‘the Green Games’ and an attempt was made to consider the environment in all aspects of planning and staging of the games including design, construction and operation of venues, remediation, transport, catering and waste management (Bland 2000). John Scott, Director of International Relations and Major Events at U.K Sport alleges that ‘The 2000 Olympic Games in Sydney was considered a watershed in ‘green’ event management...they successfully demonstrated how environmental issues could be addressed cost-effectively, without impacting on the delivery of the event’ (U.K Sport 2003). These initiatives have set new benchmarks of environmental performance and a potentially new level of awareness across the event management industry.

There is no doubt that the Sydney Olympics played a key role in raising the environmental awareness in relation to major events. Since then, U.K Sport has produced environmental guidelines for world class events, showing recognition of the increasingly significant role that the environment plays when bidding for hosting
sporting events (U.K Sport 2002). Moreover, the Football Association has addressed environmental issues in its 2006 World Cup bid and the International Cycling Federation (UCI), International Motorcycling Federation (FIM) and Canada Games Council have all developed green event policies (Committed to Green Foundation 2003).

Additionally a workshop was held in May 2001 during the 7th European Roundtable on Cleaner Production on Sustainability & Large Scale Sports Events (Ottesen et al 2001). This workshop supported the argument that there are significant environmental and also wider sustainability issues associated with major sporting events. Following the Environmental Programme presented at the Sydney Olympics, the workshop set out to consider the potential for major sporting events to be seen as focal points for promoting sustainability and demonstrating it in practice. Due to the enthusiasm and interest in sport it is believed that there are important opportunities for communicating sustainability issues to a large audience on a scale which would not be possible in traditional environmental programmes (Ottesen et al 2001).

A further issue raised at the workshop was that of Corporate Social Responsibility (CSR). Many of the corporations which provide money for sporting events are used to dealing with environmental issues and increasingly recognise the importance of CSR (Ottesen et al 2001). By sponsoring an event a corporation has a major marketing opportunity and if this could be enhanced through association with an environmentally responsible event, the sponsorship could gain added value (Ottesen et al 2001).

There are however, barriers which will need to be overcome if environmental consideration is to be fully integrated into sporting events. Environmental matters are a new area for most event managers and can pose a threat to the budget, timetables and even to the reputation of the event, in that it might create expectations that cannot be met (Ottesen et al 2001). Additionally, some believe it would detract from the main occasion. Furthermore, because there are many players in this business, it can be difficult to establish whose responsibility it is to address environmental and sustainability issues. In conclusion, there is still much to be done in order to convince
the sports industry that sustainability is important, that it is an essential part of good management, and that being ‘green’ need not be a cost burden (Ottesen et al 2001).

After studying current progress in this field, it can be seen that many advances have been made in recent years, regarding the sport and environment issue. By researching the impacts associated with Eventing, a gap in current research will be filled, with environmental considerations expanded into a new area of the sports industry. It is important to remember that the Environmental Management Guidelines must take into account, and try to overcome, barriers such as those identified by Ottesen et al (2001). However, unlike many other large sporting events that are infrequent or one-off occurrences; many horse trials are carried out in the same location year upon year providing greater opportunity for developing a theme of continuous improvement. It is hoped that the development of Environmental Management Guidelines for the sport will raise awareness of environmental issues in general and help to reduce the impacts of Eventing.

2.3 Structure of Eventing
To aid the production of guidelines, it is important to understand the structure of the major governing bodies of Eventing in order to identify the most effective method for distribution. The key elements from the perspective of this research are shown in figure 1, reflecting the issues of organization, guidance and communication.

2.3.1 International level: Fédération Equestre Internationale (FEI)
At an international level, the Fédération Equestre Internationale (FEI), based in Switzerland, is the international governing body of all Equestrian sport and it is this organization which is recognised by the International Olympic Committee (IOC). The FEI establishes rules and regulations for the conduct of international equestrian events in a number of disciplines including Eventing. The FEI adopted a Code of Conduct towards the Environment in 1998 (Appendix 3) although there is minimal awareness of this document in the U.K. (BE 2003b, BEF 2003b).
2.3.2 National level: British Equestrian Federation (BEF)
At a national level the British Equestrian Federation (BEF) is the governing body for
equestrian sport, and is affiliated to the FEI. It has twelve member bodies including
British Eventing (BE) and works on policy issues with the FEI. The BEF represents
common interests of its member bodies to organizations such as the British Olympic
Association and acts as international Secretariat on behalf of the Olympic disciplines
representing their interest in all matters concerned with FEI and other national
federations (as FEI only recognises one governing body in each country).

2.3.3 National Governing Body for Eventing: British Eventing (BE)
British Eventing regulates the sport of Eventing as well as organizing and scheduling
many events throughout the U.K. It is represented by BEF internationally and is
reliant on their advice on international issues. BE is headed by the elected Board of
Directors, with staff consisting of a Chief Executive supported by a Sport & Technical
Manager, Marketing Manager, Administration Manager and support personnel.

BE provides guidance to organizers in the form of a rule book, health and safety
manual and guidance on design and building of the cross-country course. No specific
guidance on environmental issues is provided to event organizers. Technical advisers
are assigned to each organizer to ensure consistent standards and provide a point of
contact and support. Additionally regional organizer meetings are arranged to provide
another point of contact and help to overcome any problems experienced. A British
Eventing Steward is present at each event, and is responsible for the whole
competition.
Figure 1) Structure of International and national governing bodies of Eventing
3 Objective & Aims

Sections 1 and 2 described the process leading to the research into the environmental impacts of Eventing and the awareness of event organizers. This section will now set out the main aims and research questions of the study.

3.1 Aims

1. To assess the environmental awareness and management of event organizers (at national level) and controlling bodies (at both national and international levels).

2. To identify the major environmental impacts relating to Eventing.

3. To produce Environmental Management Guidelines for the integration of environmental issues into management and organization of horse trials.

3.2 Research Questions

1. Do one-day-events and three-day-events share common impacts?

2. Are environmental attitudes across the industry analogous?

3. Are Environmental Management Guidelines necessary for Eventing?

The answers to these research questions will firstly confirm if it is deemed that Environmental Management Guidelines are necessary for Eventing. Following this it will be important to assess whether there are sufficient similarities between the impacts of one-day and three-day-events, and the attitudes and awareness of organizers to allow for the successful development and implementation of a generic set of Environmental Management Guidelines for the sport.
4 Method

The method was carried out as follows:

- Research structure of Eventing (section 2.3) to determine current methods of organization, guidance and communication.
- Interview with the Sports and Technical Manager at British Eventing to assess environmental awareness and obtain advice and opinions on the production of guidelines.
- Initial interview with the secretary and site manager at Badminton Horse Trials (one of the case study locations) to help identify potential environmental impacts and highlight important issues to address in the questionnaire.
- Use of postal questionnaires to assess the impacts associated with Eventing, and organizers’ awareness of these impacts.
- Detailed study of two case study locations providing first hand knowledge of the environmental impacts.

Each of these methods will be explained in more detail below, with a consideration of any methodological problems encountered.

4.1 Research into structure of Eventing
In order to gain a greater understanding of the structure of the governing bodies of Eventing, the websites of each organization were visited (FEI 2003a, BEF 2003a, BE 2003a). Any useful information was extracted and used to help create a summary diagram (see figure 1 section 2.3) of the relationships between the three main bodies, FEI, BEF and BE. This was done in order to help identify the best method for dissemination of the Environmental Management Guidelines. The FEI and BEF were consulted via electronic mail, and BE via interview to confirm accuracy of the diagram.

4.2 Interview with Governing Body - British Eventing
An interview with the Sports and Technical Manager at British Eventing was undertaken to obtain opinions on the production of Environmental Management Guidelines, and to assess the level of support and information given to organizers.
Additionally the interview was used to clarify the relationship between BE, BEF and FEI. The results of the interview were necessary in contributing to the production of effective and achievable guidelines.

4.3 Questionnaires
A questionnaire (Appendix 2) was formulated to assess the individual event organizers’ awareness of environmental issues and to identify what they considered to be the main impacts caused by Eventing. This provided baseline data from which guidelines for environmental improvement could be developed. The questionnaire took into account impacts identified in a related study on the impacts of the racecourse industry on the environment (Fothergill 2001). Additionally, potential impacts highlighted in questionnaires used to assess the baseline environment for industry e.g. that used by the East Anglian EMS Club were studied (EMS Club 2003). Both of these sources of information emphasized major impacts which would need to be assessed in the questionnaire. Subsequently, the preliminary meeting at Badminton was important in drawing attention to the impacts specific to Eventing, highlighting the unique nature of horse trials and their associated facilities. This enabled the production of a questionnaire which was specifically tailored for the sport of Eventing. Guidance on questionnaire design was taken from Welford (1998).

The questionnaire was broken down into a number of sections:

- **Section 1: Overview**
  This section was designed to provide an overview of the event with regards to its size and number and type of classes held. It mainly involved the use of tick boxes and short answer questions for ease of completion. Information on attendance figures and whether attendance was increasing or decreasing was also obtained, providing a basic assessment of whether impacts were likely to increase over time. Further questions regarding funding and turnover of the event were also addressed.

- **Section 2: Staff, training and facilities**
  The second section assessed the number of staff/volunteers, whether they were provided with any guidance on environmental issues from British Eventing, and
their knowledge of legislation. Additionally the number and range of facilities were assessed along with purchasing policies.

- **Section 3: Assessment of impacts and complaints**
  The organizer was then asked to assess the environmental impacts of an event and asked if any complaints regarding the event had been received.

- **Section 4: Key impact areas**
  Four key areas, namely nature conservation, energy use, water use and waste production were assessed in more detail. These areas were highlighted as having potential impacts from the initial interview at Badminton Horse Trials. Additionally these areas have been identified as being the greatest environmental concerns for golf courses (Stubbs 1997) and personal communication with Stubbs (2003) confirmed they are likely to be similar for Eventing.

- **Section 5: Opinions regarding production of Environmental Management Guidelines**
  The final section involved longer answers, designed to initiate discussion regarding the relevance of Environmental Management Guidelines to Eventing and obtaining opinions. A short description of EMS was given to aid responses.

Before sending out the questionnaires they were piloted by someone who has been involved in the organization of several events. This was done to ensure that the questionnaire would be understood by the target audience and would result in usable data. Following suggestions arising from this exercise, minor adaptations were made. Problems acknowledged by Fothergill (2001) in relation to his questionnaire were also taken into account.

Following these adaptations, the questionnaire was sent out, with an SAE for easy return and a covering letter, with the UEA logo, explaining the need for response. The covering letter stressed that where respondents’ opinions were requested this information would remain anonymous, as suggested by Welford (1998). A date was also set for the return of the questionnaire to try and encourage a quick response. Initially it was thought that the British Eventing logo would be used on the covering
letter. However, after speaking to British Eventing it was felt that, since they had recently sent a questionnaire themselves, it would be better not to include the logo. The questionnaires were sent to all organizers hosting an event affiliated to British Eventing; with names and addresses obtained from BE. In total, 135 questionnaires were sent out.

4.4 Case Studies
Two case studies were used to further identify and gain a more in depth understanding of impacts associated with Eventing and compare the impacts of a large scale and small scale event.

The case study locations used were Badminton Horse Trials, Gloucestershire (Large scale three-day-event – largest in the World), and Great Witchingham Horse Trials, Norfolk (Small scale, one-day-event). At both locations, interviews were carried out to gain further information regarding impacts in areas such as waste disposal, energy and water consumption, and to obtain opinions on the production of Environmental Management Guidelines.

In addition, these case study venues were visited while the events were in progress for observational purposes.
5 Results & Discussion

Firstly the results of the interview at British Eventing will be discussed in order to assess awareness and potential for Environmental Management Guidelines. Following this an integrated discussion of both the results of the questionnaire and case studies will take place. This will gauge current awareness and help to assess the potential for guidelines along with possible methods for distribution.

5.1 Interview at British Eventing

An interview with Tim Hadaway, the Sports and Technical Manager at British Eventing, was undertaken to obtain opinions regarding the production of guidelines and to assess environmental awareness.

5.1.1 Environmental awareness

The interviewee was not aware of the FEI Code of Conduct towards the Environment although he had previously been involved in running an event affiliated to the FEI. This result concurred with other organizers questioned about this document, suggesting that the document may not be distributed to national federations and individual governing bodies, namely BEF and BE, or that that there may be a communication problem between the two organizations. It will be important to overcome any problems in this area when distributing guidelines as communication, both internal and external, plays a key role in Environmental Management (Netherwood 1998).

5.1.2 Environmental Perceptions

The interviewee felt that the environment should undoubtedly be a concern when hosting an event. However, it is suspected that like most health and safety issues, organizers are probably dealing with many of the issues without realising it. Most organizers held the same view e.g. ‘We are already dealing with the problem adequately’ (Scone Palace). Additionally the interviewee felt that event sites were always left tidy with adequate litter collection and as little damage to the ground as possible. Organizers want to keep the area clean and tidy as they have a duty to the landowner/estate and want to gain full co-operation for future events. This response was reiterated by the organizers themselves. They stated ‘adequate litter bins are provided and movement of vehicles around the event area is controlled’ (Monmouth),
‘we try to maintain the land as we use it for grazing purposes’ (Tythrop Park) and ‘we conform with estate/landowner requirements e.g. we are obliged to restore tidiness to the property’ (Great Missenden).

The interviewee thought that event organizers should have overall responsibility towards environmental impacts caused by spectators and competitors but they should be helped by the responsible actions of others. For example, visitors to events could help by ensuring all rubbish is put in litter bins and competitors could be asked to take horse droppings home with them.

Responsibility to the local community and the upkeep of the local environment as a whole was also considered to be important. It was felt that as events are reliant on local support a good relationship is essential. The interviewees’ experiences with running an event at Blair Castle in Scotland demonstrated that events and local communities could work together and have mutual benefits. In this example the economy of the local area benefited from the running of the event e.g. hotels were booked six months in advance. Conversely, at another event the relationship with the local community was poor and complaints were experienced with regard to noise.

Regarding the production and need for Environmental Management Guidelines, the interviewee felt that there were many other issues taking place in the sport of Eventing at the present time. New health and safety regulations have left the industry feeling hard pushed to cope with increased bureaucracy and many of the smaller events are experiencing financial strains. This feeling was supported by the responses from organizers e.g. ‘I would be concerned that should I have an EMS imposed on my event, the extra burden would mean the event would not proceed.’ (Somerford Park). Likewise the respondent at Sadborow stated ‘We are finding it increasingly difficult to run a one-day-event which breaks even and escalating expenses are our chief concern other than providing the competitors with a good event’ and the respondent at Henbury Hall felt ‘Having had to accept health and safety rules and regulations for our events, I am afraid environmental issues are too much to expect organizers to take on board. We are volunteers’ (Henbury Hall).
Due to these strains the interviewee felt that it would be important to obtain the right approach towards environmental guidance, with the possibility of voluntary rather than formalised guidance. However, it was believed that the production of Environmental Management Guidelines could help lead to increased awareness, as the environmental impacts of Eventing have probably not been fully considered before. However, most people view Eventing as a fairly ‘clean’ sport and it was concluded that public opinion would be unlikely to be enhanced following the introduction of Environmental Management Guidelines.

Regarding information distribution, the interviewee felt that information regarding environmental issues should be disseminated by BEF, since they are the governing body of equestrian sport in Britain and guidance could then be applicable to a wider audience than just horse trials organizers.

5.2 Questionnaire responses
Out of the 135 questionnaires sent out, 53 positive responses were received, representing a 38% response rate. A further 7% (10 respondents) sent apologies for non-response due to lack of time, cancellation of events or because they were organizers of new events with few details on resource use and impacts.

Most of the responses (91%) were from one-day events, which would be the expected outcome, since there are many more one-day-events throughout the season than there are three-day-events.

The majority of events (74%) have been running in the same location for more than five years, with 38% running in the same location for more than 15 years. This highlights the fact that, unlike many other large sporting events that are infrequent or one-off occurrences at different locations and with different organizers, most horse trials are carried out in the same location year upon year by the same organizer. This could provide greater opportunity for developing a theme of continuous environmental improvement, with expertise and experience building up over the years (Ottesen et al 2001).
5.2.1 Attendance
The figures for attendance could not easily be compared as some respondents simply gave the number of competitors, whilst others gave a combined figure of both competitors and spectators. However, figure 2 shows that over half (53%) the respondents felt that attendances at their event were increasing, indicating that environmental impacts are also likely to increase.

![Figure 2) Trends in attendance over last five years](image)

5.2.2 Funding & Turnover
Most events are funded by entry money and sponsorship money, with the average turnover for a one-day event being approximately £37,000. However, the turnover of events varies greatly from £4000 for ‘Culzean’ (a small event holding few classes in Scotland) to £150,000 for larger events including Thirlestane Castle in Scotland and Bicton in Devon. Badminton Horse Trials (case study location) is the largest three-day-event of the season and has a turnover in excess of £1 million. This event is self-funded with the main income coming from fees paid by the tradestands and spectator entry fees. Unlike most of the one-day-events, competitor entry fees do not play a big role in the funding at Badminton.

It is important to consider the turnover of an event, since one of the potential barriers to environmental guidelines is financial constraint. However, the fact that an event is environmentally responsible could mean added value for sponsors, who have a huge
marketing opportunity by having their brand associated with sport (Ottesen et al 2001). This could therefore attract larger sponsorship deals. However, for sponsorship to gain the added value desired it is important to ensure that the environmental element of the event is well publicised, in the lead up, during and as part of the post-event legacy (Committed to Green 2003).

5.2.3 Staff – Guidance & Training

Questions regarding the number of staff and contractors involved in an event were often misunderstood. However the general trend showed that there were few direct staff in the run-up to an event but many volunteers involved on the day. Approximately 150 volunteers were needed per day for a one-day-event.

A large three-day-event such as Badminton employs more staff due to the scale of event. Additionally, unlike most of the one-day-events, some of the staff at Badminton are full time paid individuals. Supplementary staff were required in the six months preceding the event to help cope with increased preparation pressures. Preparation for the event must start much earlier than for a one-day-event due to the large numbers of spectators anticipated.

Questionnaire responses showed that 68% of staff received some type of training, which was normally in the form of health and safety training, fence judge briefing, course building or any specific training necessary for their job. Similar responses were also found at both of the case study locations. Only 20% said that contractors received training or guidance from the event with this mostly being in health and safety. This highlights the differing importance placed on providing training for staff versus contractors and is an area that must be taken into account when producing Environmental Management Guidelines. Although it may be important to focus on staff to begin with, any management practices put into place at an event should be communicated to and adhered to by contractors (Welford & Gouldson 1993, ISO 14004 1996).

A minority (14%) said that someone at the event had received environmental training. Again this was mainly in the form of health and safety training, underlining the confusion between health and safety and environmental issues. Although ‘health and
safety is intrinsically linked to environmental improvement’ (Welford & Gouldson 1993, p.66), the word ‘environment’ envelops much more than just health and safety issues. Some respondents suggested that they used their ‘countryside common sense’ and that they felt specific training to be unnecessary. This was a view shared by organizers at both of the case study locations and by the organizer at Marchington who stated ‘Common sense prevails. I have run events for 12 years and you learn a lot without being told’.

The majority (82%) of organizers said that they received no guidance concerning environmental issues from any of the governing bodies the event was affiliated to. Of those who felt they did receive guidance, some detailed the guidance and rule books provided by British Eventing (BE), commenting on their coverage of health and safety issues. However this further emphasizes the problem of defining the term ‘environment’. Several respondents received guidance from estates or government e.g. Oasby is involved in ESA, Countryside Stewardship scheme and set aside and thus feels adequate attention is paid to environmental issues. Berrington Hall works alongside the National Trust on environmental issues and Blair Castle has organic farm status and therefore considers itself very aware. In some cases guidance was received from landowners e.g. information regarding where grass could and could not be cut. At Badminton Horse Trials it is important to note that no guidance is received from the FEI, to which the event is affiliated, despite the presence of an FEI Code of Conduct towards the environment (Appendix 3).

Figure 3 shows that 38% of respondents thought that Environmental Management Guidance was unnecessary. Results from the longer answer questions showed that the majority of respondents felt that Environmental Management was unsuitable, that the impact of an EMS would be out of proportion to the benefit and that their event was not large enough in areas such as energy use and waste production to warrant having a system to manage it. The general feeling of many respondents was summed up by the organizer at Aswanley ‘I think we do it anyway. The place is left clean and we recycle what we can. Staff and volunteers have huge demands on their time: to add another layer of ‘training’ would ultimately cause helpers to fade out and organizers to decide it isn’t worth the hassle. Please no more bureaucracy’.
However, 36% felt it was up to BE to produce guidance. Most organizers probably chose BE as they are the organization which provides them with most other guidance regarding rules and health and safety issues. Small percentages of respondents thought that guidance should come from BEF, the preferred method of the Sports and Technical Manager at British Eventing, or the FEI and 14% came up with other suggestions. Of this 14%, most felt that it was up to the event itself to produce or conform to guidance, with others suggesting that landowners, organizations such as the National Trust, DEFRA or the local authority should play a role.

Figure 3) Opinions regarding responsibility to produce Environmental Management Guidelines

5.2.4 Facilities
Of the 53 responses, only three events had a permanent grandstand on site, these included two events that are held at racecourse/point-to-point sites, namely Tweseldown and Windsor Racecourse. Additionally five events made use of temporary grandstands.

At Badminton Horse Trials, a temporary grandstand is constructed around the main arena, and provides seating for 11,949, while several others are situated around the cross-country course. In contrast to preparation for a small event, which would take place in the days leading up to the event, construction of these facilities begins two months before the competition. This brings additional people to the area and results in
visual and landscape impacts occurring for a longer time period during the months preceding the event.

5.2.5 Hospitality
The majority (75%) of events had hospitality facilities, on average catering for between 100-200 people. However some of the larger one-day-events catered for up to 4000 people (Weston Park). Hospitality facilities often form a major part of resource use at an event, with the generation of waste and use of electricity and water.

5.2.6 Tradestands
A substantial majority (89%) of events had tradestands present, with the average number for a one-day-event being 18. However, there was great variation in the number of tradestands with some small events such as ‘Culzean’ only having one or two tradestands, whilst other larger events such as ‘Thirlestane Castle’ had approximately 100. Generally, the three-day-events had many more tradestands with an average of 250. At Badminton Horse Trials 274 individual tradestands were present along with several themed marquees, resulting overall in approximately 500-600 exhibitors on site. A significant amount of money is made from rental while the tradestands can request different floors and provision of electricity at additional cost. Observation showed that for an event of this scale, the tradestand holders generally arrived a few days prior to the event start in order to set up. This meant that a huge amount of cardboard was generated, resulting in bins around the tradestand area overflowing as cardboard was not compacted (Photograph 2).

Photograph 2) Cardboard generation during setting up of tradestands
Within some of the tradestand areas, metal sheeting was provided as protection to the ground in case of bad weather conditions (Photograph 3).

![Photograph 3) Protection of ground by metal sheeting](image)

The number of tradestands present at an event is important as they represent one of the main sources of waste, especially in the form of food and packaging waste.

5.2.7 Stabling
Permanent stabling was present at 30% of sites, with an average provision of 61 stables. A further 17% of events had temporary stabling, with the average capacity much higher at 208 stables. Stabling on site results in the production of horse waste and bedding, which must be disposed of responsibly. Additionally, temporary stabling requires the use of contractors for construction purposes, and can result in damage to the ground and grassland species. Damage can occur due to trampling and bedding left on site can result in plant life being smothered. Additional problems can occur due to nutrient loading of the soil in specific areas.

5.2.8 Environmental awareness
Of the respondents, only 35% stated that they knew of the legislation regulating their event. Noise and environmental health were their principal concerns. However some organizers listed access issues and public rights of way, guidance from SEPA, use of special waste (including paints, creosote, fuels) and conforming to ESA and Countryside Stewardship schemes. It is obviously important to ensure that events
show compliance with all relevant legislation, and this will be an important issue to address in any environmental guidance produced.

Almost all events (98%) try to use local suppliers, but only 41% were concerned about whether the supplier had a proven environmental reputation. This response was mirrored at the case study locations. Environmental considerations are an additional factor that could be applied in the tendering process and the possibility of BE providing a central contractor supplier list has been raised in a recent article in the leading magazine for the industry (Carr, 2003). It was felt that if a contractor list were to be drawn up it would be relatively easy to incorporate environmental considerations into the tendering process (Hadaway 2003).

The questionnaire also revealed that only 8% had heard of the ‘Committed to Green’ organization, with 23% having heard of Environmental Management Systems. This is not surprising, due to the fact that the respondents are not environmental specialists. However this lack of awareness could be addressed through the production of guidance and dissemination of information. Seeing success stories that other sports and sporting events have achieved (Committed to Green 2003) could help increase motivation of staff and improve morale, both of which are important factors in Environmental Management (Pollack 1995).

Overall, 51% of event organizers rated their overall environmental impacts as balanced, with only 13% viewing their impacts as negative and the other 36% viewing the overall impacts as positive (figure 4).
Figure 4) Opinions on overall environmental impact of event

The fact that few organizers regarded their impacts as negative corresponds with the perceived irrelevance of environmental impacts and lack of environmental knowledge often associated with SMEs (Burr 2003). Some respondents felt that the impacts caused by Eventing were negligible e.g. ‘The impact is minimal and in many respects brings the urban dwellers in touch with the countryside environment’ (Bicton). Whilst the organizer at Great Witchingham believed that a horse trials venue is ‘probably the most environmentally friendly sporting venue you can find’ and the respondent at Poplar Park stated that ‘Eventing is not the sort of activity which adversely affects the environment’. This highlights the fact that organisers feel confident in their management of environmental issues and shows a substantial barrier to any guidance produced.
The breakdown of environmental impacts in specific areas (figure 5) revealed that the majority of respondents felt that impacts were neutral in most of the environmental impact areas, namely energy use, water use, chemical use, waste, noise, plants, animals, soil, water quality, air quality and cultural heritage. This highlights a lack of environmental awareness and knowledge of impacts, similar to that shown in SMEs, as visits to case study locations showed impacts did occur in many of these areas. Areas in which most respondents felt the impact was positive were in the areas of purchasing, local community, local economy and visual/landscape impacts. The only environmental impact area seen to be negative by most organizers was transport.

A number of respondents marked several impact areas as not-applicable. These were energy use, water use, chemical use, noise, water quality, air quality and cultural heritage. This may suggest a lack of knowledge regarding environmental issues. However, the site visits showed that impacts did arise in some areas that had been deemed not-applicable.
5.2.9 Transport
Transport to most events involves the use of cars and horseboxes which will impact on local air quality and the climate in general. Transport may be a difficult issue to address, as competitors are likely to travel long distances to try to qualify their horses for specific events. However, the organizer at Great Witchingham suggested that BE could try to distribute events more equally around the country to ensure that travelling distances are reduced. This is an area which has received much attention from British Eventing in recent months, but is difficult to resolve to everyone’s satisfaction.

At a large event such as Badminton, with 250,000 people attending the event over four days, traffic and transport to the event is a major issue and it is important to try to avoid congestion. Transport to the event, was mostly by car or coach although a bus service was provided to meet the Paddington train at nearby Chippenham station. However, this service was not very popular and if people asked the best way to the event they were told that car is the easiest option. Some people also arrived by helicopter/light aircraft (Photograph 4) using the landing strip available on site. The landing charge was no more expensive than arriving by car and avoided traffic congestion problems. However, this will contribute further to climate change issues.

For Badminton, detailed traffic plans involving a chief traffic steward and the police were adopted to help control the traffic. The council were also heavily involved, deciding where traffic lights were allowed. Additionally signs were posted on the surrounding roads to notify the general public of likely congestion dates, helping to avoid conflict with the local community.
Congestion was not seen as a major problem by one-day-events since there are less competitors and times are spread throughout the day (Sayer 2003).

5.2.10 Complaints
The majority of organizers (80%) stated that no complaints had been received. However, when complaints were received they were generally relating to noise from the public address system, mud on local roads and horseboxes on narrow lanes. All complaints were made by local residents and generally received via the local council. Although only a small percentage of events reported complaints, an interview at British Eventing revealed that noise was a common recurring issue at some events, and one event organizer had even given up an event due to constant complaints about noise (Hadaway 2003).

At Great Witchingham, several complaints have been made in the past, mainly relating to noise from the public address system. When contacted, the local council stated that a public address system should not be able to be heard outside the boundaries of a site, and if this was the case it could be defined as a statutory nuisance and a charge could be served under the Environmental Protection Act 1990 (Broadland District Council 2003). The event organizer was well aware of the problems of noise; especially during the spring event when relatively little protection is given from tree leaves. However, it is important to note that for health and safety reasons the speakers must be able to be heard by competitors around the site. The organizer would prefer to be approached by individuals with complaints themselves rather than hearing about the problems from the council after the event has taken place.

At Badminton most houses in the village are owned by the estate and because the event is for one week only most of the residents put up with any disruption. Some complaints regarding the event are made, especially with regard to traffic congestion. However, the event feels that if they deal with people in a sympathetic manner there is little problem. The relationship with the local community is considered very important and complaints are taken seriously. The event believes that people would feel able to come to the horse trials office individually if they had a complaint and that complaints
can be dealt with more easily in this way. Public meetings are avoided and seen as a last resort.

These results suggest that noise should be highlighted as an important issue in the guidance, and information should be provided to endeavour to maintain good relationships between event organizers, the local community and local council. It has been suggested that bad practice can occur due to 'ignorance of the facts, rather than a wilful disregard of the needs and interests of others' (Aitchison & Lloyd Jones 1994, p.9). It is believed that this is the case regarding noise issues and thus it is important to ensure all organizers understand the legislation regarding noise and ensure that the local community is given notice as to when the event is occurring and is warned that slight disturbances may be experienced.

5.2.11 Conservation and Cultural Heritage

![Presence of environmentally important areas](image)

Figure 6) Presence of environmentally important areas

Figure 6 shows that although the majority of respondents (45%) stated that no rare species were present on site, 18% (10 respondents) responded positively. Examples of rare species present included flowers, fungi, otters, golden eagles, wild orchids, owls, hawks, newts (including great crested newts), bats, herons and heath land plant species that are part of a European heath land project. Notably a significant proportion (37%) of respondents stated that they did not know whether there were rare species
present or not. This is an area which needs attention, as any rare species present cannot be conserved unless they are identified. This idea is reiterated in the EMS Club report when it states ‘No one can improve or control what they don’t know’ (EMS Club 2001-2002, p11).

The majority of respondents (68%) stated that no areas were designated as protected by the national/local authorities or by the event itself, with only 8% of respondents stating they did not know. Of the 24% of positive responses the designations included Special Sites of Scientific Interest (SSSIs), Environmentally Sensitive Areas (ESAs), conservation areas, set aside land, water bogs and areas designated by the Countryside Agency. It is important to ensure that these areas are respected throughout the event. At Badminton, it was found that any sensitive plants or trees were fenced off during the event to prevent damage. However, at Great Witchingham, little attention was paid to guidance received from English Nature regarding how close to the River Wensum SSSI spraying is allowed, with spray being applied as deemed necessary by the organizer/landowner.

The majority of respondents (56%) stated that no historic or archaeologically important areas were present on site, with only 8% not knowing whether or not these types of areas were present. Of the 36% of positive responses most included the venue itself, with many events occurring in estate grounds incorporating stately homes or castles.

5.2.12 Resource use
Resource use was studied in terms of energy use, water use and waste production. The majority of respondents felt that energy use, water use and waste production were all remaining level (figure 7). However, since most respondents thought that attendances were increasing, it is suspected that resource use is also likely to increase. Some respondents were hosting new events and therefore responded ‘don’t know’, although these answers only accounted for a minority of responses.
At Badminton it was recognised that although electricity use is now believed to be at a plateau, approximately five years ago there was an increase in the amount of electricity used due to computerisation e.g. to enable credit/debit card transactions and produce computerised results sheets. Additionally water usage is also felt to be increasing due to caterers’ requirements for washing up facilities and due to use by the public e.g. filling up tanks in caravans/horseboxes. Likewise much water use is carried out in the stables with water being required for watering and washing down the horses and cleaning equipment. It is believed that the amount of waste at the event is remaining level and that litter is less of a problem than it used to be, due to increased awareness of tradestand holders. At Badminton, a main concern is that the park is kept tidy and cleaned at the end of each day so that visitors arriving the next day find the site clean.
Figure 8) Main types of energy used by events

Figure 8 shows that the main sort of energy use for the majority of events was generators (40%), with bottled gas and electricity both being important sources, at 27% and 26% respectively. Mains gas and oil accounted for a very small amount of energy use along with additional fuel in the form of petrol/diesel.

At Badminton a mains electricity compound was present on site, and tradestands could order electricity prior to the event if required (Photograph 5). Additional generators and bottled gas were used by some of the tradestands, but were discouraged due to creation of noise. Work to provide electricity to tradestands was provided by an outside contractor, with work starting at the beginning of April.
Figure 9 shows that the vast majority (68%) of events used mains supply as the main source of water. Boreholes and direct pumping were also important with 16% and 10% respectively receiving water from these sources. Other sources of water were found to be springs used at both Aswanley and Borough Court events. Little water was used for irrigation purposes, although certain events did irrigate e.g. Badminton, with water generally being pumped from a lake or river. Many events, including Badminton, provided a water tap in the tradestand area for public use and additional taps in the lorry and caravan parks. Generally there were no restrictions in place regarding the amount of water used and the taps had no collection trays beneath them to catch any water spilt, resulting in water wastage.
There was some confusion over whether an abstraction licence was required when using boreholes or direct pumping as the main water source. Many respondents answered the question even if they did not use such methods as a water source which has rendered the results from this question invalid. However, it is important to ensure that where an abstraction licence is required, one is sought to ensure legislative compliance.

Most events used contractors to remove waste water and liquid effluent from the site, with the majority coming from ‘portaloos’. Several events had more permanent facilities and used mains sewerage or septic tanks. At a large event like Badminton, the portaloos needed to be periodically emptied during the event. They were emptied by a tanker which relayed the waste to a tank for storage. This waste was then taken by Avon waste to Avonmouth Sewage Works where it was treated. The event resulted in 330,000 litres of human waste.
The main waste disposal routes are shown in figure 10. At most events litter and dry waste was disposed of either by removal by contractors (44%) or removal by the local authority (26%) which will ultimately result in the waste being landfilled. Other methods of disposal included segregation, recycling and burning. Of the 12% (6 respondents) that recycled waste, recycling of items such as paper, bottles, cardboard, plastic and aluminium cans takes place. 10% of events burnt waste which is a concern due to air quality impacts. Burning of litter and dry waste along with old timber and farm waste including plastic was carried out at Great Witchingham, although the organizer was unsure whether or not this is allowed. It was thought that approximately 1.5 tonnes of waste was generated from the two days of competition at Great Witchingham. At Badminton, all dry waste was dealt with by contractors, with 1100 litres wheelie bins being used around the site. A compactor was then brought onto the site and waste was compacted in a silage clamp and put into skips to be disposed of by licensed contractors, who took the waste to landfill. The event generated 120 tonnes of dry waste.

Figure 10) Waste disposal routes for different waste types
Recycling has been attempted at Badminton, when the Director was approached by a local company. Recycling was attempted in one area of the tradestands, with four bin types provided: Aluminium/Card/Glass/Paper. Additionally a tent with a conveyor belt was used to sort rubbish and ensure proper segregation. The scheme cost approximately £3600 and only a £40 return was received for the aluminium. The staff felt that the problems outweighed the benefits because there was much ‘non-descript’ rubbish. The public also did not take to the idea, showing contrary results to those found by Stubbs (2001) at the Sydney Olympics Games. The event has also tried segregation at a later date but this proved to be even more expensive.

Although there are barriers to recycling such as cost; due to the European Union targets to reduce disposal of biodegradable waste to landfill by two thirds of its 1995 level by 2020 (EU Landfill Directive 1999/31/EC cited in Ward 2002), it will be important to try to encourage more recycling of waste at events. The respondent at Withington Manor felt that the questionnaire had encouraged them to consider recycling of waste.

Questionnaire responses showed that human waste was dealt with by contractors in 76% of cases, with 13% saying that the local authority dealt with this waste. The other 11% used composting, septic tanks or burning.

In the majority of cases horse waste was composted (56%), with 28% stating that contractors removed this form of waste. Other fates for this waste included burning and selling-on. Burning used to occur at Badminton until the local authority stopped this practice. In some cases respondents stated that competitors were encouraged to take horse waste home with them to keep the lorry park clean.

Questions concerning disposal of waste have drawn attention to the fact that most waste is removed by contractors. Due to the finding that there is currently little training given to contractors it may be important to address this issue in the production of guidelines.
Figure 11) Reasons to reduce resource use

Figure 11 shows that the majority of respondents would only be interested in reducing energy use in order to save money (40%). 23% of respondents felt that the main reason would be to improve efficiency, with the same number of people stating that they would not be interested in reducing energy use. Many of those not interested stated that use at the event was already minimal and could not be easily reduced e.g. ‘very little energy use is applicable at the event’ (Oasby). Only 14% felt that they would like to reduce energy use in order to minimise environmental impacts.

The vast majority (48%) of respondents would not be interested in reducing water use. It is likely that this is due to perceived minimal use of water and because water is seen as a vital commodity for both horses and their riders. 23% of respondents would be interested in reducing water use if cost savings could be made, whilst 16% and 13% respectively would reduce water consumption for reasons of improved efficiency and reduced environmental impacts.

Most respondents (33%) would be interested in reducing waste production if cost savings could be achieved. A further 28% would not be interested, whilst 18% are either interested in improving efficiency or reducing environmental impacts.
These results perhaps reflect the fact that many events are struggling with the costs of running an event (Hadaway 2003) and would therefore be most interested in reducing costs. This corresponds with the results of a study by the United Nations Environment Programme, which found that the major concern for SMEs, which show many similarities to Eventing, is the short-term financial bottom line (Clark in Hillary 2000). Few respondents were interested in reducing environmental impacts. This shows a perceived irrelevance of impacts, again similar to views encountered in many SMEs (Burr 2003). However, a slightly higher proportion of respondents felt that reducing environmental impacts was a consideration in the area of waste management, perhaps reflecting a greater understanding of the current problems relating to waste disposal.

### 5.3 Summary of Results
Currently there appears to be a lack of awareness and knowledge regarding environmental impacts caused by Eventing, highlighted by the lack of impacts identified by organizers. A summary of the key impacts and their related issues as identified through both the questionnaire responses and case study locations can be seen in table 1, meeting aim 2, section 3.1.

<table>
<thead>
<tr>
<th>Environmental Impact Area</th>
<th>Related issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ON SITE</strong></td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td>Generation, reduction, re-use, recycling, contractors</td>
</tr>
<tr>
<td>Raw Materials</td>
<td>Purchasing, reduction, re-use, wastage</td>
</tr>
<tr>
<td>Conservation</td>
<td>Designated areas, rare species, cultural heritage, awareness</td>
</tr>
<tr>
<td>Chemicals</td>
<td>Storage, usage, spillages, disposal</td>
</tr>
<tr>
<td>Energy</td>
<td>Source, usage, wastage</td>
</tr>
<tr>
<td>Water</td>
<td>Source, discharge, efficient use</td>
</tr>
<tr>
<td>Land use</td>
<td>Erosion, compaction, poaching</td>
</tr>
<tr>
<td><strong>LOCAL AREA</strong></td>
<td></td>
</tr>
<tr>
<td>Economic</td>
<td>Purchasing, accommodation, tourism</td>
</tr>
<tr>
<td>Community</td>
<td>Noise, traffic congestion, delays, local air quality, waste, landscape/visual impacts, co-operation</td>
</tr>
<tr>
<td>Environment</td>
<td>Noise, air quality, flora &amp; fauna</td>
</tr>
<tr>
<td><strong>WIDER ISSUES</strong></td>
<td></td>
</tr>
<tr>
<td>Climate change</td>
<td>Through energy use, transport</td>
</tr>
<tr>
<td>Resource use</td>
<td>Through material use, energy/water/chemical use</td>
</tr>
<tr>
<td>Landfill</td>
<td>Through waste production, limited reduction, re-use and recycling</td>
</tr>
</tbody>
</table>

Table 1) Summary of the impacts of Eventing and their related issues
Specific areas which were felt to have major impacts were those of waste production, purchasing and transportation. Other impacts were considered base level impacts, as although impacts occur, their magnitude is not as great e.g. water use and energy use. Impacts spreading to the local area and wider environment were also identified and are important to take into account. Positive impacts occurred with regard to expenditure in the local area and creation of tourism. In certain instances positive impacts were also found with regard to nature conservation, this was particularly in relation to those events on National Trust sites or with designated areas on site. Additional examples of good practice were identified with regard to the collection of litter and regard for the land.

Overall, common attitudes were identified in relation to Environmental Management. Most organizers felt that Environmental Management was unnecessary and that they already acted in a responsible way regarding environmental issues. This reflects a lack of awareness and consideration of the environmental impacts arising from horse trials. Furthermore, many organizers emphasized the fact that they were country people who were fully aware of environmental issues and did not need interference from ‘outsiders’ who did not understand the sport. This highlights the complacency of organizers, showing that they are reluctant to acknowledge any environmental impacts and not always willing to listen to the ideas of others.

Many organizers were also sceptical about the benefits of Environmental Management, worrying that it would generate a large volume of paperwork with no proportionate benefit to them or the environment. Similarly financial strains and recent health and safety regulations meant that many organizers felt that any extra rules and regulations would be an additional burden and they would not be able to cope.

From these results, it can be seen that there are many barriers which will need to be overcome if Environmental Management is to be taken up by the sport.
6 Guidelines for environmental improvements at horse trials

The results and discussion (section 5) have identified the main impacts associated with Eventing along with the attitudes, awareness and current management practices of environmental issues by organizers.

Initiatives used to engage other industries with similar barriers to Environmental Management will now be studied, and their possible adaptability for Eventing assessed. Subsequently, suggestions for guidance following the target areas for environmental improvement are shown in section 6.6. The structure of governing bodies (section 2.3 & figure 1) will be used to help identify channels for information dissemination.

6.1 Suitability of EMS in SMEs

As has been suggested for SMEs, it is important to find mechanisms that are appropriate to the size of the business and to appreciate that a one-size-suits-all approach to Environmental Management does not work (Fay in Hillary 2000). It has been recognised that in many cases traditional EMS standards, such as ISO 14001 and EMAS are ill-suited to SMEs (Gerstenfeld and Roberts in Hillary 2000). Since these types of businesses possess the most similarities to Eventing in terms of barriers to Environmental Management, it is considered that traditional EMS standards will be no more suitable for Eventing than they are for SMEs. However, this does not mean that Environmental Management is not required; simply that it must be tailored to the specific needs of an industry (Hutchinson & Hutchison 1995).

It is therefore important to review current approaches to Environmental Management used in industries showing similar barriers to EMS implementation as Eventing. The examples used here are techniques used to engage SMEs and the Golf industry in EMS implementation. Following their review they will be assessed for their adaptability to Eventing.
### 6.2 EMS implementation in SMEs

Several initiatives have been introduced to try to overcome barriers to EMS implementation in SMEs. One recent and successful initiative has been that of Project Acorn, a DTI funded project aimed at engaging SMEs in EMS implementation (Gascoigne 2002, Burr 2003).

The project focuses on a step-by-step approach to EMS implementation, with recognition of achievement via third party audits along the way. The project splits ISO14001 into five levels, with an optional sixth level for obtaining EMAS (table 2).

<table>
<thead>
<tr>
<th>Level</th>
<th>Steps required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Commitment, policy, establishing a baseline, developing initial environmental performance indicators, initiating culture change and continual improvement.</td>
</tr>
<tr>
<td>2</td>
<td>Identification and compliance with legal, market and customer requirements.</td>
</tr>
<tr>
<td>3</td>
<td>Developing environmental objectives, targets and management programmes, establishing operational controls.</td>
</tr>
<tr>
<td>4</td>
<td>Implementation and Operation of the EMS</td>
</tr>
<tr>
<td>5</td>
<td>Checking, audit and review of the EMS (leading to ISO 14001 certification)</td>
</tr>
<tr>
<td>6</td>
<td>External communication and/or EMAS registration</td>
</tr>
</tbody>
</table>

Table 2) The six levels of Project Acorn (taken from Gascoigne, 2002)

Each level is then split into stages with each stage having a Stage Profile describing what needs to be achieved, when it should be done, who should be responsible and the method of doing it. In support of these Stage Profiles are Guidance Notes including top tips, step-by-step guidance and suggestions of sources of further information. In addition to these resources, training for each level alongside other companies is held. Moreover ‘hand holding’ from supply chain leaders (mentors) is also common.

This initiative has proved successful, with benefits including:

- Removal of the problem of lengthy implementation with no feedback as progress is seen via the audits and each level is a recognisable achievement in itself.
• More user-friendly approach.
• Possibility to stop at any time and rejoin easily at a later date e.g. stop when resources get low (Burr 2003).

Jensen (2003) recognises it is important for SMEs to deal with Environmental Management in small, ‘edible’ portions, similar to those shown by project Acorn. It is felt that this would also be a good idea when developing guidelines for Eventing.

6.3 Initiatives for sport and EMS
In recent years, EMS has been taken up by some sectors of the sports industry, such as Golf. Most Environmental Management initiatives have evolved around the ‘Committed to Green’ approach to Environmental Management, with a wealth of information now having been developed for sports events and facilities (Green and Gold 1999, U.K Sport 2002, Committed to Green 2003).

The Committed to Green approach to Environmental Management revolves around seven key steps. An outline of these steps is given below.

1) Organizers adopt green policy.
2) Carry out Environmental scoping review of venues and operations.
3) Establish environmental teams.
4) Set targets and define programmes.
5) Implement programmes.
6) Monitor implementation and adjust programme accordingly.
7) Evaluate and publicise results.
(Committed to Green 2003).

Many similarities can be seen between this approach and the approach used in project Acorn. However, the Committed to Green approach has been developed especially for sport and therefore recognises specific barriers (e.g. those identified by Ottesen et al 2001 in section 2.2) to the implementation of EMS in sport. Although studying EMS and guidelines used for other industries is a useful starting point, it is important to develop guidelines which are specific to the sport of Eventing.
6.4  *Is it realistic to adapt any of these methods for Eventing?*

From the results of both the questionnaires and case study interviews, it is clear that there are many issues taking place in the sport of Eventing at the present time. New health and safety regulations have left the industry feeling hard pushed to cope with increased documentation and many of the smaller events are experiencing financial difficulties. Therefore at the moment there appear to be many barriers to the production of Environmental Management Guidelines for Eventing. In order to increase motivation towards improved environmental performance, it will be necessary for organizers to see the benefits for the sport. One way in which this could be achieved is through increased media attention resulting from an environmental initiative. This would help to improve the image of the sport, which has had some bad press in recent years due to both horse and rider fatalities.

One issue which has been raised from the examples above is that the first stage in Environmental Management is to gain commitment. Currently in Eventing there is a lack of commitment towards Environmental Management. The research has shown that many organizers feel that Environmental Management is simply too much to expect from volunteers and that they deal with many of the issues already. It is important to recognise that without commitment from both top management and event organizers, environmental improvement will not be achievable (O’Laoire & Welford in Welford 1998). Thus the first issue to overcome is to gain commitment from senior management.

Although the aforementioned solutions to Environmental Management e.g. Project Acorn and ‘Committed to Green’ may not be realistic at present, once awareness has been raised within the sport of Eventing they may have a possible use in the future. Additionally many of the points raised can be adapted to help in the production of some voluntary guidance points.

6.5  *Current consideration of Environment within Eventing*

Currently the environment is given little consideration when planning competitions although it is recognised that event organizers already show many elements of good practice e.g. cleaning up litter and leaving the site clean.
The FEI has a Code of Conduct towards the Environment which was adopted in 1998 (Appendix 3), although there is minimal awareness of this document in the U.K (BE 2003b, BEF 2003b). Some points of this document (1,2,3,4,5c and 7) have little to do with true environmental concerns. However other points within the document cover issues such as:

- Respecting laws and standards of environmental protection when building new developments.
- Maintenance of biodiversity.
- Avoidance of habitat destruction.
- Avoidance of pollution of land, water, soil.
- Avoidance of the creation of land stability problems.
- Consideration of environmental impacts when bidding for the hosting of events.
- Respecting environmental protection laws through use of sustainable material.
- Avoidance of soil and water pollution when dealing with stable waste.
- Avoidance of littering, illegal waste deposits and spreading of fires when riding in the Countryside.

It is felt that the document makes some good points but needs to go under review in order to cut out points that do not cover ‘true’ environmental issues.

### 6.6 Suggested steps for environmental improvement

Firstly, it is suggested that the FEI review their current Code of Conduct towards the Environment, as it currently appears to be poorly used and distributed. This is not uncommon, as it has often been recognised that many organizations who have written a policy find it difficult to translate policy recommendations into action (Netherwood 1998). Once this document has undergone review, it should be distributed throughout the FEI and brought to attention of all National Federations at the General Assembly. Having been made aware of its existence at the General Assembly, the BEF should ensure that the document is distributed throughout their organization and that all of its member bodies who run events affiliated to the FEI e.g. BE are aware of the Code of Conduct towards the Environment.
By raising awareness of the existing Code of Conduct potential environmental impacts of equestrian sport will be understood and therefore the need for guidance may be recognised. In order to take on board ideas outlined in the code of conduct, the senior level of each organization e.g. BEF, BE will need to show commitment to environmental improvement. Commitment is central to Environmental Management (O’Laoire & Welford in Welford 1998) and is generally shown through production of an environmental policy, which ‘formally outlines an organization’s commitment to Environmental Management’ (Netherwood 1998, p42).

General awareness of environmental issues could be addressed through environmental training. It is suggested that a member of each governing body, FEI, BEF and BE undergo environmental training. Training can play a key role in increasing awareness of environmental impacts (Netherwood 1998) and can help build environmental issues into everyday decision making. Additionally these trained individuals will form an important point of contact for event organizers.

It is felt that British Eventing should be proactive in its approach to environmental issues. Most organizers felt that British Eventing should be responsible for the production of environmental guidance (figure 3, section 5.2.3), and as they already have a point of contact with organizers it appears to be the most practical option. It is deemed that the best approach to Environmental Management is via an environmental initiative comprising a set of voluntary guidelines, with an associated environmental logo, similar to that used by Green Globe 21 in their ecotourism campaign (Green Globe 2003). Having a logo can add incentive or reward for those willing to meet the requirements (Gilbert 1993) and could help give market differentiation for those meeting criteria e.g. by creating greater media attention for those with the logo.
A first step for BE could be to adopt a policy/code of conduct as mentioned above, to show commitment to environmental improvement. A draft policy for use by BE has been developed (table 3).

British Eventing is responsible for organising and promoting affiliated events throughout the U.K. British Eventing recognises that through both its office activities in Stoneleigh, and at individual event sites, direct and indirect impacts on the environment are caused. Its ambition is to minimise these impacts through a policy of continual improvement in environmental performance. British Eventing aims to integrate environmental considerations into all business decisions and will review the policy and objectives on a yearly basis. British Eventing recognises that commitment to achieve goals must stem from top management through all staff and event organisers, and is committed to providing training for selected individuals, having put aside resources in terms of time and money to achieve this goal. British Eventing will ensure that all relevant stakeholders, both internal and external, and all members of staff are aware of the policy and will provide guidance to event organisers to help to reduce environmental impacts caused at events.

British Eventing also recognises that through environmental improvement at event sites there is an opportunity to promote awareness of the environmental dimension of sport, and to encourage the wider sporting community to incorporate environmental considerations into event hosting.

This policy will be operated through a series of objectives with additional guidance points on how to achieve these objectives provided to event organisers.

**British Eventing is committed to:**

- Implementation of the environmental policy and the full resources to achieve this goal.
- Providing training to staff and support to event organisers to enhance awareness of relevant environmental issues and ensure effective management of environmental impacts.
- Ensuring compliance with all relevant legislation.
- Conserving biodiversity, landscape and cultural heritage.
- Minimising waste production and volume going to landfill through reduction, reusing and recycling.
- Minimising and managing efficiently the use of energy, water and raw materials.
- Avoiding pollution of water, air and land.
- Including environmental considerations in procurement decisions.
- Engaging contractors in the environmental initiative.
- Creating open and effective communication and participation with relevant stakeholders, regarding impacts such as noise and transport which can extend beyond site boundaries.
- Supporting a programme of communication, education and public awareness.
- Regular review and auditing of the policy and provision of information regarding environmental performance to other key governing bodies of the sport through production of an annual report.

Signed ……………………….. Date…………………. Chief Executive British Eventing

Any questions/comments can be directed at…………………………… BE Environmental Specialist

Table 3) Draft environmental policy for British Eventing

Subsequently, it would be important to undertake an environmental review as shown by both project Acorn and Committed to Green. This research has identified the main target areas to be waste, transport and purchasing. In addition it has been recognised
that engagement of sponsors, contractors, volunteers and media in any environmental initiative would be important.

Following the results of the review it would be possible for BE to develop voluntary guidelines (see suggested guidance points table 4) which could be sent out to organizers with current correspondence. These guidelines should work to achieve improvement in the key areas identified in the policy. In addition to this British Eventing should show commitment to environmental improvement by endeavouring to ‘practice what they preach’ with regard to environmental concerns. Thus they should try to take environmental considerations into account within their office in Stoneleigh. Since there are many companies present at the Stoneleigh site, it may be possible to have some communal facilities e.g. communal recycling bins which would decrease purchase and collection costs.

It has been recognised that in SMEs it is often helpful to educate selected employees so that they can act as ‘trainers’ for other employees (Jensen 2003). Therefore, it is suggested that the Technical Advisers undergo environmental training and take on an additional environmental role. This would ensure that an effective network for disseminating information and advice to event organizers would be formed, helping them to overcome any problems arising and forming effective liaison between the organizers and the governing body. Clearly the Technical Advisers will not become environmental experts overnight, and thus help and advice could also be sought from organizations such as the ‘Committed to Green’ Foundation.

The Technical Advisers could report to British Eventing, with environmental issues becoming a regular agenda item at the current organizer meetings. This would permit any problems arising to be addressed. Additionally the meetings would allow for dissemination of knowledge creating greater understanding of environmental issues (Jensen 2003) and enabling success stories to be shared. A short report on progress could be produced annually by the BE trained Environmental Specialist and provided to BEF and FEI to help integration of environmental issues into the wider equestrian world.
A set of objectives (taken from the draft policy for BE) and how they could be achieved is set out in table 4. These guidance points have been developed in relation to the key impacts identified from questionnaires and case study visits. It is hoped that the majority of these guidance points could be achieved relatively easily and without too great a cost. Additionally it is felt that hosting a ‘green’ event would create increased media attention for the sport. By achieving these guidance points, the environmental impacts of Eventing would be reduced and awareness of the environmental issues relating to both Eventing and sport in general would be raised.
<table>
<thead>
<tr>
<th>Objective</th>
<th>How to achieve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure compliance with all relevant legislation</td>
<td>Establish and maintain a central list of potential legislative requirements e.g. legislation regarding noise pollution and requirement of abstraction licence.</td>
</tr>
<tr>
<td>Conserve biodiversity, landscape and cultural heritage.</td>
<td>Ensure sensitive areas on site are adequately protected (fencing) and marked (signage). Design spectator routes to avoid sensitive areas. Ensure, post event, that all damage to wildlife habitats is repaired.</td>
</tr>
<tr>
<td>Minimise waste production</td>
<td>Explore possibility of passing on items from one event to another e.g. set of generic signage may be passed on from one event to another. Use recycling bins around site. Ensure signage of facilities is clear to avoid contamination and design signage and containers with re-use in mind. Explore possibility of purchase of recycling bins by BE for use at multiple events.</td>
</tr>
<tr>
<td>Avoid pollution of water, air and land</td>
<td>Encourage horsebox sharing for competitors and use of public transport/car sharing for spectators. Enforce a ‘no idling’ policy for vehicles on site. Ensure all hazardous products are stored in secure facilities and are applied and disposed of by appropriately qualified and trained staff and according to label instructions. Maintain register of chemical stocks and usage. Keep any spraying operations away from water sources. Aim for a buffer zone of 3-5m around lakes, ponds, streams and ditches.</td>
</tr>
<tr>
<td>Include environmental considerations in procurement decisions</td>
<td>Explore possibility of a central contractor database, including environmental criteria in the tendering process.</td>
</tr>
<tr>
<td>Engage contractors in the environmental initiative</td>
<td>Work with tradestands to help them address environmental and waste-related issues Ensure all contractors and volunteers are aware of the green initiative.</td>
</tr>
<tr>
<td>Support a programme of communication, education and public awareness</td>
<td>In advance of the event inform the general public of the overall goals of the environmental initiative, the specific steps and their rationale. Inform all participants (competitors, officials, media and contractors) of the initiative and suggest how they can contribute. Organize a press conference on ‘greening’ the event.</td>
</tr>
</tbody>
</table>

Table 4) Suggested Environmental Management Guidance points
7 Conclusion

Firstly the results of the study will be summarised, showing what has been achieved. Following this, limitations of the study will be examined and potential for future study assessed.

Interviews, questionnaires and communication via e-mail has helped to assess the environmental awareness and management of event organizers and controlling bodies, meeting aim 1, section 3.1. Results showed that at present little consideration is given to environmental issues when organising competitions. Additionally, although the FEI has a Code of Conduct towards the environment, many members of both BE and BEF are unaware of its existence.

The results of the questionnaires and case study visits showed that environmental impacts do occur (see table 1, section 5.3 for summary of impacts) and that similar impacts are seen at both one-day and three-day-events, meeting research question 1, section 3.2. There is some knowledge of environmental impacts in certain areas such as transport; however, the majority of organizers are unaware of additional impacts which were identified through the questionnaire responses and case studies. This is probably due to perceived irrelevance of environmental impacts and a lack of environmental knowledge similar to that associated with SMEs (Burr 2003). Eventing also creates impacts in the local area (both positive and negative) and contributes to wider issues, such as climate change.

Common attitudes towards environmental issues have been identified across the industry (see research question 2, section 3.2) with the majority feeling that although impacts created should be a concern, formalised Environmental Management is too extreme and another burden on an already struggling industry which fears additional bureaucracy and documentation. In spite of these barriers, it is deemed that Environmental Management Guidelines are necessary for Eventing (research question 3, section 3.2) due to the environmental impacts identified through both the questionnaires and case study locations. However, it is important to remember that barriers, such as resource constraints and fear of bureaucracy, will need to be overcome.
Due to similarities between the impacts of one-day and three-day-events and common attitudes regarding environmental issues, it has been possible to produce a set of generic guidelines for the industry, meeting aim 3, section 3.1. The focus of the guidance is on environmental training and commitment to environmental improvement, as shown through the draft environmental policy (table 3). These areas have been targeted as they are both central to Environmental Management (Netherwood 1998). It is hoped that by increasing environmental awareness some of the barriers to Environmental Management, such as perceived irrelevance of environmental impacts, will be overcome. Whilst developing the guidance, barriers to Environmental Management, such as those shown by SMEs and those identified by Ottesen et al (2001), have been recognized. Additionally, the importance of providing support has been appreciated, and it is suggested that this is provided by the newly trained Environmental Specialists and Technical Advisers. Moreover, the inclusion of environmental issues at organiser meetings and external advice from the Committed to Green organization will provide further support.

Guidance for environmental improvement has been produced with the aim of reducing impacts, improving the image of the sport and providing increased media coverage. It is hoped that the guidance will be both effective and realistic to achieve and that by providing a logo there will be a greater incentive to achieve the guidelines. It is hoped that the production of a report on progress will help to integrate environmental issues into the wider equestrian world.

7.1 Limitations
Although a pleasing response rate for a postal questionnaire was received, the lack of a greater response rate means the whole industry has not been assessed. Additionally due to recent health and safety enforcements and a general feeling of financial hardship, it may not be the best time to introduce consideration of environmental issues, for fear of overwhelming organizers.

7.2 Future study
This study has provided a baseline of information regarding environmental impacts associated with Eventing and attitudes and awareness of organizers. Additionally the
research has expanded consideration of environmental issues into a new area of the sports industry. If the recommendations for guidance were to be taken up, future studies could assess the success of implementation of the guidance. If commitment was obtained, research into the running of a full EMS in line with the Committed to Green ideas could be assessed.
8 References


British Equestrian Federation (2003a) Website available at: www.bef.co.uk, accessed on 13/01/03


British Eventing (2003b) National governing body of Eventing. Personal Communication

Broadland District Council (2003) Environmental Protection Department. Personal Communication.


Committed to Green Foundation (www.committedtogreen.com), accessed on 15/01/03.


UEA (1990) *Environmental Statement: Bristol Rovers new football stadium*. School of Environmental Sciences: UEA.


U.K Sport (www.uksport.com), accessed on 15/01/03.


Appendix 1 – Abbreviations
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>British Eventing</td>
</tr>
<tr>
<td>BEF</td>
<td>British Equestrian Federation</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>DEFRA</td>
<td>Department of Environment, Food and Rural Affairs</td>
</tr>
<tr>
<td>DTI</td>
<td>Department of Transport and Industry</td>
</tr>
<tr>
<td>EMAS</td>
<td>Eco Management and Audit Scheme</td>
</tr>
<tr>
<td>EMS</td>
<td>Environmental Management System</td>
</tr>
<tr>
<td>ESA</td>
<td>Environmentally Sensitive Area</td>
</tr>
<tr>
<td>FEI</td>
<td>Federation Equestre Internationale</td>
</tr>
<tr>
<td>FIM</td>
<td>International Cycling Federation</td>
</tr>
<tr>
<td>IEMA</td>
<td>Institute of Environmental Management and Assessment</td>
</tr>
<tr>
<td>IOC</td>
<td>International Olympic Committee</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards Organization</td>
</tr>
<tr>
<td>NF</td>
<td>National Federation</td>
</tr>
<tr>
<td>SEPA</td>
<td>Scottish Environmental Protection Agency</td>
</tr>
<tr>
<td>SME</td>
<td>Small or Medium Sized Enterprise</td>
</tr>
<tr>
<td>SSSI</td>
<td>Site of Special Scientific Interest</td>
</tr>
<tr>
<td>TEC</td>
<td>Training and Enterprise Council</td>
</tr>
<tr>
<td>UCI</td>
<td>International Motorcycling Federation</td>
</tr>
</tbody>
</table>
Appendix 2 – Questionnaire for event organizers
Questionnaire for event organizers

Baseline information:

1) Name of event: ______________________________________________________

2) Your Title: _________________________________________________________

3) How many years has the event been running? __________________________

4) Type of event? (Please tick)
   [ ] IDE  [ ] 3DE

5) What classes are held at the event? (Please tick all which apply)
   [ ] Intro  [ ] Intermediate  [ ] CIC***
   [ ] Pre-novice  [ ] Open Intermediate  [ ] CCI*
   [ ] Open Pre-novice  [ ] Advanced Intermediate  [ ] CCI**
   [ ] Novice  [ ] Advanced  [ ] CCI***
   [ ] Open Novice  [ ] CIC*  [ ] CCI****
   [ ] Intermediate Novice  [ ] CIC**

   Other (please specify) ______________________________________________

6) How large is the site of the event (hectares/ acres)? __________________

7) Number of BE affiliated events at location per year: ______________________

8) Is the event FEI affiliated? (Please tick)
   [ ] Yes  [ ] No

9) Attendance at event last year: ______________________________________

10) Over the last five years have your attendances been: (Please tick)
    [ ] Increasing  [ ] Decreasing  [ ] Level

11) How is the event funded? ___________________________________________

12) What is the turnover of the event? _________________________________

13) What is the name of your local planning authority? ____________________

Staff and training:

14) Number of direct staff including volunteers involved in the event: ________
15) Approximately how many non-direct employees (including contract workers) are present:
   ▪ in the run-up to the event __________________________________________
   ▪ during the event _________________________________________________

16) Is any training given to the staff? (Please tick)

   Event staff/volunteers  □ Yes  □ No
   Contractors  □ Yes  □ No

   If YES, then what is the training in:

   ___________________________________________________________________

17) Has anyone received any environmental training? (Please tick)

   □ Yes  □ No

   If YES, please state who received the training and what it was in:

   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________

18) Do you receive any guidance concerning environmental issues from any of the bodies you are affiliated to? (Please tick)

   □ Yes  □ No

   If YES, please describe briefly _______________________________________
   _______________________________________
   _______________________________________

19) If no, whose responsibility do you think it is to produce Environmental Management Guidance? (Please tick)

   BE  □
   BEF  □
   FEI  □

   Other (Please specify) _______________________________________________

   Guidance not necessary  □
### Facilities:

20) Which (if any) of the following facilities does your event have?

<table>
<thead>
<tr>
<th>Facility</th>
<th>Number</th>
<th>Capacity (in total)</th>
<th>Operated by: (please tick)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent grandstand</td>
<td></td>
<td></td>
<td>Event</td>
</tr>
<tr>
<td>Temporary grandstand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitality facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tradestands</td>
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<td></td>
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<tr>
<td>Suraced car park</td>
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<td></td>
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</tr>
<tr>
<td>Caravan/camping facilities</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Shower facilities</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Permanent stabling (for use by competitors)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary stabling (for use by competitors)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any additional facilities?
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

### Environmental awareness:

21) Do you know of any environmental legislation that regulates your event? (Please tick)

☐ Yes ☐ No

If YES, please detail:
_____________________________________________________________________
22) Does your event try, where possible, to buy goods & services from local suppliers? (Please tick)

☐ Yes  ☐ No

23) Does your event try, where possible, to buy goods and services from suppliers with a proven environmental reputation? (Please tick)

☐ Yes  ☐ No

24) Have you ever heard of the following? (Please tick)

The ‘Committed to Green’ Foundation  ☐ Yes  ☐ No
Environmental Management Systems  ☐ Yes  ☐ No

**Environmental impacts:**

Impacts can be both positive (good for the environment) & negative (bad for the environment)

25) Do you feel your event has an environmental impact in any of the following areas? (Please tick)

<table>
<thead>
<tr>
<th>Area</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw material use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy use</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Water use</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Chemical use</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Waste</td>
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<td></td>
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<tr>
<td>Noise</td>
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<td></td>
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<tr>
<td>Transport</td>
<td></td>
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<td></td>
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<tr>
<td>Purchasing</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Local community</td>
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<tr>
<td>Local economy</td>
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<td></td>
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<tr>
<td>Plants</td>
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<td></td>
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<tr>
<td>Animals</td>
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<tr>
<td>Soil</td>
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<tr>
<td>Water Quality</td>
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<tr>
<td>Air Quality</td>
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<td></td>
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<tr>
<td>Visual/Landscape</td>
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<td></td>
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<tr>
<td>Cultural heritage</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26) Overall would you rate your events environmental impacts as: (Please tick)

☐ Positive  ☐ Negative  ☐ Balanced
27) Has the event ever received any complaints about any of the environmental issues listed in question 25? (Please tick)

☐ Yes ☐ No

If YES what did these complaints concern and who made them (e.g. local council, local residents, nature groups etc)
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Conservation:

28) What is the site used for during the rest of the year? _______________________
________________________________________________________________________

29) Do you have any rare species of plants or animals present on the site? (Please tick)

☐ Yes ☐ No ☐ Don’t know

If YES, what are they? __________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

30) Are there any areas designated as protected by the national/local authorities or by the event itself? (Please tick)

☐ Yes ☐ No ☐ Don’t know

If YES, please explain: __________________________________________________
________________________________________________________________________

31) Are there any historic/archaeologically important areas in the event grounds? (Please tick)

☐ Yes ☐ No ☐ Don’t know

If YES, please explain: __________________________________________________
________________________________________________________________________
**Energy usage:**

32) Which of the following types of energy does the event use? (Please tick)

- Electricity
- Diesel generators
- Mains gas
- Bottled gas
- Oil
- Other (Please specify)  

33) Energy usage is: (Please tick)

- Generally Increasing
- Generally Decreasing
- Staying the same
- Don’t know

34) The main reason the event would be interested in reducing energy usage would be to: (Please tick)

- Save money
- Improve efficiency
- Reduce environmental impacts
- Not be interested
- Other (Please state)

**Water usage:**

35) From which of the following sources does the water used at the event come from? (Please tick)

- Mains supply
- Borehole
- Direct pumping from river/stream

36) If any of your water comes from a borehole or direct pumping does this activity require an abstraction license from the Environment Agency? (Please tick)

- Yes
- No
- Don’t know

37) Are any of the following areas irrigated? If yes please specify source of water:

<table>
<thead>
<tr>
<th>Area</th>
<th>Yes</th>
<th>No</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dressage arenas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Show-jumping arena</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross country</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
38) Water usage at the event is: (Please tick)

- Generally Increasing
- Generally Decreasing
- Staying the same
- Don’t know

39) Where does the wastewater and liquid effluent go after use? (Please tick)

- Mains sewerage
- Septic tanks
- Don’t know

If you have any septic tanks on site how many are there? _______________________

40) The main reason the event would be interested in reducing water usage would be to: (Please tick)

- Save money
- Improve efficiency
- Reduce environmental impacts
- Not be interested

Other (Please state) _______________________________________________________

Waste:

41) Which of the following disposal routes are used for the following waste types? (Please tick)

<table>
<thead>
<tr>
<th>Litter/Dry waste</th>
<th>Human waste</th>
<th>Horse waste</th>
<th>Other (please specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal by contractors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Removal by local authority</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segregation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling on (in terms of manure etc)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please state)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If segregation or recycling take place, please specify what is segregated/recycled: ___

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
42) The amount of waste produced at the event is: (Please tick)

- Generally Increasing
- Generally Decreasing
- Staying the same
- Don’t know

43) The main reason the event would be interested in reducing waste production would be to: (Please tick)

- Save money
- Improve efficiency
- Reduce environmental impacts
- Not be interested

Other (Please state) ______________________________________________________

Environmental perceptions:

The following statement and five questions are designed to allow you to have your say on environmental issues and Eventing. The questions may be answered with long or short answers, as you see relevant.

Before answering please read this brief note:

What is an Environmental Management System (EMS)?

Environmental Management Systems are designed to allow the activities of an organization to be profitable but with increased consideration of environmental issues. In practice this means:

1) The environment is considered systematically in all decisions.
2) Commitment is required from top management.
3) Training of staff in environmental issues must occur.
4) All potential environmental impacts are evaluated.
5) Environmental Management Systems can lead to cost savings, increased efficiency and better public relations.

1) Do you think an Environmental Management System would be useful at your event?
2) Do you feel that your event has any responsibility towards the environmental impacts caused by spectators/competitors visiting the event?

3) Do you feel that your event has a responsibility towards the local community and the upkeep of the local environment as a whole?

4) Do you feel the environment should be a concern when hosting an event?

5) Do you feel this questionnaire has helped you think about the environmental issues that concern hosting an event? (Please use this section to express any other views you have about the questionnaire.)

If you would be willing for me to contact you and discuss some of these issues further please provide a contact name and number: __________________________________
________________________________________________________________________

If you would like a summary of my findings on completion of the study in August please tick:

[ ] Yes  [ ] No

If possible, I would like to e-mail these results. If you have an e-mail address please specify: _____________________________________________________________

Thank you for taking the time to fill in this questionnaire. Please return it in the S.A.E provided by 2nd May 2003.
Appendix 3 – FEI Code of Conduct towards the Environment
FEI Code of conduct towards the Environment

The equestrian sport is the only Olympic sport, which is performed in union with an outstanding ambassador of nature and the animal world: the horse. This factor alone makes the equestrian sport one of the most interested in the conservation of a sound environment and the FEI must focus the attention of all horsemen on the dangers which today threaten that environment in a world more and more governed by technology and short-sighted economic interests.

In order to make the equestrian sport always more useful and always less problematic towards the environment, the FEI urges all NFs, organizers and riders to enforce the following guidelines:

1. The FEI code of conduct towards the horse must be strictly adhered to;

2. Young riders must be taught to consider the sport in the context of a deeper and sympathetic understanding of the animal world and to place the achievement of horsemanship above that of mastering the technicalities of the various equestrian disciplines.

3. NFs should be encouraged to offer assistance to other national equestrian organizations within their countries, such as pony clubs or associations for equestrian tourism. They may also play a role in teaching young people to appreciate the beauties of nature, the love of the horse and respect for the environment.

4. Those NFs of countries less developed in the Olympic equestrian disciplines but with a long-standing tradition of horse breeding and local horse events, should be helped to foster their traditional approach to the sports with horses as a means of maintaining the presence of the horse and its natural environment in their countries.

5. The protection of the environment must always prevail over the technical requirements of the various disciplines when organizing events and in particular in the following cases:

   a) New equestrian centres should, as much as possible, be created in a natural environment and in any case, they must respect the laws and standards set up for environment protection;

   b) The creation of cross-country phases in Driving, Endurance and Eventing must respect the natural status of the venues by maintaining the area's biodiversity and by avoiding the destruction of habitat and the pollution of land, soil and water, as well as the creation of land stability problems.

   c) Training in indoor disciplines, such as Show Jumping, Dressage and Vaulting, must always, between competitions, provide periods of relaxation for the horse in a natural environment.
d) The allocation by the FEI of championships and events should always take into consideration their environmental impact and evaluate the soundness of the projects proposed by the bidding organizers.

6. Materials used in the manufacture of goods destined for use in the equestrian sport should, as much as possible, respect environment protection laws. To this effect, the FEI urges NFs, organizers and riders to avoid using goods which may constitute, on both a short and long-term basis, a danger for the environment or a misuse of irreplaceable resources.

7. Since the horse is an important element of the natural environment, the FEI and the NFs should promote all common programs with horse breeders which may promote breeding activities and encourage the protection of their environment.

8. All stables should respect environmentally sound practices when handling stable waste including all measures to avoid soil and water pollution.

9. Whenever riding in the countryside, riders should avoid littering and creating any fire hazards. They should endeavour to inform others against littering, against illegal waste deposits and against the spreading of fires.

10. While using natural trails for competition or exercise, riders and equestrian organizations should promote understanding and good relations with other users, such as walkers and bikers, and should always respect animals and plants by keeping their horses under control.