



The British
Psychological Society
Research Board

Guidelines for Psychologists Working with Animals

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Working with Animals in Psychology

Psychologists work with animals¹ for a variety of reasons. The most obvious use is in research, and it is this that has commanded most attention in the general media. Animals are also sometimes used in practical teaching within psychology degree programmes. However, these do not exhaust the possible ways in which psychologists, in their professional capacity, may work with animals. For example, there is increasing use of animals in various forms of psychological therapy with people, or to advise on therapy for animals whose behaviour appears disordered in some way. Psychologists may also find themselves involved in the training and use of animals for commercial purposes. Many psychological studies involve no more than the observation of the animals, but some research questions cannot be answered adequately without more invasive studies; and all studies of captive animals necessarily involve keeping animals in confinement. Even studies of free-living animals in their natural habitat may involve disruption of their environment, or brief capture for marking or attachment of a tracking or telemetry device.

The British Psychological Society, with the active co-operation and involvement of the Experimental Psychology Society, has produced the following guidelines for the use of all members who are engaged in psychological activities involving living animals. The majority of animal use in psychology is in research, and this is covered by the Animals (Scientific Procedures) Act 1986. Any scientific procedure that may cause pain, suffering, distress or lasting harm to a 'protected' animal is governed by this Act (see Section 5 below). Protected animals comprise all non-human vertebrates and a single invertebrate species (*Octopus vulgaris*) (see, for example, Sherwin, 2001). These guidelines will provide an outline of the legal responsibilities of members of the Society whose research is governed by the Animals (Scientific Procedures) Act 1986; the guidelines should also be taken into consideration where any work is not governed by the Animals (Scientific Procedures) Act 1986, as they may indicate best practice. Psychologists working with animals in

¹ In this document the term 'animal' is used as an abbreviation for 'non-human animal'.

ways that are not covered by this legislation should aim to maintain standards at least as high as those suggested here for research use, and should follow the spirit of these guidelines even where the letter cannot strictly be applied. In addition, especially where work in the UK is not covered by the Animals (Scientific Procedures) Act 1986, psychologists should be aware that they have a more general duty of care towards any protected animal under the Animal Welfare Act (2006).

Our recommendations are general in scope, since the diversity of species and techniques used in psychology preclude giving specific details about appropriate animal care and treatment. **Thus members of the Society are reminded of their general obligation to avoid or at least minimise discomfort to living animals.** It should be noted that permission to perform procedures regulated under the 1986 Act will not be granted unless the researcher can justify the costs to the animals in relation to the likely benefits of the research (see Section 4 below). In addition, when permission to perform a regulated procedure is requested, the researcher is also required to demonstrate that consideration has been given to *replacing* animals with non-sentient alternatives whenever possible, *reducing* the number of animals used, and *refining* procedures to minimise suffering (The three R's: Russell & Burch, 1959). Psychologists who work with animals should, therefore, keep abreast of new developments in animal welfare, with new ways of reducing the numbers of animals required for the procedures, and with refining the procedures so as to enhance the welfare of the animals concerned.

These guidelines will be used by the editors of the journals of the Society in assessing the acceptability of submitted manuscripts. Submitted manuscripts may be rejected by an editor if the content violates either the letter or the spirit of the guidelines and the reasons communicated to the author. Members of the Society using animals should consider the guidelines before embarking on a regulated or non-regulated procedure, since any breach may be considered professional misconduct.

1. Legislation

Members of the Society working in the UK must familiarise themselves with the laws regarding animal welfare, and with threatened and endangered species that are relevant to their work, and conform with the spirit and letter of the relevant legislation. Wherever their work is done, Members of the Society, or those whose work is published by the Society, should conform to the ethical standards underlying UK legislation. A summary of the British laws designed to ensure the welfare of animals is given by Crofts (1989): detailed guidance on the operation of the Animals (Scientific Procedures) Act 1986 is provided by the Home Office (website: Appendix 1). Lists of threatened species and laws aiming to protect them can be obtained from the International Union for the Conservation of Nature (website: Appendix 1). Before publication of primary reports of research involving animals in the Society's journals, authors must confirm in their cover letter that they have adhered to the legal requirements of the country in which the study was conducted, as well as to these guidelines.

2. Replacing the Use of Animals

Much psychological study requires an intact behaving organism. However, alternatives such as video records from previous work or computer simulations may also be useful. Both can be especially helpful in teaching contexts; see Stricklin et al. (1995) and Hull (1996). Two specific examples of these approaches are the video material of free-living rats that is a part of the 'Ratlife' project (Appendix 1: website) and a simulation of rat behaviour in operant learning procedures (Appendix 1: website for 'Sniffy the virtual rat'). General advice on computer simulations for teaching can be obtained from the Higher Education Psychology Network, formerly known as LTSN (Appendix 1: website).

3. Choice of Species and Strain

Psychologists should choose a species that is scientifically and ethically suitable for the intended use. Choosing an appropriate subject species usually requires knowledge of that species' natural history and some judgement of its level of sentience. Knowledge of an individual animal's previous experience, such as whether or not it was bred in captivity, is also important. When the use involves regulated procedures, and when a variety of species can be used, the psychologist should employ the species which, in the opinion of the psychologist and other qualified colleagues, is likely to suffer least whilst still attaining the scientific objective, and must justify their choice in any *Project Licence* application. Moreover, the animal model chosen should be one that is effective and efficient in producing the anticipated benefit. The use of non-human primates will always require particularly careful consideration because of their high level of sentience; Bateson (2011) provides a recent review of these issues.

Different strains of commonly-used laboratory rodents have very different physiological and behavioural characteristics that may make them more or less suitable for psychological research. In addition the amount of variation between individuals may be greater in outbred than in inbred strains. As a consequence, the use of inbred strains may reduce the numbers of animals that are required, although it may reduce the generality of the results that are obtained. Psychologists now use genetically manipulated mice in a wide variety of studies. Although such studies are typically done on a genetically manipulated strain that has already been behaviourally characterised and where the mutation is thought to have no adverse welfare consequences, such problems may emerge in novel test situations. Wells (2006) provides a summary of a report from the National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs) that examines the welfare issues associated with studies using transgenic mice. The full report (Appendix 1: NC3Rs website) includes useful checklists for assessment of welfare-related issues in such animals.

4. Number of Animals

Researchers working under the 1986 Act are legally required to use the smallest number of animals sufficient to accomplish the research goals, and this principle should be generally applied. The aim of minimising the number of animals used in an experiment can be achieved by appropriate pilot studies, reliable measures of behaviour, good experimental design and the appropriate use of statistical tests (Still, 1982; McConway, 1992; Festing et al., 2002). In 1996, the American Psychological Association's Task Force on Statistical Inference was published, giving guidance on the importance of taking statistical power into account when designing experiments (see Appendix 1: APA website). Howell (2006) also has a useful discussion of power calculations. The NC3Rs (Appendix 1: NC3Rs website) is currently investigating this area and will, in due course, be placing a report on their website.

5. Procedures

The following section details procedures that are specifically covered by the Animal (Scientific Procedures) Act 1986. Any scientific procedure involving a protected animal that may have the effect of causing pain, suffering, distress or lasting harm is regulated under the Animals (Scientific Procedures) Act 1986. This includes causing death, disease, injury, physiological or psychological stress, significant discomfort, or any disturbance to normal health, whether immediately or in the long term. The investigator should consider experimental designs that avoid the use of regulated procedures by, for example, enriching rather than impoverishing the environment as the experimental treatment, or by employing situations in which naturally occurring instances of deleterious conditions are observed.

Permission to perform regulated procedures requires a *Project Licence*, which specifies the species, numbers of animals and combinations of procedures that may be used. Such a licence is only granted after weighing the benefits of the proposed programme of against the

costs (in welfare terms) to the animals that will be used in the work. The *Project Licence* holder is responsible for ensuring that the project is conducted legally under the terms of the Animals (Scientific Procedures) Act 1986, and in accordance with the conditions of the licence. In general, regulated procedures must be carried out at a *Registered Establishment* although there are limited exceptions for fieldwork projects.

The actual performance of a regulated procedure also requires a *Personal Licence*, which is given after successful completion of appropriate training courses to those who are competent to perform the procedures. *Personal Licence* holders are required to seek to minimise any pain, suffering or distress that might arise, given the requirements of the experimental design (AVMA, 1987; Bateson, 1991; NRC, 1992). Whatever procedure is in use, any adverse effects on animals must be recognised and assessed, and immediate action taken whenever necessary (Mellor & Morton, 1997; Morton, 1997; Morton & Townsend, 1995). According to the Animal (Scientific Procedures) Act, 1986 the *Personal Licence* holder has the primary responsibility in this regard; a Named Animal Care and Welfare Officer (NACWO) with responsibility for day-to-day care of the animal and a Named Veterinary Surgeon (NVS) will also be available to give advice on animal health and welfare.

When applying for legal permission to perform regulated procedures, investigators are also required to discuss with colleagues and others, through a Local Ethical Review process, the justification for the use of animals and the balance between costs and benefits. The Local Ethical Review Committee must include not only academics but also a veterinary surgeon and a lay person, and must approve project and personal licence applications before they are passed to the Home Office. There are several models for evaluating animal research which can be of use when making ethical decisions (Orlans, 1987; Shapiro & Field, 1988; Porter, 1992; Smith & Boyd, 1991). Furthermore, when reporting research in scientific journals or otherwise, researchers must always be prepared to identify any costs to the animals involved and justify them in terms of the scientific benefit of the work.

The following more specific points may be helpful:

a. Housing Conditions

Caging conditions should take into account the social behaviour of the species. Caging in isolation may be stressful to social animals; overcrowding may also cause distress, and possible harm through aggression. Because the degree of stress experienced by an animal can vary with species, age, sex, reproductive condition, developmental history, depression of the immune system and social status, the natural social behaviour of the animals concerned and their previous social experience must be considered in order to minimise such stress. Guidance documents associated with the Animals (Scientific Procedures) Act 1986 specify minimum standards for the housing of laboratory animals (Appendix 1: Home Office Website).

b. Reward, Deprivation and Aversive Stimulation

It is not always necessary to provide all species of animals with *ad libitum* food intake, and, in some cases, this may even be considered harmful; deprivation, on the other hand, can cause distress to animals (Claasen, 1994). Some levels of deprivation are regarded as regulated procedures under the Animal (Scientific Procedures) Act 1986, but others are not.

Thus, when arranging schedules of deprivation the experimenter should consider the animal's normal eating and drinking habits and its metabolic requirements; a short period of deprivation for one species may be unacceptably long for another. When using deprivation or aversive stimulation, the investigator should ascertain that there is no alternative way of motivating the animal that is consistent with the aims of the experiment, and that the levels of deprivation used are no greater than necessary to achieve the goals of the experiment. Alternatives to deprivation include the use of highly preferred foods and other rewards which may even motivate a satiated animal.

c. Aggression and Predation

The fact that the agent causing harm may be another non-human animal does not free the experimenter from the normal and legal obligations to experimental animals. Huntingford (1984) and Elwood (1991) discuss the ethical issues involved and suggest that, wherever possible, field studies of natural encounters should be used in preference to staged encounters. Where staged encounters are necessary, the use of models as targets should be considered. If live animals are used as potential targets for aggressive behaviour then continuous observation, with intervention to stop aggression at predefined levels, and provision of protective barriers and escape, are also strongly recommended.

d. Fieldwork

Investigators studying free-living animals should take precautions to minimise interference with individuals as well as the populations and eco-systems of which they are a part. Capture, marking, radio-tagging, collection of physiological data (such as blood or tissue samples) or field experiments may not only have immediate effects on the animal, but may also have longer term consequences such as a reduced probability of survival and reproduction. The subsequent release of the animals may also be problematic. For guidance on appropriate procedures, see Kirkwood et al. (1994), and the British Wildlife Rehabilitation Council (1989). Investigators should consider the effects of such interference, and use less disruptive techniques such as recognition of individuals by use of natural markings rather than artificial marking where possible. Cuthill (1991) discusses the ethical issues associated with field experiments, and recommends pilot investigations to assess potential environmental disruption and follow-up studies to detect and minimise persistent effects.

The cost-benefit analysis of a field procedure should take into account the adverse consequences of disruption not only for the animals used as subjects but also for other animals and plants in the ecosystem (Bekoff, 1995; Bekoff & Jamieson, 1996). When an experimental protocol requires that animals be removed from the population either temporarily or on a long-term basis, investigators

should ensure that suffering or discomfort are minimised not only for the removed animals but also for others dependent on them (e.g. dependent offspring). Removed individuals and their dependants must be housed and cared for appropriately. Sources of further information on field techniques are the books edited by Stonehouse (1978), Amlaner and Macdonald (1980), and Barnard (2007) providing an especially valuable review of the issues that arise in fieldwork.

e. Anaesthesia, Analgesia and Euthanasia

After conducting surgical procedures, close attention should be given to proper post-operative care in order to minimise preparatory stress and residual effects. Regular and frequent post-operative monitoring of the animal's condition is essential, and it is a requirement of the *Personal Licence* that if at any time an animal is found to be suffering severe pain or distress that cannot be alleviated it must be killed humanely using an approved technique (see Section 7 below). Unless specifically contra-indicated by the experimental design, procedures that are likely to cause pain or discomfort should be performed only on animals that have been adequately anaesthetised, and analgesics should be used before and after such procedures to minimise pain and distress whenever possible (Flecknell, 2006). US and EU legislation make the presumption that where there is little or no evidence that a procedure may be painful, human experience should be taken into account and used as a guideline until proved otherwise.

6. Procurement of Animals

Common laboratory species, listed under Schedule 2 of the Animals (Scientific Procedures) Act 1986, must come from Home Office Designated Breeding and Supply Establishments. Other species should only come from high quality suppliers. More detailed guidance relevant to wild-caught animals is provided by the Association for the Study of Animal Behaviour (Appendix 1: ASAB website).

7. Animal Care

The researcher's responsibilities extend also to the conditions under which the animals are kept when not being studied. If a regulated procedure is being used then these are governed by the Animals (Scientific Procedures) Act 1986; this principle should be extended to animals used for other purposes, and the housing conditions and husbandry practices must at least reach the standards required by the guidelines and codes issued under that legislation.

The 1986 European Convention (Article 5 – see Appendix 1: EU website) provides that 'Any animal used or intended for use in a procedure shall be provided with accommodation, and environment, at least a minimum of freedom of movement, food water and care, appropriate to its health and well-being. Any restriction on the extent to which an animal can satisfy its physiological and ecological needs shall be limited as far as practicable.' Normal maintenance of captive animals should thus incorporate, as much as possible, aspects of the natural living conditions deemed important to welfare and survival (Poole, 1998). Consideration should be given to providing features such as natural materials, refuges, perches and dust and water baths. Frequency of cage cleaning should represent a compromise between the level of cleanliness necessary to prevent diseases and the amount of stress imposed by the cleaning process. Companions should be provided for social animals where possible, providing that this does not lead to suffering or injury. The housing regime should provide adequate exercise and cognitive stimulation.

The nature of human-animal interactions during routine care and experimentation should be considered by investigators. Depending upon species, rearing history and the nature of the interaction, animals may perceive humans as conspecifics, predators or symbionts (Estep & Hetts, 1992). Special training of animal care personnel can help in implementing procedures that foster habituation of animals to caretakers and researchers and minimise stress. Stress can also be reduced by training animals to co-operate with handlers and experimenters during routine husbandry and habituation to experimental procedures.

8. Disposing of Animals

If an animal has been used in a procedure regulated by the Animals (Scientific Procedures) Act, 1986 its reuse is tightly controlled and requires specific Home Office approval. In other circumstances, when research projects or teaching exercises using captive animals are completed, it may sometimes be appropriate to distribute animals to colleagues for further study, breeding or as companion animals. However, if animals are distributed in any of these ways, appropriate measures must be taken to ensure that they continue to receive a high standard of care. If animals must be killed during or subsequent to a study, this must be done as humanely and painlessly as possible; acceptable methods for particular species are defined in Schedule 1 of the Animals (Scientific Procedures) Act 1986 (HMSO, 1997). Death of the animals must be confirmed before their bodies are disposed of. A veterinary surgeon should be consulted for advice on up to date methods of euthanasia that are appropriate for species not listed in Schedule 1. For information on euthanasia methods see AVMA (2000), and Close et al. (1996, 1997).

9. Animals in Psychology Teaching

Animals may be used in psychology teaching at a variety of levels, primarily at university level. At every level where animals are used, the ethical issues should be discussed with the relevant teaching group. Students should be encouraged to form their own ethical assessments and must not be required to carry out any experimental manipulation that they, individually, judge to be inappropriate. It is the responsibility of teachers to ensure that students are trained and competent to carry out whatever is required of them.

At secondary school and undergraduate level, it may be appropriate to include some work involving live animals, although the use of animals for demonstrations of known facts using regulated procedures is prohibited. There may be some occasions on which students may use animals individually for learning purposes in ways

that are not covered by this legislation, but these by definition will not involve procedures believed to cause any harmful consequence. Observation of animals in their natural habitat may be encouraged provided that neither the animals nor the habitat are manipulated. The use of film and video brings valuable opportunities for the observation of formal manipulative studies.

Students who have career aspirations in professional psychology may have a special interest in animal psychology. They may wish to carry out final year experimental projects involving animals. If such projects may involve pain or suffering, they are only legally permissible if they form part of an ongoing programme of research, and where the study would otherwise have been conducted by the supervisor or his/her research team as work approved under an existing *Project Licence*. It is a legal requirement that any regulated procedures required by such projects will normally be performed by a *Personal Licence* holder although some simple tasks, such as the removal of food for temporary deprivation, may be delegated provided they are closely supervised by a *Personal Licence* holder. However, delegation must be explicitly permitted on the *Personal Licence* of the person who asks others to perform such tasks.

At the postgraduate or advanced undergraduate level, any student wishing to perform regulated procedures with animals must hold a *Personal Licence*. Home Office-accredited training courses must be passed as a pre-requisite to obtaining a licence. Additional courses, such as the BAP Pre-clinical Training Course (see Appendix 1: BAP website), are also recommended.

10. The Use of Animals for Therapeutic Purposes

A variety of animal species may be used by psychologists as aides or adjuncts to therapy. An example of this is the use of pet dogs as ‘co-therapists’ in the clinical setting, either through direct contact and interaction with the client or patient, or simply by their presence

in the consulting room during a therapy session. Other examples include horse riding for disabled children, companion animal visiting schemes in hospitals or hospices, and pet keeping schemes within prison rehabilitation programmes. Animals, such as snakes and spiders, are sometimes used in behaviour therapy for the treatment of specific phobias.

In all these cases, considerations concerning the general care and welfare of therapeutic animals are similar to those outlined for experimental animals. In addition, however, a number of specific considerations can be noted. The individual temperament and training of such animals should be appropriate for the planned task (e.g. a hospital visiting dog should be calm, placid and sociable with people) and should, therefore, be assessed carefully prior to use. Care should also be taken that contact between the therapeutic animal and client/patient is monitored at all times. Therapeutic interactions, especially with children, can be very demanding and tiring for an animal. Animals should, therefore, have the opportunity to retreat from stressful situations or interactions, should they arise.

Although such use of animals will not, in general, require a specific license, it is covered by the broad provisions of the Animal Welfare Act (2006). Psychologists involved in such treatment programmes should ensure that they are familiar with the legislation.

11. Clinical Assessment and Treatment of Animal Behaviour

A small number of psychologists work with animals whose behaviour is disordered or problematic in some way. The methods that may be employed are beyond the scope of these guidelines. The Society has collaborated with the Association for the Study of Animal Behaviour (ASAB) in devising an accreditation scheme for those working in this area. The scheme is administered by ASAB and details can be found on their website (see Appendix 1). The website also includes contact details for accredited clinical animal behaviour practitioners.

Members of the Society whose professional practice in other areas brings to light examples of disordered animal behaviour that may require specialist treatment are strongly encouraged to refer the case to a practitioner accredited in this way. An equivalent scheme operates in the US and also accredits individuals on a worldwide basis (Appendix 1: ABS website).

12. Obtaining Further Information

There are a number of organisations that provide publications and detailed information about the care and use of animals. The Universities Federation for Animal Welfare (UFAW) is particularly relevant to British psychologists, and has produced a *Handbook on the Care and Management of Laboratory Animals* (Poole 1987). The National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs) provides an increasingly important focus for UK efforts to enhance the welfare of laboratory animals. Both organisations have excellent websites (Appendix 1). The website of the Office of Laboratory Animal Welfare (Appendix 1: OLAW website) provides a comprehensive series of links to relevant US bodies.

Psychologists working with animals should also inform themselves about the debate on the desirability of animal research. The opposing arguments are presented by the Royal Society for the Protection of Animals (RSPCA), the Laboratory Animal Science Association (LASA), the British Union for the Abolition of Vivisection (BUAV), Understanding Animal Research (UAR) and the Fund for the Replacement of Animals in Medical Experiments (FRAME). These organisations all have useful websites (see Appendix 1). Relevant books include DeGrazia (1996), Dawkins (1993) and Ryder (2000).

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Appendix 1:

Websites for additional reference

A. Governmental sources of information concerning legislation

- In the UK, the **Home Office** is responsible for legislation in the field of animal welfare. The Home Office website contains the full text of the legislation, associated guidance and much other material of relevance to this area.
www.homeoffice.gov.uk/science-research/animal-research (June, 2011) is the link to this material. A Google search with the terms ‘animals home office’ should bring up the current link if this fails.
- Within the EU, **Council Directive 86/609/EEC** (24 November, 1986) provides the original framework expected of legislation in individual members states of the European Union.
http://ec.europa.eu/environment/chemicals/lab_animals/home_en.htm includes links to all EU directives on laboratory animals. Council Directive Directive 2010/63/EU (22 September, 2010), has updated the original Directive and at present (January, 2012) is in the process of being implemented into the relevant legislation of EU member states.
- In the US, the **Office of Laboratory Animal Welfare (OLAW)**, a part of the National Institutes of Health, provides a comprehensive guide to American regulation in this area and can be found at: **<http://grants.nih.gov/grants/olaw/olaw.htm>**

B. UK non-governmental sources of information on welfare-related issues

- The **Animal Welfare Institute** is a US charity with a particular interest in laboratory animals and is at: **www.awionline.org/**
- The **Boyd Group** provides a forum in which individuals with very different views in relation to the use of animals can meet and attempt to come to a consensus on specific issues. Recent examples include the use of non-human primates in scientific research and the use animals in cosmetics testing. Their reports are available at: **www.boyd-group.demon.co.uk**

- The **British Union for the Abolition of Vivisection** is one of the oldest established organisations. It is the UK campaigning for a complete ban on experimental work on non-human animals. Its website (www.buav.org/) provides a clear insight into the ‘animal rights’ perspective on the use of animals in research and chemical testing programmes.
- The **Higher Education Academy** supports a large network of learning and teaching practitioners involved in psychology throughout the UK. A particularly useful aspect of the website is the comprehensive listing of resources, including videos and computer programs, that may be useful in the teaching of psychology. www.heacademy.ac.uk/disciplines/psychology
- The **Institute for Laboratory Animal Research** is sponsored by a wide range of American organisations (including the National Institutes of Health) and their website includes recommendations for standards of housing and care. The full text is available at: http://dels.nas.edu/ilar_n/ilarhome/index.shtml
- The **International Union for the Conservation of Nature (IUCN)** is of particular relevance to those working in the field or on endangered species. The IUCN *‘Red Book’* provides definitive information in this area. This material can be found at: www.iucn.org
- The **Laboratory Animals Association** is the professional association for those working at UK centres where laboratory animals are used. Their website is at: www.lasa.co.uk
- The **National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs)** was set up following a House of Lords review of the Animals (Scientific Procedures) Act 1986 to act as a co-ordinating centre for UK research in this area. Its website provides a valuable and growing set of resources in the area of animal welfare and scientific research at: www.nc3rs.org.uk
- **Ratlife.org** is a website devoted to video material of laboratory rats living under semi-natural conditions. It provides an ethologically oriented account of rat behaviour that complements

Stuart Barnett's classic account (Barnett, 1952) and can be found at: www.ratlife.org/

- The **Royal Society for the Protection of Animals** is the best established animal welfare organisation in the UK. It has a specific department dealing with research animals and a series of useful publications including to advice to lay and other non-specialist members of Local Ethical Review Committees. This material can be reached at: www.rspca.org.uk
- **Sniffy the Rat** is a particularly nice example of a simulation that can be used to replace the use of rats in animal learning practicals at undergraduate level. The program runs on both Macintosh and Windows platforms and a demonstration version can be downloaded by following the links at: www.wadsworth.com/psychology_d/special_features/sniffy.html
- **Understanding Animal Research** (formerly the Research Defence Society) is an organisation that supports the responsible use of animals in scientific research and provides a range of relevant resources at: www.understandinganimalresearch.org.uk/homepage
- The **Universities Federation for Animal Welfare (UFAW)** was established 1926 to provide a scientific approach to all aspects of animal welfare, including that relevant to the use of animals of animals in research laboratories. UFAW offers small-scale grant support to tackle such problems. Their website is located at: www.ufaw.org.uk
- The **Wellcome Trust**, as well as being a major funder of medically-related research, also has a policy statement and resources relevant to laboratory animal welfare at: www.wellcome.ac.uk/Education-resources/biomedical-resources/animal-research/index.htm

C. Treatment of disordered animal behaviour

- In the UK, the **Association for the Study of Animal Behaviour (ASAB)** accredits animal behaviour specialists with an expertise in the treatment of disordered behaviour. The Society was involved in drawing up the accreditation scheme. The following link will take you to the appropriate section of the ASAB website:
www.nottingham.ac.uk/~plzasab/accred/index.php
- In the US, **Animal Behavior Associates Inc.** accredits animal behaviour specialists with an expertise in the treatment of disordered behaviour. The following link will take you to an associated website with lists of practitioners:
www.animalbehaviorassociates.com/index.html

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