CERTIFICATE IN ANIMAL WELFARE SCIENCE, ETHICS AND LAW 2010

Please view the general documents to obtain copies of:

Timetable
B.1: Guidance Notes for candidates on general requirements.
G: Role of Advisers to Certificate Candidates.

The following papers are enclosed:

B.2: Specific Guidance Notes for the Certificate. These notes explain what is required in terms of experience and in terms of the content of the Certificate examinations.

C: Syllabus and Commentary for the Certificate.

D: Reading list.

E: Application Forms E.1A, E.2.

E.1A - for specific details of practice

E.1B - Details of Veterinary Centre in which gaining experience

E.2 - for final approval of experience and for permission to submit an entry to the examination

F: List of Advisers - also refer to Lists of Certificate holders in Register of Members.

A copy of the most recent Examination Question Paper is enclosed for your information.

April 2010
THE CERTIFICATE IN ANIMAL WELFARE SCIENCE, ETHICS AND LAW

SPECIFIC GUIDANCE NOTES FOR CANDIDATES
[These notes must be read in conjunction with the B1 General Guidance Notes to Candidates]

MEMBERSHIP OF THE ROYAL COLLEGE OF VETERINARY SURGEONS

1. It is not a requirement of the Animal Welfare Science, Ethics and Law Board that candidates entering for the Certificate are Members of the Royal College of Veterinary Surgeons (MsRCVS), although candidates must hold a registerable qualification.

AIM

2. The Certificate should be attainable by all those with an interest in the three subjects combined with suitable experience in dealing with animals and people. It is acceptable for someone to take the Certificate who has never been involved in traditional general practice apart from seeing practice as an undergraduate (e.g. laboratory animal and zoo veterinarians). Practice experience may also be indirect through laboratory diagnostic work, or through subordinate staff (e.g. DEFRA, DVM's).

EDUCATIONAL OBJECTIVES

3. The objectives of the examination are to ensure that the candidate has achieved the following:

i. gained a thorough understanding of the abnormal physiological and ethological parameters encountered in research into animal welfare. An ability to put forward a comprehensive approach (including clinical evaluation) to the assessment of an animal welfare in any particular situation (i.e. being able to assess an animal's physiological and psychological wellbeing).

ii. obtained an appreciation of a broad range of practical animal welfare problems covering different species and differing uses, particularly those of topical interest; is able to place them in an historical perspective.

iii. developed an ability to debate the ethical perspective of animal welfare problems and to understand the philosophical principles involved; appreciates the variety of ethical stances taken over particular issues and is aware of the unrevealed biases, rhetoric and limitations.

iv. has an understanding of the ethical problems relating to animal welfare (as opposed to veterinary practice etiquette), which can face the veterinary surgeon and is able to distinguish between ethical and legal constraints.

Footnote: 1 A candidate should have seen the major uses of animals (e.g. small animals, intensive farming, laboratory animals, zoos and exotic species, horses and wildlife) and had some contact with or perused the literature of the major interested parties (e.g. animal welfare organisations, anti—vivisectionist charity work, political)
v. is able to recognise welfare, ethical and legal problems when presented and is able to conduct a reasoned and critical analysis from each perspective.

vi. has some working knowledge of the legal system in the UK and Europe as well as the major animal protection laws, relevant to the protection of animals.

4. Candidates are required to augment their understanding of the welfare problems of species with which they are not familiar by visits to intensive husbandry units, abattoirs, experimental animal units etc. and are recommended to spend at least one day at an animal shelter.

5. It is emphasised that, at all stages, candidates are expected to demonstrate a grasp of welfare issues in the full range of species.

6. A candidate should have seen the major uses of animals (e.g. small animals, intensive farming, laboratory animals, zoos and exotic species, horses and wildlife) and had some contact with or perused the literature of the major interested parties (e.g. animal welfare organisations, anti-vivisectionists, charity work, political).

SPECIFIC EXPERIENCE

7. Entry to the examination is restricted to those who have been veterinary graduates for at least two years.

8. Experience offered must have been obtained within the previous five years, or after enrolment, and no period of experience can be offered to meet the requirements for more than one RCVS Certificate/Diploma. Applicants should, preferably, be studying for no more than one qualification at a time.

9. Candidates will be required to have a knowledge of principles of husbandry of all species treated by the veterinary profession and knowledge of general animal 'uses' that cause concern and may need to spend time visiting systems such as intensive farms, laboratory animal holdings, zoos and abattoirs etc., if they do not encounter these in their normal work. Candidates should also spend a period of time amounting or equivalent to at least two years in an appropriate practice or establishment.

Approved Practice Route:

10. See B1 Guidance Notes.

Approved Centre Route:

11. The ‘Approved Centre’ concept does not fit easily for this particular subject, the concept has therefore been adapted to an alternative route to suit the Board’s requirements, where an ‘Approved Tutor(s)’ rather than an ‘Approved Centre’ is considered to be more appropriate.

FINAL APPROVAL OF EXPERIENCE/ADDITIONAL SUBMITTED WORK

12. ALL SUBMITTED WORK, i.e. Case Exposures and Case Reports should be anonymous and will be treated in confidence by the Board Members and Examiners.

13. At the time of application for Final approval of experience, candidates will be required to illustrate welfare problems and their attitude to welfare in not less than 15 and not
more than 20 of a broad range of case exposures to show that they are perceiving ethical and legal dilemmas in the course of their professional experience (including 'seeing practice' for the purposes of the Certificate).

14. The case exposures should cover the BROADEST RANGE of animal care, animal 'use', and species.

15. Candidates should consider providing at least one case from each of the following examples, bearing in mind that within one species there may be more than one use. Some examples of the areas of animal 'use' would include:

a. Farming: Dairy
   Beef
   Sheep
   Pigs
   Poultry
   Deer
   'Exotic' (e.g. Ostrich, Buffalo).

b. Laboratory Animals

c. Zoo or a Circus Animal

d. Companion: Dog
   Cat
   Bird

e. Wild

f. Horses

Format for Case Exposures

16. Case Exposures can be done in any jurisdiction. Candidates must however demonstrate an understanding of UK (and to a lesser extent EU Law). Each case exposure must not consist of more than 500 words under the sub headings listed below, and should be set out as follows.

17. Please provide an index of your case exposures at the front giving the case exposure number, the species and a brief title.

   Case No.
   Date
   Sub-headings:
   Presenting problem
   Underlying cause
   Action taken
   Outcome
   Clinical/Ethical/Welfare/Behavioural Comment.
   Law

18. FOUR typewritten copies of the case exposures should be submitted. These need NOT BE BOUND but should be submitted separately and securely in lightweight plastic folders.
19. Candidates MUST show their case exposures to their advisers prior to submission and indicate that they have done so on their Application Form E.2.

**THE EXAMINATION**

20. The examination is in three Sections:

(a) **THREE** case reports
(b) **TWO** written papers, and
(c) an oral and practical examination.

**SUBMITTED WORK FOR EXAMINATION**

**Number of Cases**

21. Candidates are required to submit **THREE** case reports which should reflect the range of each case to take in all three aspects of the Certificate i.e. (Ethics (professional person to person ethical use and abuse of animals), welfare science and Law. Candidates may submit one or more cases based on work originating overseas. Candidates **must** however be able to provide parallels with the UK system and how it is implemented. Candidates **will** be required to contact a Law adviser.

22. Candidates are required to demonstrate sufficient competence in all three areas of Animal Welfare Science, Ethics and Law over the **THREE** case reports, although case reports which emphasise primarily one of these three aspects is permissible.

23. Sample case reports are available on request.

24. One of the cases may be theoretical **BUT, in addition**, must have a practical starting point and the candidate must have visited a system. For example, a case might be based on the pros and cons of keeping hens in cages, as well as real life cases and **must** follow a visit to see a system e.g. a poultry farm.

**Format**

25. Preparation of each report should follow a clear format. In most cases the report can be structured according to the classic form of a scientific paper.

**Introduction**

- definition of the problem
- analysis - impact on animal welfare
  relevant law, guidelines, welfare codes and ethics

**Methods of investigation**

Observations, actions taken and outcome

**Discussion**

- welfare assessment
- owner's prospective/viewpoint/beliefs
- legal aspects
- alternative investigations which could have been made
- alternative strategies which could have been adopted
Candidates should be aware that they will be required to take account of ethical considerations and ethical conflicts, as well as legal and scientific aspects of animal welfare. Case reports should include references to the body of literature which exists in all these areas.

Summary and conclusions

References
Appendices: e.g. videos (max 15 mins), clinical laboratory data, necropsy reports and law case reports.

26. Candidates should seek advice from their advisers on the preparation of the case reports, but no more than one report, which has received major input from an adviser, may be submitted and such report should be counter-signed to that effect.

27. Published papers may not be submitted as such, although work, which has been the subject of publication, can form the basis for one or more case reports.

28. Three copies must be submitted of each of the THREE case reports. These should not bear the candidate’s name, and should be submitted direct to the RCVS with a covering letter (and a compliments slip inside each set of three reports) by the closing date but under separate cover from the examination entry. Each report should be given a short title and numbered 1, 2, and 3. It is preferable for each set of THREE reports to be submitted using spiral or comb binding. The information contained in case reports should be presented clearly, concisely and accurately, in typed form.

Word Count

29. Each case report MUST NOT EXCEED 3500 words of double-spaced typing EXCLUDING appendices such as references, tables and figures. Candidates must indicate the number of words on the front cover of each case report. Candidates are asked to submit an electronic version of their submitted work together with their hard copy. This will be retained at RCVS unless requested by the examiners for purposes such as checking the word count. The electronic version should be Microsoft Office 2000 or XP compatible and should be submitted on either CD or floppy disc/s. Please ensure that the disks are easily identifiable by placing them in an envelope with your name, and ‘Electronic version of submitted work for Certificate in Animal Welfare Science, Ethics and Law’ marked clearly on the front.

Marks Scheme

30. The THREE case reports will be marked out of 100 marks.
**WRITTEN EXAMINATION**

**Format**

31. There will be TWO x two hour written papers.

   Paper I will consist of 30 short answer questions each lasting 4 minutes

   Paper II will consist of eight essay type questions of which four must be answered each lasting 30 minutes.

   **Candidates are warned that answers should be given specifically and that illegible handwriting may result in examiners being unable to award marks for information which candidates intended to convey.**

32. Candidates should be aware that, as a result of devolution, animal welfare legislation may vary in different parts of the United Kingdom. However, candidates will be required to have a knowledge and understanding of the law in only one of England, Wales, Scotland, or Northern Ireland. The choice of jurisdiction is entirely within the discretion of the candidate, but candidates should indicate in their answers which jurisdiction they are focussing upon.

**Marks Scheme**

33. Each Paper will be marked out of 50 marks.

**ORAL AND PRACTICAL**

**Format**

34. The oral and practical will extend over a maximum of two hours for each candidate.

35. The format of part of this section of the examination is that of an Objective Structured Clinical Evaluation (OSCE). An OSCE is a practical examination in which the candidate moves round from one section to another and is given varying tasks to do which can range from a simulated situation illustrating communication skills (e.g. breaking bad news to an owner) which would be monitored by an examiner hidden behind a screen, to analysis of a video for ethical perspectives or legal implications. They may also be shown slides and asked to comment on them. Slides will depict a welfare, legal or ethical problem.

36. There will also be an oral of a maximum of 30 minutes where candidates will be given a topic in advance, on the day of the examination, to see if they are able to approach a practical problem of assessing welfare as well as discuss some of the legal and ethical issues involved. They will be expected to defend robustly the position they wish to hold.

37. Candidates may be questioned on their case reports.
Marks Scheme

38. The OSCE will be marked out of 50.

39. The Oral will be marked out of 50.

Syllabus, Commentary and Reading List

40. A detailed syllabus and commentary is provided, together with a reading/reference list and list of suitable videos.

41. Prior to entry to the examination, candidates should have explored the literature concerning the scientific aspects of animal welfare and be able to recognise ethical dilemmas and know how to resolve them in order to carry out analysis and consider a course of action.

42. A reading list is provided. However, in view of increased access to the internet, and easy availability of on-line literature searches the Board has agreed that the existing reading list should be frozen in 2002 and that in 2-3 years’ time the list will be withdrawn altogether. In future, candidates will be expected to undertake their own research and encouraged to seek advice on suitable reading matter from their advisers and from the RCVS Library and Information Service.

Advisers

43. Candidates MUST have an adviser.

44. The Board would strongly advise that candidates should approach more than one adviser, so that guidance on all three areas of the Certificate: Welfare Science, Ethics and Law is covered adequately. If the main adviser is a scientist there is no reason that a lawyer or an ethicist can not be approached. Where possible candidates should approach advisers on a geographical basis, to assist candidates when preparing for the examination.

45. Candidates are requested to approach an adviser in advance of their enrolment. The list provided is of non-veterinary surgeons. A list of Certificate and Diploma Holders in Animal Welfare, Science, Ethics and Law, can be found at the back of the RCVS Register of Members. It is up to the candidate to take the initiative and bear any expense involved in contacting their advisers.

46. A Candidate MUST indicate to the Board on their Application Form E.2. that they have shown their case exposures to their advisers prior to submission.

47. All advice for RCVS Certificates and Diplomas is given on a ‘goodwill’ basis by advisers, and there is no provision for payment of a fee/honoraria by the RCVS to advisers.

48. There have been requests by some advisers in Animal Welfare Science, Ethics and Law, who are non-veterinarians, for payment for assisting candidates in the preparation of their submitted work. Any payment for such advice is entirely a matter between a prospective adviser and a Candidate.
49. Candidates should ensure that they copy the current information documents contained within this information Pack for their respective advisers, in particularly, they should ensure that their adviser receives a copy of the requirements on the submitted work (B2) and the Guidance Notes to advisers.

**ATTENDANCE AT SHORT COURSES**

50. Although there is provision in the byelaws to make attendance at courses, or the acquisition of credits, compulsory for those wishing to take the Certificate examination, the Board is **not** at this stage introducing such compulsory requirements.

51. It is hoped that Certificate candidates will attend any relevant short courses which are organised, and such attendance will be monitored when considering candidates' applications for approval of experience. Candidates are also urged to attend as many relevant meetings, symposia, conferences, etc., as possible, during their studies prior to the examination. For details on an entirely independent course which was established to assist candidates in their preparation for this particular Certificate are to be found at the end of this document as Appendix A.

**ABBREVIATION FOR QUALIFICATION**

52. Successful candidates are permitted to use the abbreviation "CertWEL." after their names, in the RCVS Register and Directory, on practice plate, stationery, etc.

**ADDITIONAL INFORMATION**

53. Candidates may wish to use the Library of tapes and videos at the University of Birmingham Medical School - (Contact: Professor D B Morton - telephone No. 0121 414 3616, FAX 0121 414 6979). Videos are also available for viewing at the Cambridge University Department of Clinical Veterinary medicine - (Contact telephone No. 01223 337643).

**MEMBERSHIP OF VETERINARY ASSOCIATIONS/SOCIETIES**

54. The Animal Welfare Science, Ethics and Law Veterinary Association (AWSELVA) has been founded to establish a forum through which veterinarians and non-veterinarians can develop informed views on issues relating to animal welfare science, ethics and law through a multidisciplinary approach.

<table>
<thead>
<tr>
<th>Main functions of AWSELVA</th>
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</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
</tr>
<tr>
<td>• To provide assistance and to run courses for candidates for the RCVS Certificate in Animal Welfare Science, Ethics and Law.</td>
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<tr>
<td>• To develop a programme of continuing professional development (CPD) in animal welfare science, ethics and law through meetings, newsletters and mail shots covering the relevant literature.</td>
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<tr>
<td><strong>Promotion</strong></td>
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<tr>
<td>• To promote contact with and provide informed advice to professional bodies and political bodies (eg RCVS, BVA, PVS, BCVA, BLAVA, UFAW, NFI), the veterinary schools and</td>
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</table>
agricultural colleges, responsible animal welfare associations (eg RSPCA and CIWF) and the
general public on issues of animal welfare, veterinary ethics and the relevant legislation.

**Membership**
The AWSELVA is open to veterinarians and non veterinarians with an interest in the fields of
animal welfare science, ethics and law. Currently the group is too small to qualify as a specialist
branch of the British Veterinary Association (BVA) although this is a longer term goal. At such a
time as this becomes possible all non-veterinarians wishing to continue membership will be
offered associate membership.

Members of AWSELVA will receive notification of all meetings, reduced registration fees for
those meetings and copies of all newsletters and mail shots issued by the Association.

(AWELSVA details continued)

**Membership fee**
A Membership fee is payable annually to the Treasurer renewable on the 1st of January each
year.

**Officers of AWSELVA**

- Chairman and Meetings Coordinator: Professor John Webster
- Senior Vice Chairman: Professor David Morton
- Secretary: Greg Dixon
- Treasurer: Steve Wotton
- Liaison Officer and Newsletter Editor: Sue Haslam

I wish to enrol as a member of AWSELVA.

Name and Address (for all correspondence) BLOCK CAPITALS PLEASE

Telephone: 

Fax: 

Signed: 

Send to:

AWSELVA C/o Mr Steven Wotton, DFAS, Department of Veterinary Clinical Science, University
of Bristol. Langford, Bristol, BS40 5DU
Email: Steve.Wotton@bristol.ac.uk

CERTIFICATE IN ANIMAL WELFARE SCIENCE, ETHICS AND LAW

COMMENTARY

Animal Welfare Science is a rapidly advancing discipline and all veterinary schools in the UK now teach it either as a specific subject or integrated within other disciplines. Candidates who are not recent graduates may not have received instruction in this subject and would be expected to undertake sufficient background reading in order to gain the knowledge normally provided in such a course. The Certificate in Animal Welfare Science, Ethics and Law aims to develop the ability to reason and argue coherently from a practical as well as a theoretical standpoint and to liaise with Specialists as and when appropriate.

It is assumed that all candidates for the Certificate will follow a broad syllabus regardless of their background e.g. in farm animals, companion animals, laboratory animals or other. This should ensure an all round understanding of the philosophy and practice of Animal Welfare Science, Ethics and Law. Case Exposures and Case Reports related to the applicant's usual field of work will be required in addition to this basic course. The items marked with asterisks (*) should be studied in detail and a more superficial understanding of other topics will be sufficient.

SYLLABUS

1. Introduction to Animal Welfare Science

*Concepts of animal welfare, wellbeing, suffering, happiness etc.
The roots of science (philosophical and empirical): some limitations of a scientific approach.
*Scientific approaches to animal welfare, their use in assessment and their limitations.
*The issue of animal rights.
*Animal needs - eg. the "Five Freedoms".
*The 3 Rs as applied practically to animal use.
Public understanding of science.

2. Ethics of Animal Use

*The philosophical concepts involved in animal use eg. assigning rights to animals.
Cultural and religious perspectives of animal use.
*Ethical views of humans towards animal welfare, public attitudes and values.
*The moral obligation of man towards animals and its changing status.
*Ethical dilemmas arising from conflict between human and animal interests, (eg. the economics of food production, the use of laboratory animals). Xenograft donors.
*Practical ethical frameworks for harm/benefit analyses (consequentialist and non-consequentialist approaches).

Comparison with ethical frameworks in other disciplines (eg. healthcare, business, ethics).
Emerging fields of animal welfare concern and their analysis (eg. transgenic animals, artificial breeding).
Patenting and copyrighting of transgenic animals.

3. Physiological and Psychological Aspects of Adverse States

a. Behaviour

*Methods of studying behaviour and communication in animals.
Physiological and neurological bases of behaviour and responses to adverse stimuli.
*Social behaviour, including parental care, dominance hierarchies, altruism, imprinting.
Environmental, genetic and evolutionary aspects of behaviour and their susceptibility to manipulation.
Reproductive behaviour in relation to welfare.
Exploratory and learning behaviour.
Escape behaviour and avoidance of predators.
*Abnormal behaviour related to housing or husbandry.
*Behavioural problems in companion animals and their treatment.
*Motivation, self-awareness, self-consciousness and cognition in animals.
Breeding for temperament.
*Animal senses and their potential importance in the assessment of welfare.

b. Relationship between Health and Welfare

*Animal suffering, wellbeing and happiness as influenced by freedom from disease (or its prevention).
*Stress and its scientific evaluation.
*The relationships between disease and welfare, eg. lameness in cattle, leg weakness in broilers, tail-biting in pigs.
Effects of genetics and DNA manipulation upon animal health.

4. Animal Environments

*Understanding of environmental factors affecting welfare eg. pen design, stocking density, safety aspects, building design (e.g. temperature, humidity, airflows, lighting, noise, odours).
*Problems associated with barren and enriched environments.
*Problems associated with social groupings or isolation.
*Problems associated with cleaning and other husbandry procedures.
*Methods of assessing and improving environments.
5. Consideration of the Veterinary Profession's Role in Animal Welfare

The State Veterinary Service.
Private practice.
The Named Veterinary Surgeon (experimental animals).
Potential for influencing legislation and government policy.
Interactions with animal welfare organisations.
*The veterinary surgeon as expert witness in animal welfare cases.
Guidelines on the ethics of animal protection.

6. Veterinary Aspects of Welfare

*Financial pressures in intensive and extensive systems.
*Pain recognition and assessment.
The pharmacology of pain relief.
The use of sedatives, narcoleptics and anxiolytics.
*Methods of euthanasia and their assessment for humaneness.
*Assessment of adverse effects on animals associated with routine procedures such as castration and tail docking.
Communication skills with clients in difficult situations eg. euthanasia, negligence, cruelty, ethical practice.

7. Specific Welfare Problems

*Farm animals eg. transport and slaughter, casualty animals, lameness.
*Companion animals including horses eg. neglect, inappropriate handling, feral animals.
*Laboratory animals eg. caging, stress associated with experimentation, use of alternatives, regulatory and commercial requirements.
Zoo animals e.g. unsuitable confinement/husbandry, conservation issues.
Wildlife eg. methods of pest control, conservation, competing interests, release into the wild.
Utility animals eg. animals used in racing, hunting, working, assistance dogs, primates for paraplegics, show animals and their breeding.
Xenograft donors.

8. Legislation Affecting Animal Welfare

The basic legal systems in the UK and their relationships in Europe.
*Animals (Scientific Procedures) Act 1986.
*CITES and related controls on trade in wildlife.
Patenting of animals.
*Animals Act 1971.
Various other acts relating to animal welfare, national (Scotland and N. Ireland) European and worldwide perspectives.
*Transport legislation and other guidelines (eg. IATA).
9. Human-animal Relationships

*Influence of culture and socio-economic backgrounds.
Changes in attitudes to animals associated with urbanisation.
The role of the media in influencing public attitudes.
*Humans and companion animals.
*The selection and training of animal attendants, animal technicians and stockmen.

Business interests and their effects on animal welfare.
The use of animals in education.
Psychological and psychiatric perspectives in humans and their treatment of animals.
Human attitudes and animal productivity.
The use of animals in the treatment of human disease and rehabilitation.
Xenografts: recipient sensitivities.

Originated February 1994
Revised October 1994
Revised May 1996
CERTIFICATE IN ANIMAL WELFARE SCIENCE, ETHICS AND LAW

Candidates should note that the reading list for Animal Welfare Science, Ethics and Law was frozen in 2002 and will eventually be withdrawn. Candidates are expected to research the literature for themselves and are recommended to make use of the RCVS Library and Information Service for this purpose (http://www.rcvslibrary.org.uk, e-mail - library@rcvs.org.uk or telephone 020 7222 2021). Candidates should also seek advice on suitable reading matter from their advisers.

READING LIST

1. Animal Welfare Science - Core Reading


Farm Animal Welfare Council (FAWC) Reports - All


All publications from FAWC are constantly added to therefore, candidates should ensure that they have a complete up-to-date set which can be obtained from: FAWC, 1A Page Street, SW1P 4PQ or Mr M Mulbocus on 0207 904 6535

HMSO: Code of Practice for the housing and care of animals in designated breeding and supplying establishments. HMSO London

MAFF. Codes of recommendations for the welfare of livestock. Sheep, cattle, pigs, domestic fowls etc. London: MAFF publications. 1990


Animal Welfare Science - Additional Sources of Reference


Kestin, S.C. Su, G. & Sorensen, P. Different broiler crosses have different susceptibilities to leg weakness in broiler chickens. Poultry Sci. 78:1085-1090 1999


2. Ethics - Core Reading


Food Ethics Council Publications; Drugs use in farm animals. Nottingham Tel. 01636 812622


Ethics - Additional Sources of Reference


Ethics and legal aspects of treatment and rehabilitation of wild animal casualties British Wildlife Rehabilitation Council 1989


3. Law - Core Reading


**Law - Additional Sources of Reference**


Cooper, M. E.  Birds, exotic animals and the law. Seminars in Avian and Exotic Pet Medicine 7: No 4:166-175 1998


Meat Hygiene Service – Manual and Videos (ONLY available from course)

**Useful journals for current literature**

Animal Welfare
Applied Animal Behaviour Science
Laboratory Animals
New Scientist
Research in Veterinary Science
Veterinary Record

**Information Resources (eg databases for literature searches)**

Animal Welfare Information Centre
National Agricultural Library (AWIC)
10301, Baltimore Blvd., Room 05
Beltsville, MD 0705
301 504 612 Fax 301 504 5472
Animal Welfare Institute
PO Box 3650
Washington DC 0007
20 337 233 Fax; 02 338 9478
Applied Research Ethics
National Assoc. (ARENA)
13 Boylston Street - 4th Floor
Boston, MA 02116
518 44 3510 Fax; 518 44 3560

Center for Animals in Public Policy
Tufts University
200 Westboro Road
North Grafton, MA 01535
508 839 5302 Fax 508 839 953

The Hastings Center
255 Elm Road
Briarcliff Manor
NY 10510
914 762 8500 Fax 914 762 2124

National Institute of Health
National Library of Medicine
Bethesda, MD 20894
301 496 3147 Fax 301 480 3537

Scientists Center for Animal Welfare (SCAW)
4805 St Elmo Avenue
Bethesda, MD 20814
301 654 6390

University of California Alternatives in Education, Research & Testing
(UCALERT)
UC Center for Animal Alternatives,
University of California,
Davis School of Veterinary Medicine.

Web Sites and Addresses

RSPCA: international@rspca.org.uk
http://www.rspca.org.uk
DEFRA: http://www.defra.gov.uk/animalh/welfare

Updated Nov 2002 and then frozen
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<th>Number</th>
<th>Title</th>
<th>Length</th>
<th>Comments</th>
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<tbody>
<tr>
<td>62</td>
<td>Royal Yolk (British Egg Industry Council)</td>
<td>c.15</td>
<td>First aimed at children</td>
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<tr>
<td></td>
<td>Sentenced for Life (Chickens' Lib)</td>
<td>c.15</td>
<td>Different biased views on the poultry industry.</td>
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<td></td>
<td>Chicken for Dinner (Chickens' Lib)</td>
<td>c.15</td>
<td></td>
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<td>63</td>
<td>Horizon - farm animal behaviour (BBC)</td>
<td>45</td>
<td>Basic data (1983)</td>
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<tr>
<td></td>
<td>Farming Diary - pigs (Anglia)</td>
<td>c.20</td>
<td>For farmers 1987</td>
</tr>
<tr>
<td></td>
<td>Farming Diary - hens (Anglia)</td>
<td>c.15</td>
<td>For farmers 1989</td>
</tr>
<tr>
<td>65</td>
<td>Environmental enrichment (UFAW)</td>
<td>c.20</td>
<td>Zoo animals etc a bit unscientific in places</td>
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<tr>
<td>20</td>
<td>Humane slaughter (HSA)</td>
<td>c.15</td>
<td>Practical guide</td>
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<td>76</td>
<td>Farm Animal Welfare (FAW CDEFRA)</td>
<td>17</td>
<td>FAWC</td>
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<td>74</td>
<td>Free Range Pigs (Danish)</td>
<td>34</td>
<td>Report on scientific studies with comment</td>
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<td>73</td>
<td>Caring for Horses and Ponies Part I (UVCE)</td>
<td>26</td>
<td>For children and first time buyer.</td>
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<tr>
<td>77</td>
<td>Fur Factories (Lynx)</td>
<td>16</td>
<td>Propaganda but with facts</td>
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<tr>
<td>75</td>
<td>First Sight (BBC)</td>
<td>c.15</td>
<td>Zoos 1991</td>
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MORE ANIMAL WELFAREVIDEOS

A Kind Goodbye. SCAS

Man’s Best Friend? World in Action

Over the sea to die. First Sight.

Horse export. A Matter of Fact.

To market to market. Council of Justice to Animals and Humane Slaughter Association

The road to misery. CWF

Lameness in farm animals. DEFRA

Canine behaviour therapy. R. Mugford and J. Bower

Farm Fires (MAFF)

Condition Scoring in Sheep (MAFF) (to be completed in early 1995)

A Dignified Exit - 1992 (Handling of slaughter pigs) Danish Meat Research Institute

A Few Pennies More - 1994 (CIWF)

Heat Stress in Farm Animals (Solving the Problem) 1993 (DEFRA)
CERTIFICATE IN ANIMAL WELFARE SCIENCE, ETHICS AND LAW

Details of the establishment in which experience is being gained over at least two calendar years to meet the requirements of the byelaws for the Certificate in Animal Welfare Science, Ethics and Law:

(If more than one establishment, please photocopy this form and complete in respect of each such establishment)

1. Name of employment establishment and address

2. Date of commencement of employment

   (and date of leaving if you are no longer employed at this address: )

3. Details of the type of establishment and, if appropriate, numbers of veterinary surgeons usually working in your place of employment

4. Please give a description of your work and state why you wish to enter for this Certificate:
Candidates are requested to present their experience under the following headings (not necessarily in this format). In addition please enclose photocopies of your RCVS CPD Record Cards covering the period of experience that you are offering for the Certificate.

This section must be discussed and agreed with the candidate's advisor prior to submission.

Animal welfare experience:

<table>
<thead>
<tr>
<th></th>
<th>Science</th>
<th>Ethics</th>
<th>Law</th>
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<tr>
<td>Attendance at courses</td>
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<td>Practical experience</td>
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<td>Training programme to gain the additional experience required</td>
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<td>Other</td>
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Name: ______________________________________

Signature: ______________________________________

Date: __________________________
TO BE COMPLETED BY CANDIDATE'S ADVISER:

I confirm that I have agreed to act as this Candidate's Adviser.

Name:___________________________________________________________________

Signature:________________________________________________________________

Date:____________________________________________________________________

PLEASE SUBMIT THE ORIGINAL FORM PLUS 4 COPIES
CERTIFICATE IN ANIMAL WELFARE SCIENCE, ETHICS AND LAW

Application for FINAL approval of experience and for permission to submit an entry to the next examination

N.B. This form must be completed and returned to the RCVS, Belgravia House, 62-64 Horseferry Road, London SW1P 2AF by 1 November prior to the examination which you wish to enter. NO LATE APPLICATIONS WILL BE ACCEPTED.

1. **TITLE** (block letters) ________________________________

2. **NAME** in full (block letters) ________________________________

3. **DEGREES/DIPLOMAS/CERTIFICATES** in abbrev.form

4. **ADDRESS** for all correspondence (block letters)

5. **TELEPHONE NO(s) for contact during day** ________________________________

6. **FAX No:** ________________________________

   **EMAIL:** ________________________________

7. **DATE OF ENROLMENT**

   ________________________________ (M O N T H/ Y E A R)

8. **PERIODS OF EXPERIENCE BEING OFFERED** to meet the requirements of the byelaws

<table>
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<tr>
<th>Establishment (name and address)</th>
<th>Period of employment (from/to)</th>
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If there has been any change in the work-load of the establishment, or in your personal work-load, since you applied for enrolment, please give details below:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

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9. **OTHER POSTGRADUATE STUDIES**
   During the period of experience being offered, have you been or are you studying for any other postgraduate qualification? YES / NO
   If yes, please give brief details:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

10. **I HEREBY APPLY FOR FINAL APPROVAL OF EXPERIENCE AND FOR PERMISSION TO SUBMIT AN ENTRY TO THE NEXT CERTIFICATE EXAMINATION IN ANIMAL WELFARE SCIENCE, ETHICS AND LAW.**
   I certify that the period of experience being offered has not been/is not being offered to meet the requirements of the byelaws for any other RCVS Certificate or Diploma.

________________________________________________________________________

________________________________________________________________________

11. **CONFIRMATION OF INTENT TO SIT THE EXAMINATION**
   If approval of experience is granted, I do / do not (delete as appropriate) intend to submit an entry to the next examination.

________________________________________________________________________

12. **FOUR COPIES OF MY CASE EXPOSURES FOR APPROVAL BY THE BOARD ARE ATTACHED.**

Signature ___________________________ Date _____________

**PLEASE SUBMIT THE ORIGINAL FORM PLUS 4 COPIES**
THE FOLLOWING SECTION SHOULD BE COMPLETED BY YOUR ADVISER.

I confirm that I am acting as this candidate's Adviser and that I have seen and advised on the Case Exposures being submitted for approval.

Name

Signature          Date

If candidates have made changes to the information presented on form E1A an update should be presented at this time.
RCVS CERTIFICATE AND DIPLOMA IN ANIMAL WELFARE SCIENCE, ETHICS AND LAW

[For Certificate, Diploma holders and Specialists, please refer to the lists published in Section 3 of the RCVS Register of Members]

SUGGESTED LIST OF ACAD EMIC ADVISERS (non veterinarians)

It is advisable for a Candidate to approach an Adviser in each of the three areas of animal welfare science, ethics and law. However, where an RCVS Diplomate is acting as a Candidate’s Adviser, it is unnecessary for a Candidate to have three Advisers in each of the separate areas of animal welfare science, ethics and law.

It is for the candidate to approach an Adviser to seek their agreement to act and to travel to meet them, if necessary.

<table>
<thead>
<tr>
<th>NAME</th>
<th>ADDRESS</th>
<th>TELEPHONE/FAX</th>
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<tbody>
<tr>
<td>Dr Harry Bradshaw</td>
<td>University of Cambridge Veterinary School</td>
<td>TEL: 01223 330885 FAX: 01223 330886</td>
<td>Animal Welfare Science</td>
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<tr>
<td>Prof. Don Broom</td>
<td>University of Cambridge Veterinary School</td>
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<td>Animal Welfare Science</td>
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<tr>
<td>Dr J Cooper</td>
<td>Animal Science Dept. De Montford University</td>
<td>TEL: 01400 272 275602</td>
<td>Animal Welfare Science</td>
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<td>Caythorpe Court</td>
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<tr>
<td>Dr Mike Gentle</td>
<td>Roslin Institute Midlothian</td>
<td>TEL: 0131 527 4200 FAX: 0131 440 2726</td>
<td>Animal Welfare Science</td>
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<tr>
<td>Dr Alison Hanlon</td>
<td>Faculty of Veterinary Medicine University College Dublin Belfield Dublin 4 Ireland</td>
<td>TEL: +353 1 7166249 FAX: +353 1 7166253</td>
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<tr>
<td>Dr Steve Kestin</td>
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<td>TEL: 0117 928 9313</td>
<td>Animal Welfare Science Particular interest: Broilers, Fish and Wild Animal Welfare</td>
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<tr>
<td>Dr Jeremy Marchant</td>
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<td>TEL: 01400 272521</td>
<td>Animal Welfare Science</td>
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<tr>
<td>Dr Michael Mendl</td>
<td>University of Bristol Langford House Langford Bristol BS40 5DU</td>
<td>TEL: 0117 928 7679</td>
<td>Animal Welfare Science will only be able to advise one Dip. candidate at a time.</td>
</tr>
<tr>
<td>Dr Daniel Mills</td>
<td>School of Agriculture and Horticulture Caythorpe Court Caythorpe Grantham Lincs NG32 3EP</td>
<td>TEL: 01400 275629</td>
<td>Animal Welfare Science</td>
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<tr>
<td>Professor Christine Nicol</td>
<td>University of Bristol&lt;br&gt;Dept. of Animal Husbandry&lt;br&gt;Langford House&lt;br&gt;Langford&lt;br&gt;Bristol&lt;br&gt;BS40 5DU</td>
<td>TEL: 0117 928 9473</td>
<td>Animal Welfare Science&lt;br&gt;will only advise one Dip. cand. at a time</td>
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<tr>
<td>Dr Natalie Waran</td>
<td>Institute of Ecology &amp; Res. Man.&lt;br&gt;University of Edinburgh&lt;br&gt;School of Agriculture Bldg.&lt;br&gt;West Mains Road&lt;br&gt;Edinburgh&lt;br&gt;EH9 3JG</td>
<td>TEL: 0131 667 1041&lt;br&gt;FAX: 0131 667 2601</td>
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<td>TEL: 01582 831818</td>
<td>Animal Welfare Science &amp; Ethics</td>
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<tr>
<td>Dr R Ashcroft</td>
<td>Imperial College School of Medicine Dept. Primary Health Care &amp; Gen. practice Norfolk Place London NW2 1PG</td>
<td>TEL: 020 7 594 3369 e-mail: <a href="mailto:r.ashcroft@ic.ac.uk">r.ashcroft@ic.ac.uk</a></td>
<td>Ethics</td>
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<tr>
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<td>TEL: 0121 414 3616</td>
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<td>Dr Jennifer Jackson</td>
<td>University of Leeds Dept. of Philosophy Leeds LS2 9JT</td>
<td>TEL: 0113 233 3280 FAX: 0113 233 3260 e-mail: <a href="mailto:J.C.JACKSON@LEEDS.AC.UK">J.C.JACKSON@LEEDS.AC.UK</a></td>
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<tr>
<td>Dr David Lamb</td>
<td>294 Leigh Road Chandlers Ford Hants SO5 3AU</td>
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<td>The Reverend Giles Legood</td>
<td>The Royal Veterinary College Royal College Street Camden Town London NW1 OUT</td>
<td>TEL: 020 7 468 5000</td>
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<td>Prof. Roy McClelland</td>
<td>Dept. of Mental Health The Whitlea Medical Building 97 Lisburn Road Belfast BT9 7BL</td>
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<td>Dr Kate Rawls</td>
<td>Lancaster University Furness College Lancaster LA1 4YG</td>
<td>TEL: 01524 65201 Ext. 2500</td>
<td>Ethics</td>
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<tr>
<td>Rev. Bryan Vernon</td>
<td>University of Newcastle Dept. of Primary Care Medical School NE2 4HH</td>
<td>TEL: 0191 222 8954</td>
<td>Ethics</td>
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<tr>
<td>Dr Marie Fox</td>
<td>Dept. Law University of Manchester Oxford Road Manchester M13 9PL</td>
<td>TEL: 0161 275 3570  FAX: 0161 275 3579 email: <a href="mailto:Marie.Fox@man.ac.uk">Marie.Fox@man.ac.uk</a></td>
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<tr>
<td>Dr Mike Radford</td>
<td>School of Law Taylor Building University of Aberdeen Old Aberdeen AB24 3UB</td>
<td>TEL: Direct line: 01224 272416 email: <a href="mailto:m.radford@abdn.ac.uk">m.radford@abdn.ac.uk</a></td>
<td>LAW</td>
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April 2008
1. **Briefly outline** what you understand by:
   (a) cognition
   (b) mood

   in relation to animals.

2. **Briefly outline** the welfare consequences for cattle of religious slaughter.

3. **List** the main welfare issues related to the sale of animals through markets.

4. **Briefly outline** how the ‘elasticity of demand’ can help us understand animal preferences.

5. **List** the **advantages and disadvantages** of using slatted housing systems for overwintering cattle.

6. What do you understand by the term ‘speciesism’?

7. You have recently attended a training course on a new surgical technique. Apply the four principles of medical ethics to your decision to offer this surgery to your clients.

8. **Briefly outline** the ethical issues which must be discussed during an Ethical Review Process looking at the use of primates for research into treatment of Alzheimer’s disease.
9. **List THREE** similarities and **THREE** differences between a veterinary surgeon and

(a) a paediatrician and  
(b) a car mechanic.

10. **Briefly outline** what you understand by the term ‘moral rights’ in relation to animals.

11. **Define** the following in relation to the Animals (Scientific Procedures) Act 1986:

(a) a regulated procedure  
(b) a personal licence  
(c) a designated establishment.

12. In what ways may a person commit an offence in relation to dog fighting?

13. What European Union legislation governs the transport of animals? How does it define what animals are considered unfit for travel?

14. Who enforces legislation relating to animal welfare in England?

15. **Briefly outline** the provisions of the Dangerous Dogs Act 1991 and any subsequent amendments. **List** the main limitations of the Act.

16. **Briefly describe** the anatomical and physiological properties which allow us to determine that animals can feel pain.

17. **Briefly describe** how the ‘enriched cage’ improves the welfare of laying hens.

18. How might an aggressive temperament in a dog affect its welfare?

19. **List THREE** qualities of manipulable materials that pigs prefer and give an example for **each** quality.

20. **Briefly outline** the design of an experiment to determine the effect of pre-weaning handling on the mothering ability of rats.

21. Apply the 3 R’s to the issue of dehorning in cattle.

**P.T.O. for Questions 22 - 30**
22. **List** the most pertinent information you would want to know in order to decide whether to eradicate hedgehogs from an inhabited island where they are eating the eggs of seabirds.

23. **What do you understand by the term** ‘telos’? Give **ONE** common example where respect for ‘telos’ is not followed.

24. **Outline** the main options available to a small animal vet in a case where an animal is suffering pain and the owners cannot afford curative treatment.

25. **Give an example** of a deontological approach that may be used to govern the treatment of injured wild animals. How might this differ from a utilitarian approach?

26. **List THREE** ways that one may be able to influence the legislative process.

27. **Give an example** of a Farm Assurance scheme. **Briefly describe** the assurances it provides.


29. **How does the Animal Welfare Act (2006)** define what may constitute unnecessary suffering?

30. **Briefly outline** how the General Agreement on Tariffs and Trade (GATT) affects animal welfare?
THE ROYAL COLLEGE OF VETERINARY SURGEONS

CERTIFICATE IN ANIMAL WELFARE SCIENCE,
ETHICS AND LAW

TUESDAY 21 JULY 2009

PAPER II

(2 hours)

Candidates are required to answer FOUR of the following EIGHT questions from the following three Sections A, B and C – at least ONE question must be answered from each Section.

Allow 30 minutes per question.

Illegible handwriting or failure to answer the question in the form requested may result in examiners being unable to award marks for information which candidates intended to convey.

_________________________________________________________________________

SECTION A: ANIMAL WELFARE SCIENCE
(At least ONE question must be answered from this Section)

1. The People's Dispensary for Sick Animals (PDSA) has a gold medal award for animal gallantry and devotion to duty, it is ‘the highest honour for outstanding animal bravery and exceptional dedication in civilian life’. To date all the award winners have been dogs. Discuss the concept of bravery in dogs. With particular reference to their welfare, is working or assisting good for dogs?

2. Discuss the role of genetics and the environment in the welfare of:
   
   either
   
   (a) chickens kept for meat and egg production

   or

   (b) cattle kept for milk and meat production.

3. Describe the information you require, and how this could be acquired experimentally, to determine the welfare significance of bursae in pigs.

4. Describe the welfare implications of the production and use of genetically modified (GM) mice.

P.T.O for SECTION (B) ETHICS
SECTION B: ETHICS
(At least ONE question must be answered from this Section)

5. **Discuss** why wearing a leather coat might be socially acceptable but not a fur one. Do you consider either to be morally justifiable?

6. Recently, there have been the first elephants performing at a circus in the United Kingdom for many years. Do you believe it is right for animals to perform circus tricks? **Discuss**, with the use of an(y) appropriate ethical framework(s), your reasoning.

SECTION C: LAW
(At least ONE question must be answered from this Section)

7. Traditionally, professions in the United Kingdom, including the veterinary profession, are self-regulating. What do you see as the **advantages or disadvantages** of this situation? **Discuss** the role and responsibilities of the Royal College of Veterinary Surgeons.

8. **Design** an information sheet to be given out with newly purchased pets outlining a pet keeper’s responsibilities under the Animal Welfare Act (2006).

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