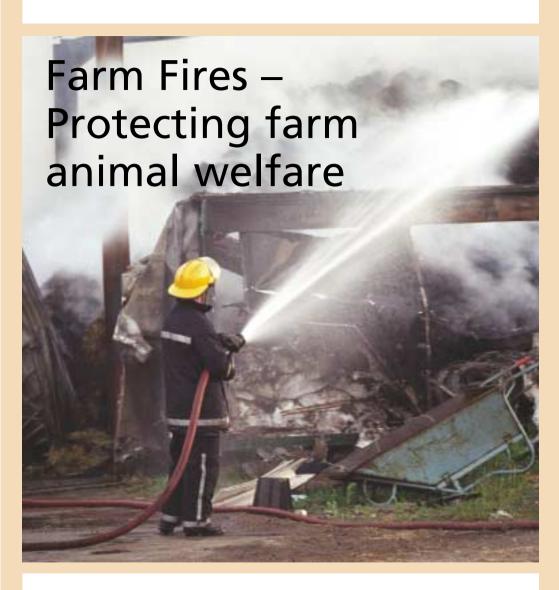
# www.defra.gov.uk







#### Introduction

- 1. All farms are at risk of fire and each year there are over one thousand fires in agricultural buildings, many of them housing livestock. Most fires on farms can be prevented provided farmers and stockpersons are sufficiently aware of potential fire hazards and alert enough to recognise and remedy any hazards which do occur. This booklet examines the fire dangers which are commonly found on farms and identifies simple ways in which risks can be reduced by taking sensible measures. Although principally concerned with farm animal welfare, such measures are equally important to human safety.
- 2. A video, *Farm Fires*, takes a look at the dangers that are commonly found on farms and points out simple ways in which risks can be reduced by taking sensible precautions.
- 3. There are many organisations which are willing to offer farmers constructive advice on fire safety, ranging from such issues as fire prevention and the training of staff for emergency action through to the most up to date standards on building design and the best type of insurance cover to take out. Please remember that when in doubt always consult experts for advice, much of which is available free of charge.
- 4. Names and addresses of organisations and publications from which advice and practical guidance on farm animal welfare and human safety can be obtained, are listed at the back of this booklet.
- 5. The welfare of both staff and animals is the farmer's responsibility. Fire prevention should therefore be part of the daily routine to ensure the safety of workers and livestock and to minimise the risk of injury should fire occur. In the majority of cases fires can be very easily prevented and tragedy avoided so consider your responsibilities very carefully.

### **Fire Safety Management**

- 6. Farmers should develop a fire safety strategy and make advance plans for dealing with fire emergencies. These plans should include all possible measures to:
  - a) reduce the threat of arson;
  - b) control smoking;
  - c) control "hot" work (work associated with welding/blow lamps etc and meat producing equipment);
  - d) maintain machinery;
  - e) ensure the safe burning of rubbish (every effort should be made to dispose of rubbish safely without burning);
  - f) promote good workshop practice;
  - g) ensure safe use and storage of flammable/combustible materials i.e. paper bags;
  - h) ensure that escape routes and passages are kept free from any stored materials or equipment at all times; and
  - j) ensure, in cases where no other staff are employed, that arrangements are made for cover from an experienced stockperson in times of absence

#### 7. Staff training should ensure that:

- a) all staff are fully aware of all the risks;
- b) staff are familiar with the appropriate emergency action including releasing animals, use of fire fighting equipment, raising the alarm and summoning assistance etc; and
- at least one responsible member of the staff should always be available to take the necessary action and co-ordinate the efforts of others in the event of fire.

#### **Advice and Guidance**

- 8. Guidance on the fire protection of farm buildings is available in British Standard 5502 (Code of Practice for Design of Buildings and Structures for Agriculture, Part 23) and should be followed. Free expert advice on fire precautions is also obtainable from:
  - a) fire prevention officers of local fire brigades;
  - b) the Fire Protection Association (FPA); or
  - c) specialist consultants.
- 9. The Department for Environment Food and Rural Affairs (Defra), the Scottish Executive Environment and Rural Affairs Department (SEERAD) and the Welsh Assembly Government (WAG) Department for Environment, Planning & Countryside jointly publish Codes of Recommendation for the Welfare of Livestock, which have been approved by Parliament. In the Codes emphasis is given to the importance of precautions against fire. The booklets are available free of charge from Defra Publications (address listed at the back of this booklet) please specify which ones you want.

### **Design and Construction of Buildings**

- 10. In the design of new buildings or alteration of existing ones there should be provision for:
  - a) easy access and a straight run out to enable livestock to be released and the building evacuated quickly with the minimum of human assistance;
  - b) every building exceeding 30 metres to have at least two doors, one at each end, so that when necessary evacuation can take place as quickly as possible. This provides occupants with an alternative escape should one exit be blocked by fire;
  - c) gates to swing open easily in either direction. All gate openings
    must be well maintained and checked regularly for ease of use.
    Escape may have to be made in the dark, and in an emergency the
    fastenings should be easy to operate;

- d) materials used in construction to have sufficient fire resistance;
- e) doors and other escape routes to be provided to enable emergency procedures to be followed in the event of a fire; and
- f) straw storage to be separated, as far as possible, from livestock accommodation to reduce the risk to stock from fire and smoke.

### **Power Supplies**

- 11. All electrical, gas and oil services should be planned and fitted so that if there is overheating, or flame is generated, the risk of flame spreading to equipment, litter or straw or to the fabric of the building, is minimal. It is strongly recommended to:
  - a) site main power on/off controls outside buildings;
  - b) have a professional electrician fit and regularly check all of the installations on the farms;
  - c) install in each farm building its own protected circuit which can be isolated from the mains supply;
  - d) have installations waterproofed as an extra safety measure;
  - e) protect cables from rodent damage, including with-in conduits; and
  - f) install Residual Current Devices (RCDs) in existing and new circuitry.

### **Automated and Mechanical Equipment**

12. It is a requirement by law that all automated and mechanical equipment essential for the health and well being of the animals shall be inspected at least once a day to check that there is no defect. Any defect must be rectified immediately.

### **Emergency Procedures**

- 13. In case a 999 call has to be made ensure that:
  - a) notices are prominently displayed in and on all livestock buildings stating where the nearest phone is located;

- each phone has fixed by it a notice giving instructions to the fire brigade on how to reach the building, including an Ordnance Survey map reference for both the farm entry and building location; and
- c) the farm name is prominently displayed at the farm entrance.
- 14. An adequate supply of water is essential and can save the fire brigade invaluable time. If a fire hydrant or a natural supply of water is not available or inadequate, then:
  - a) a static tank should be located in a convenient position between 6 metres and 100 metres from the stock buildings;
  - b) it should be covered for safety, kept full of water and clear of debris; and
  - c) a hard access will be necessary to enable the fire engine to get close to the water supply.

#### **Fire Detection**

- 15. Smoke is the major hazard in the event of a fire, causing most animal and human deaths. Ideally a smoke venting system should be installed and, with expert advice, most farm ventilation systems can be adapted to do the same job. Installing a system of heat detectors can help save valuable time if a fire does break out, especially at night.
- 16. Smoke detectors should be considered where practical providing they are not accidentally set off by normal farm routines e.g. littering up of bedded areas.
- 17. In considering the installation of a fire alarm system expert advice should be sought, particularly on the type of alarm that is most suitable and where it should be located.

#### **Insurance Schemes**

18. Apart from bad weather, fire causes more damage to industrial and commercial property than any other hazard, with subsequent disruption to business. The potential loss of revenue following a farm

fire should not be overlooked. Insurance provides compensation to farmers suffering financial loss arising in specified circumstances and can be obtained either directly from an insurance company or through a broker or other intermediary.

19. Insurers base their premiums on different categories of business but if fire hazard for a particular premises is judged to be higher than normal, an additional premium may be charged. In exceptional circumstances, when the hazard risk is too great, cover may only be granted when improvements to reduce the risk have been carried out. The Association of British Insurers (address listed at the back of this booklet) would be happy to offer general advice on insurance matters. Enquiries on whether adequate insurance cover exist in specific circumstances should be addressed to the insurance company, broker or other intermediary concerned.

### **In Summary Remember:**

To ensure that all sensible fire precautions are taken on the farm.

To ensure that all staff are properly trained for emergency action and are aware of where fire fighting equipment is located and how to use it.

That written guidance such as Codes of Practice and British Standards is available and should be followed.

That there are always fire prevention experts available for consultation and advice.

That all new buildings should meet the most up to date standards on fire safety.

That it is important for power services to be installed and regularly maintained by fully qualified and approved operators.

Availability of water supplies and easy access for the fire brigade is essential.

Fit smoke detection equipment as appropriate and consider heat sensor alarms, especially for intensive systems.

Ideally a new smoke ventilation system should be fitted, but failing that most existing systems can be adapted.

Good fire prevention practice can result in lower insurance.

That fitting a fire alarm system (which can be heard and responded to at any time of night or day) could help save both life and property.

To consult the Office of the Deputy Prime Minister for advice on the human safety aspects of fire prevention.

# List of Bodies from which guidance and advice is available

#### **Fire Protection Association**

Bastille Court 2 Paris Garden London SE1 8ND Tel: 02079025300 www.thefpa.co.uk

#### **Health and Safety Executive**

HSE Infoline Caerphilly Business Park Caerphilly CF83 3GG

Tel: 08701 545500

E-mail: hseinformationservices@natbrit.com

### The Fire Brigade

Please contact the Fire Prevention Officer of your local Fire Brigade (address and telephone number in your local telephone directory).

### **Association of Energy Suppliers**

AES Secretariat 30 Millbank London SW1P 4RD

E-mail: enquiries@aes.org.uk

Please contact your local Electricity Supply Company (address and telephone number in your local telephone directory).

#### Association of British Insurers

51 Gresham Street London EC2V 7HQ

Tel: 0207 600 3333 E-mail: info@abi.org.uk

#### Office of the Deputy Prime Minister

Fire Health & Safety Directorate Zone C/18 Portland House Stag Place London SW1F 5LP

Tel: 0207 944 4400 www.odpm.gov.uk

### **Codes of Practice and other Literature**

# British Standards 5502 Code of Practice for Design and Structures for Agriculture (Part 23).

Copies can be obtained from: BSI (Customer Services) 389 Chiswick High Road London

W4 4AI

Tel: 0208 996 9001

**Codes of Recommendation for Welfare of Livestock** (Cattle PB7949, Pigs PB7950, Laying hens PB7274, Meat chickens PB7275, Ducks PB0079, Farmed deer PB0055, Goats PB0081, Rabbits PB0080, Sheep PB5162, Turkeys PB0077).

**Action on Animal Health** (Emergencies on livestock farms PB1147, Heat stress in pigs PB1316, Heat stress in poultry PB1315, Heat stress in sheep PB2111, Guidance on transport of casualty farm animals PB1381).

Copies can be obtained from: Defra Publications Admail 6000 London SW1A 2XX Tel: 0845 955 6000

E-mail: defra@iforcegroup.com

Defra Farm Fires Video price £8.00 + VAT and Defra Lameness in Farm Animals Video price £7.00 + VAT also available from Defra Publications.

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