

FARM FIRE SAFETY GUIDE

Helping to protect
and prevent



Farm Fire Safety Guide

Our aim is to protect and support you, your farm and your family against the danger of fire. Farm fires can be devastating, causing a loss of life and livelihoods along with lost production, damaged reputations and time lost to rebuilding. On average, there are over 1,600 farm building fires each year. With buildings and machinery integral to a farm's productivity and success, having fire prevention as a top priority makes good economic sense for all rural businesses.

As well as the harm caused by fire, as an agricultural business owner, you have legal responsibilities relating to fire safety under the Regulatory Reform (Fire Safety) Order 2005.

You are legally required to take general fire precautions to ensure, so far as is reasonably practicable, the safety of any employees, contractors, customers and members of the public.

The Cornish Mutual Farm Fire Safety Guide outlines some practical steps to help you meet your legal obligations.

It covers the following areas:

- **Fire risk assessment**
- **Emergency procedure list**
- **Fire safety logbook**
- **Farm building inspection checklist**
- **Vehicle inspection checklist**

If you have any questions or would like further information and support, please call your local Cornish Mutual Field Insurance Advisor, or our Member Services Team on 01872 277151.

Fire risk assessment

Fire risk assessments are a legal requirement for all UK businesses, including farms. If you have five or more employees, you must keep a written record of your fire risk assessment. We highly recommend completing a written assessment regardless of how many people you employ, as this can include temporary workers like relief milkers or contractors such as vets.

Completing a fire risk assessment helps you:

1. Spot potential fire hazards
2. Identify at-risk persons
3. Manage and reduce fire risks
4. Train workers and plan for emergencies
5. Stay up to date with changes on the farm, people on site and work practices



FIRE RISK ASSESSMENT

Example of how to complete a fire risk assessment:

Name of farm:

Address:

Responsible person (usually the farm owner):

Telephone/best contact number:

Assessment completed by:

Date assessment was completed:

1

Date of next assessment:

Fire hazards - including dangerous substances

Example: Welding equipment, old/faulty wiring in the barn, fertiliser stores, hay bales in barn

2

Persons at risk

Example: Myself, relief milkers, contractors, regular workers, visitors using public footpath, customers in the shop

3

Fire mitigation

Example: Keeping gas bottles in an outside, fenced-in area; parking vehicles away from wooden barn walls; storing petrol out of direct sunlight; regularly cleaning and maintaining vehicles; having electrics inspected and tested by a qualified and competent person every 5 years.

4

Records and training

Example: Fire prevention training provided to workers; responsible individuals nominated as fire wardens.

5

Regular reviews

Example: Fire risk assessment to be reviewed annually, or after significant change to methods of work, farm buildings and/or persons on site

6

STEP 1 - Dates

Make sure you date the fire risk assessment on the day it is completed. Assessments should be reviewed annually, or earlier if there is a change making the current assessment inaccurate. For example, a barn extension, new build or change of use, such as being used to store fertiliser, fuel or other hazardous materials. If this isn't included in the fire risk assessment, it is inaccurate.

STEP 2 - Fire hazards

A good fire risk assessment starts with a thorough appraisal of your farm, looking at potential fire hazards across the site. Anything able to cause an undesired or uncontrollable fire, or accelerate the progress of a fire, is a fire hazard.

For example, an unattended machine could be a fire hazard, as would nearby containers of petrol – the machine might cause the fire, while the petrol can burn and act as fuel to amplify it.

The most common farm fire hazards are electrical faults in buildings and heat from vehicles, but other hazards include fermenting hay bales and welding or hot work activities.

Dangerous substances

- Dangerous substances are those which, if not properly controlled, are a high risk due to fire, explosion or corrosion of the substance container.
- For fire safety purposes, this list includes:
 - Flammable and pressurised gases or vapours able to form explosive clouds (such as solvents, paints, varnishes).
 - Fire accelerants such as metal, wood or flour dusts.
 - Other dangerous substances are bulk diesel/petrol, slurry/animal waste, guns and munitions, asbestos in building materials, fertilisers, pesticides/herbicides and other chemicals used on the farm.
- **The introduction of a new dangerous substance onto the farm requires the fire risk assessment to be updated.** No new activity involving that dangerous substance can begin until the assessment is complete and risk prevention measures have been taken.
- Along with noting dangerous substances on the risk assessment, **holding stocks of over 25 tonnes need to display a relevant hazard warning symbol** (e.g. oxidising, highly flammable etc.)

STEP 3 - Persons at risk

'Persons at risk' are all those who could be on the farm when a fire breaks out. These are likely to include yourself, employees and may include family members.

Third parties also need to be noted, such as members of the public or visitors, whether regular or occasional.

Make note of any persons particularly at risk if a fire were to occur e.g. children, the elderly and those with mobility issues.

Fire safety laws cover every location in which an employee could be working. Taking on additional employees or welcoming the public onto the farm would require this section to be updated.

FIRE RISK ASSESSMENT

STEP 4 - Fire mitigation

Having identified your farm's fire hazards in Step 2, you can plan and carry out preventative measures to reduce these risks.

While the measures taken are specific to your farm, the following are applicable to most:

- Arrange for the safe handling of dangerous substances through worker training and protective equipment. If possible, replace dangerous substances or high risk processes with safer substances and procedures.
- In addition to dangerous substances, flammable materials should be kept secure and away from fire hazards;
 - Are gas bottles kept in fenced enclosures outside?
 - Are hay/straw bales stored at a safe distance from electrical wiring?
 - Are your fertilisers and chemicals away from heat sources?
- Completing the farm and vehicle inspection checklists later in this guide can help you manage your farm's fire risks, particularly when considering potential fire hazards.
- Electrical faults are a common cause of farm fires, so have your electrical systems checked and tested regularly by qualified electricians, completing any repairs as soon as possible.
- Hot work and welding should be carried out away from flammable materials or replaced with a method that doesn't involve naked flames. All heat-generating equipment should be well maintained.
- If you believe your farm is at risk of arson, or has suffered an arson attack previously, take security precautions to prevent trespassing and make it harder to start fires with flammable materials.

STEP 5 - Records and training

Along with actively reducing the risk of fire, you must also record precautions taken to minimise fire risks.

This includes noting your preventative measures and fire safety training provided to workers (such as nominating responsible individuals to coordinate a fire response).

STEP 6 - Regular reviews

Having completed your fire risk assessment, it must remain up to date and accurately reflect conditions on your farm.

It is good practice to review your fire risk assessment every 12 months, although any material change to your farm affecting the assessment should be noted immediately.

A fire risk assessment does not offer you or your employees any protection if the fire mitigation measures you identify are not actioned.

A key part of prevention involves working with your local Fire & Rescue Services.

An assessment of your farm by fire service inspectors is a useful way of evaluating your measures and determining if further work is required. Call your local Fire and Rescue Service on the below numbers:

- **Cornwall; 0300 1234 232**
- **Devon & Somerset; 01392 872200**
- **Dorset & Wiltshire; 01722 691717**
- **Avon; 0117 926 2061**

Having an emergency procedure in the event of a fire could make the difference between a quickly contained fire and avoiding a large loss.

Farms are often harder to reach than other properties, and factors like multiple buildings, difficulty of access and water availability can increase the time it takes for the fire service to begin fighting the fire.

The following steps can help to reduce this time:

Preparations

- Use the free What3Words app to identify the code for your farm entrance. As well as asking for your address, many fire and rescue services in the South West, along with the South Western Ambulance Service, are using this app. Providing an exact location code can save valuable time.
- Designate someone to guide emergency services to the fire, particularly at night.
- Identify your water sources – along with hydrants, this could include lakes, ponds and water storage tanks.
- Keep fire exits and escape routes clearly visible and accessible.
- Ensure access to buildings isn't blocked and gates can open fully.
- Consider setting up an information box at the entrance to your farm in case you are not first on the scene. This would contain details such as how to move livestock at risk.
- Consider installing emergency gates or run outs so livestock could be removed from buildings quickly.

When a fire is discovered

- Try to ensure emergency vehicles have a clear access route to the fire or inform the fire service of any anticipated difficulties.
- Meet the fire crew on arrival, sharing information about the farm, its buildings and the location of any hazardous substances.
- Move livestock if they are at risk; if there is livestock in adjacent buildings, be prepared to move them if the fire spreads.

The next page takes you through how to complete the emergency procedure list.



Example of how to complete an emergency procedure list:

Farm name:

Full address (with postcode):

What3Words code for best entrance to the farm:

Best route into the farm:

Emergency procedure when fire is discovered if different to the instruction below: 1

Dial 999 as soon as a fire is discovered, check buildings for occupants, guide fire service in, evacuate and secure animals, fight fire if safe to do so

Location of fire assembly point(s): 2

Responsible person for guiding responders in: 3

Location of high visibility clothing and torches: 4

Location of fire hydrants/water sources: 5

If any, which buildings contain chemicals or inflammable materials?: 6

Firefighting equipment

| Type of equipment | Location on farm | Quantity/notes |
|------------------------------|----------------------|---------------------------------------|
| e.g. Water fire extinguisher | Outside the hay barn | (1), for use on wood & hay fires only |
| | | |
| | | |
| | | |
| | | |
| | | |

Livestock evacuation

Buildings that can contain livestock: 7

Evacuate livestock to: 8

Route for livestock evacuation: 9

STEP 1 - Emergency procedure

Plan your emergency procedure to keep people safe, direct fire services effectively and reduce fire damage. The exact procedure depends on your farm, but usually involves the following:

- **Calling the emergency services**
- **Confirming everyone is safe at the fire assembly point**
- **Securing the safety of animals**
- **Fighting the fire (if safe to do so)**

STEP 2 - Fire assembly points

Set your fire assembly points in large, open spaces, away from access routes to the farm and any potential fire risks.

STEP 3 - Responsible persons

Nominate individuals as fire wardens to lead emergency services from the entrance of your farm to the fire. Larger farms may require several fire wardens.

STEP 4 - High visibility clothing and torches

Store high visibility clothing and torches somewhere easily accessible; these will help to keep you and your workers safe during the response.

STEP 5 - Fire hydrants and water sources

UK fire hydrants are usually marked by yellow grates on the ground, or yellow squares with a black 'H' symbol. Knowing where your farm's hydrants are can save valuable time in helping fire services fight a fire. If the fire isn't close to a hydrant, other water sources such as lakes or ponds can be used.

STEP 6 - Hazardous materials

You are required to let fire services know if they are dealing with any hazardous materials; having a list of buildings containing these materials helps when meeting first responders.

STEP 7 - Buildings with livestock

If you house livestock on your farm, make their usual locations clear to aid the evacuation process. If animals are only housed during winter, for example, note this on the plan.

STEP 8 - Livestock evacuation area

In buildings that house animals, consider including easy-to-use emergency exits or run outs leading to enclosed fields. Having a designated evacuation area can reduce herd losses, both through avoiding the fire and straying, as animals can panic and behave erratically.

STEP 9 - Livestock evacuation route

In buildings housing livestock with multiple entrances and exits, identify the best evacuation route(s) for speed and safety.

FIRE SAFETY LOGBOOK

A fire safety logbook is your way of storing information about fire checks, fire inspections and fire training on the farm.

It should provide an easy reference to see if the farm's fire safety equipment is functional, if routine inspections and tests are being followed and if there are any changes you can make to increase fire safety.

By completing a safety logbook, you can also meet the fire risk assessment requirement for taking fire prevention measures, through maintaining systems like fire detectors and alarms.

Employee training is part of the logbook, as employers are legally required to ensure employees are aware of fire risks, preventative measures and how to respond if a fire occurs on the farm.

As with the fire risk assessment, employee fire safety training should be updated if they are working with new equipment or undertaking new duties that could present a fire risk.

Fire safety logbooks should be easily accessible, so they can be consulted to assess previous inspections and see when future checks and tests are due.

Under The Regulatory Reform (Fire Safety) Order 2005, it's a legal requirement for managers and building owners to take responsibilities for fire safety within their property. This means keeping accurate and detailed records in relation to fire safety.



While optional, farm inspection checklists and diagrams are a good way to keep track of the fire safety of your farm buildings, and a useful way to easily identify features that can help in the event of a fire. Farm building inspection checklists should include daily, weekly, monthly and annual sections for keeping track of fire safety on your farm, along with space to include a diagram.

Example of how to complete a farm building inspection checklist:

Date of inspection: 1

Inspected by:

| | Yes | No | N/A | Details |
|--|--------------------------|--------------------------|--------------------------|---------|
| Daily checks 2 | | | | |
| Fire escapes 3 Can the fire escapes be easily reached and opened? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Emergency lighting Are the emergency lights visible and functioning? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| General 4 Are welding activities or hot works carried out safely and away from flammable materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Weekly checks 2 | | | | |
| Fire alarms and detectors Does the system function when call points are used? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Firefighting equipment Is there firefighting equipment in the building? (e.g. Fire extinguishers, fire blankets or automated systems) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is it regularly serviced? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is the equipment easily visible and accessible in the event of a fire? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

STEP 1 - Date of inspection

The building inspection date should be updated with each new inspection. This allows you to see if there are any significant gaps in inspection dates, and respond accordingly.

STEP 2 - Frequency of checks

Essential fire safety inspections should be carried out daily, as they have the greatest impact on people escaping a fire and fire prevention in the first place. Less urgent checks can be performed on a weekly or longer-term basis, using the boxes further down the form.

STEP 3 - Fire escapes and aids

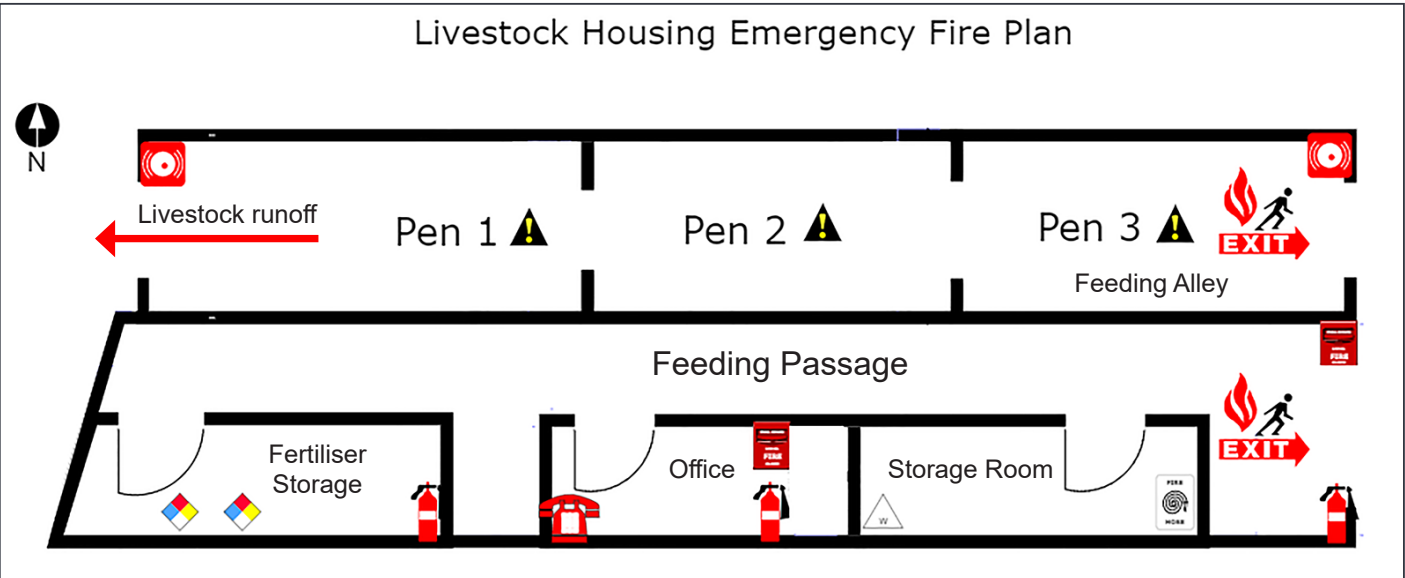
Always ensure that people within the building can see their escape route in case of a fire and are able to use it properly to get out of the building.

STEP 4 - General fire prevention checks

Some activities carry an inherent fire risk, but proper planning and training can reduce the risk of fire. While materials including bales can pose a fire risk, careful management such as storing them away from ignition sources can reduce these risks.

FARM INSPECTION CHECKLIST

Example of a farm building diagram:



| Key | |
|-----|-----------------------------|
| | Fire exit |
| | Hazardous materials storage |
| | Fire call point |
| | Emergency telephone |
| | Fire alarm |
| | Fire extinguisher |
| | Fire hose |
| | Obstructions |
| | Water shut off |
| | Gas shut off |

Putting together diagrams of your farm buildings and their fire safety features (such as emergency lighting, emergency exits, fire alarms, smoke detectors and fire extinguishers) can be a useful aid in training new workers or identifying the contents of a building in the event of a fire.

Above is an example of a farm building’s fire safety features. Each building on the farm may have a different arrangement of fire safety features, but through these diagrams you can pinpoint areas for improvement.

The key to the left shows example symbols of different features to include on your diagram. These should be easily understandable to you and your workers, so that anyone on the farm can see what fire safety features a building has.



Agricultural vehicles are essential for daily activities but are, statistically, common catalysts for farm fires. Vehicle fires can be particularly damaging, as there is a high risk of total loss. The most common origins of vehicle fires are the engine, exhaust(s), axles and the space beneath the driver's cab.

Vehicle inspection routines can minimise the chances of an accidental fire.

The following are recommended for the inspection and maintenance of farm vehicles:

- Clean away residual material such as dried grass, organic matter, high levels of dust, grease or oil. Leaf blowers or compressed air are useful for cleaning out dried grass and dust.
- Thorough inspections and clean outs should be performed before and after any baling or harvesting.
- Keep vehicles well spaced to prevent fire spreading from one vehicle to another.
- If parked inside, keep vehicles away from wooden walls and other flammable materials.
- We recommend installing a fire extinguisher in vehicles. Fire suppression systems are also available and can be retrofitted to most vehicles.
- Wiring equipment through ISOBUS connectors or in-cab sockets is safer than wiring accessories directly to battery terminals as this risks overloading and increases the risk of fire.

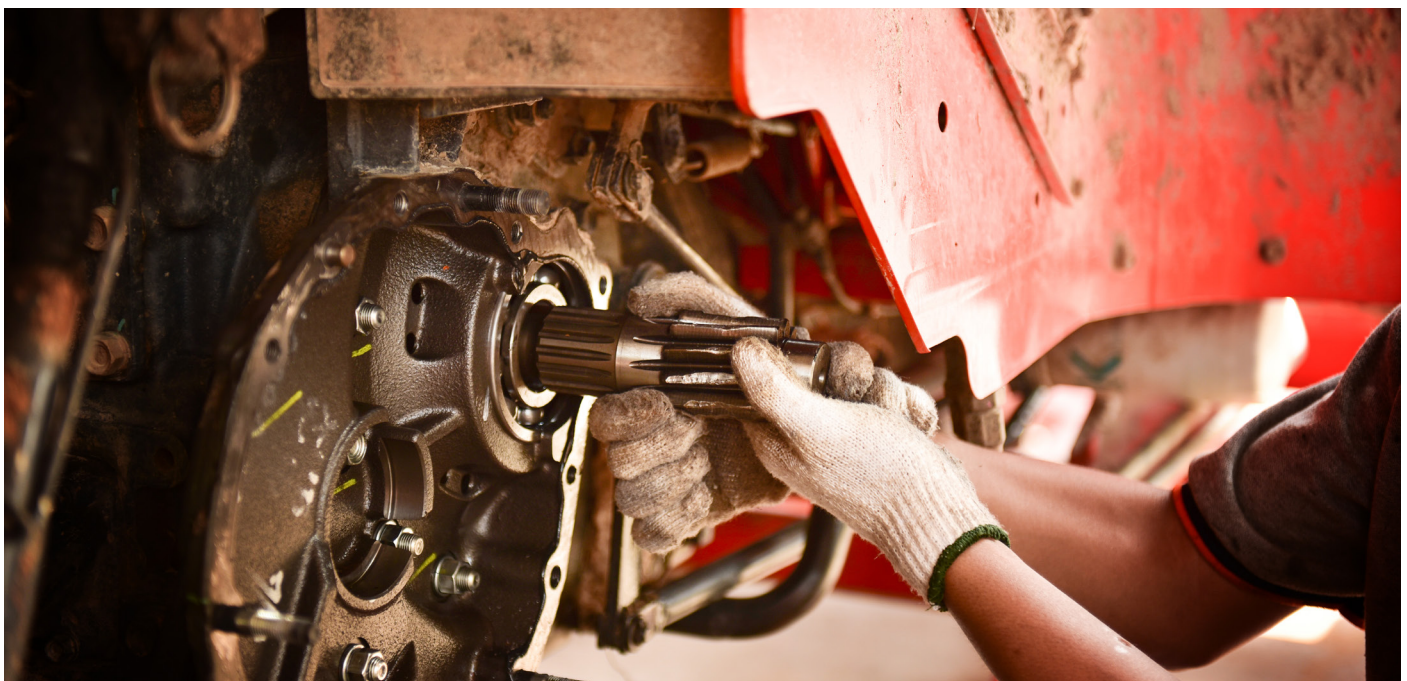
Frequency and types of inspections

The frequency of your vehicle inspections will depend on how often the vehicle is used, how long it is in use and whether particular activities (like harvesting) increase the fire risk. Also consider:

- Are all components working correctly?
- Are any parts particularly worn, increasing the fire risk?
- How would you deal with a fire occurring while the vehicle is in use?

Types of vehicle inspection:

- **Quick checks** before and after use, e.g. walking around a vehicle and checking for dry grass or oil, loose or uneven parts capable of creating sparks when driving.
- **Maintenance and cleaning**, e.g. removing panels and opening up the interior of a vehicle to search for and remove potential fuel sources, and visually checking moving parts.



VEHICLE INSPECTION CHECKLIST

Example of how to complete a vehicle inspection checklist:

| | | |
|---|--|---|
| Vehicle/piece of equipment E.g. baler, MF tractor 1 | Are there any accessories on the battery terminals?/ ISOBUS connector(s) being used? Y / N 6 | Vehicle is usually parked/stored in: 2 |
| Date of inspection: 3 / / | Cleaning Checklist - E.g. Engine / Exhaust(s) / Axles / Space under driver's cab 4 | Comments: |
| Date of next inspection: / / | | |
| Date of last cleaning: / / | | |
| Date of next cleaning: / / | | |
| Fire extinguisher/suppression system present? Y / N 5 | | |
| Fire equipment last serviced on: / / | | Signed: |

STEP 1 - Vehicle identification

This box should describe the make and type of vehicle – it helps to make identification easy if you won't be the person handling inspections.

STEP 2 - Vehicle location

If you regularly park vehicles in certain locations, noting it down will make it easier for you or others to complete an inspection.

STEP 3 - Inspection and cleaning dates

Vehicles should be inspected on a regular basis, although this does depend on the type of vehicle, what it is used for and how often it is used. Combines should be checked and cleaned before and during harvesting, and the same for balers. Less-frequently used vehicles can be checked every three months.

STEP 4 - Cleaning checklist

The exact areas to clean will depend on the specific vehicle, but generally cleaning the example areas can help to prevent fires.

STEP 5 - Firefighting equipment

Firefighting equipment like fire extinguishers can be a big help in stopping a fire on or near the vehicle, and regular servicing will ensure that these devices can be relied upon.

STEP 6 - Connected accessories

Making note of any attached accessories is a useful way of identifying potential fire risks, and can lead onto using more stable methods of connection such as ISOBUS connectors or in-cab sockets.

[illegible]

This guide has been designed to assist you in considering the fire safety of your farm. The content of this Farm Fire Safety Guide is for general information purpose only. Whilst we make every effort to ensure accuracy at the time of publication, under no circumstances should it be considered legal advice. Any reliance you place on the information is at your own risk. Always seek the advice of a professional for your particular circumstances and requirements.

If you have any questions and would like further information to better understanding potential fire risks or require support in making your farm safer; then please call your local Cornish Mutual Field Insurance Advisor, or our Member Services Team on 01872 277151.



If you would like to talk to someone about Fire Safety on your farm please call your local Field Insurance Advisor, or our Member Services Team on 01872 277151.

Proud to support:



Cornwall Fire & Rescue Service



Devon and Somerset Fire & Rescue Service



Dorset and Wiltshire Fire & Rescue Service



Avon Fire & Rescue Service

Email: Riskmanagement@cornishmutual.co.uk
Visit: cornishmutual.co.uk

Cornish Mutual
Farming Insurance Experts