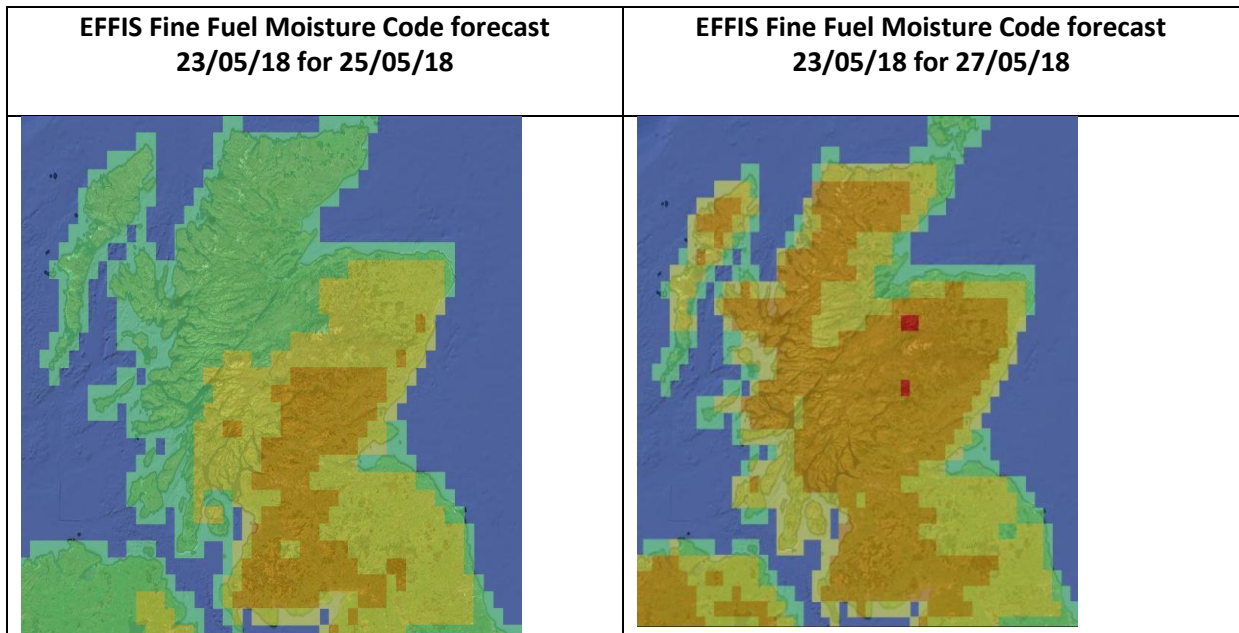
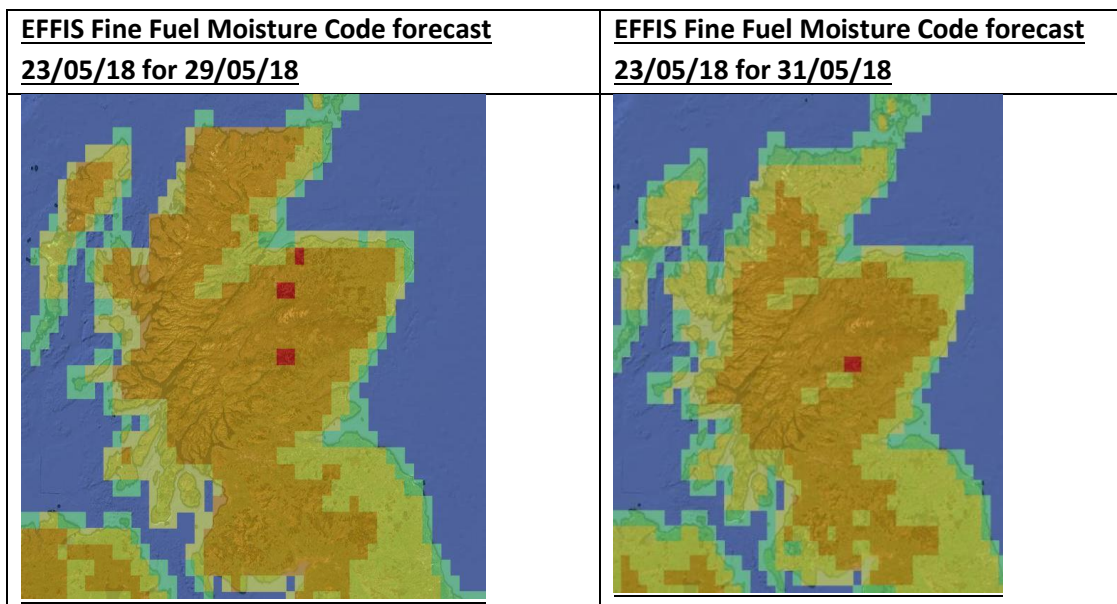


Wildfire Danger Assessment for Friday 25th May to Thursday 31st May 2018 for Scotland.

Wildfire danger assessments are made on a broad area basis. For more local risk assessments both the seasonal condition of fuels and local weather conditions should be taken into account.



The EFFIS FFMC forecast for the period 23/05/18 - 25/05/18 indicates a high and growing ignition potential in the east, south west and south east of Scotland, then spreading to cover the whole of Scotland including the Western Isles, Orkney and Shetland.



The EFFIS FFMC forecast for the period 29/05/18 - 31/05/18 indicates a continuing high ignition potential throughout Scotland.

Images courtesy of European Forest Fire Information Service (EFFIS)

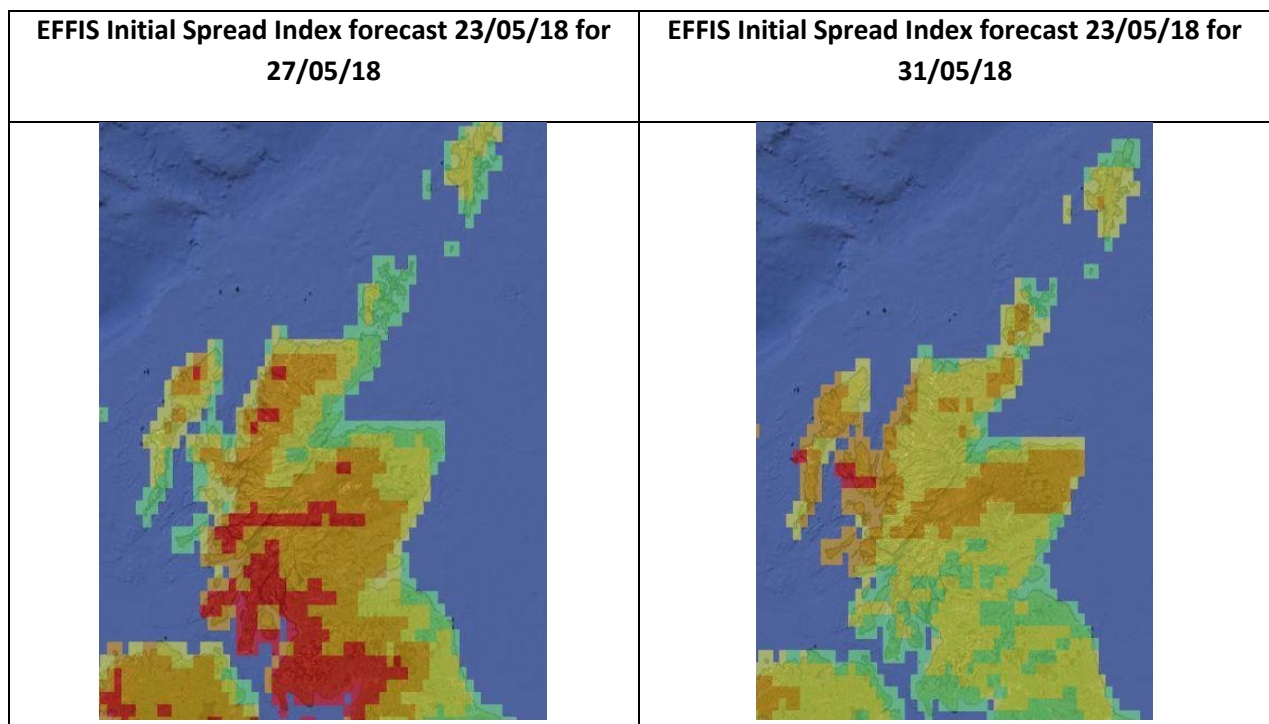
EFFIS FFMC Fire Danger class bands:

The scientific evidence indicates that significant numbers of wildfires often occur in the UK in the spring when FFMC is at or above 80. Any yellow area on the map indicates an FFMC of more than 83 and the brown areas are over 86 and red is over 89. This indicates a high ignition potential (fire hazard).

Spot readings for areas immediately west of the elevated fire risk zones on the maps above indicate some FFMC values over 80 through this period. Other areas including the north and west also have high values in the range of 77-79 on the 25th.

The seasonal condition of the fuels (vegetation) will also be different between the south of the country and the north, with the start of the growing season being later in the north than the south. Altitude will have a similar affect, with growth starting later the higher in the hills your location is.

EFFIS Initial Spread Index forecast 25th – 31st May 2018



Images courtesy of EFFIS

The Initial Spread Index (ISI) is based on FFMC, plus an additional factor for wind. **This ISI forecast for the period 25/05/18 to 31/05/18 indicates the potential for extreme fire behaviour throughout Scotland.**

General weather forecast information:

There is an anti-cyclonic high pressure weather system developing over Scandinavia and the UK, creating a further period of fine dry and warm weather. Winds will tend to be easterly. This weather pattern will continue for some time.

Discussion:

Building from the east to cover the whole of Scotland there is likely to be sunshine, warmth, wind, moderate to low relative humidity from today onwards. These are conditions that will continue to dry dead out fuels. The live fuel moisture of heather will stay low until the plants start growing.

There are still large areas of semi-natural vegetation with a lot of last year's dead vegetation. We are now in the spring transition period when plants gradually "green-up", which draws water into the new growth raising the moisture content of the vegetation. At lower altitudes the grass has started growing. However many shrub fuels such as heather, which are higher up, have not started growing yet with a delayed start to the spring in the hills due to the long winter.

There will be a high ignition potential in semi-natural vegetation in eastern Scotland from 25th May, which then covers all areas, plus high potential spread rates from 27th May. Should a wildfire ignition occur on the days with high wind speeds it is likely extreme fire behaviour will occur. Deeper fuel layers are also starting to dry out increasing the potential for smouldering fire to occur. If fires do occur they will soak up fire suppression resources quickly and for extended periods.

The Muirburn Season has finished and we are going to have some fine days through the weekend into next week, including the Bank Holiday on Monday 28th May. Land managers should be considering what fire prevention and preparedness activities to do. The messages to the public are that they should exercise great caution **throughout** Scotland.

Fire Danger for period:

Scotland, will continue to have Very High Fire Danger from 25th May, rising to Extreme Fire Danger conditions from 27th to 31st May 2018

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Appendix A: Background information

The EFFIS system is based on the Canadian Fire Weather Index system, of which FFMC is a sub-index. FFMC looks at the dead fuel moisture of the litter layer on the soil surface. The Initial Spread Index (ISI) is FFMC plus a wind function

Table 1 EFFIS Fine Fuel Moisture Code (FFMC) & Initial Spread Index (ISI) fire danger class bands:

	EFFIS FFMC Fire Danger classes				
	Very Low	Low	Moderate	High	Very High
	Green	Yellow	Brown	Red	Black
FFMC	< 82.7	82.7 - 86.1	86.1 - 89.2	89.2 - 93	>= 93
ISI	< 3.2	3.2 - 5	5 - 7.5	7.5 - 13.4	>= 13.4

EFFIS fire danger classes were originally created to support decision making in Mediterranean areas. The equivalent fire danger with typical grass and shrub fuel types in the British Isles is significantly lower. European Forest Fire Information Service (EFFIS) can be viewed at:

http://effis.jrc.ec.europa.eu/static/effis_current_situation/index.html

The weather data that is used in the EFFIS Fire Weather Index model is from the European Centre for Medium Range Forecasts (ECMWF).