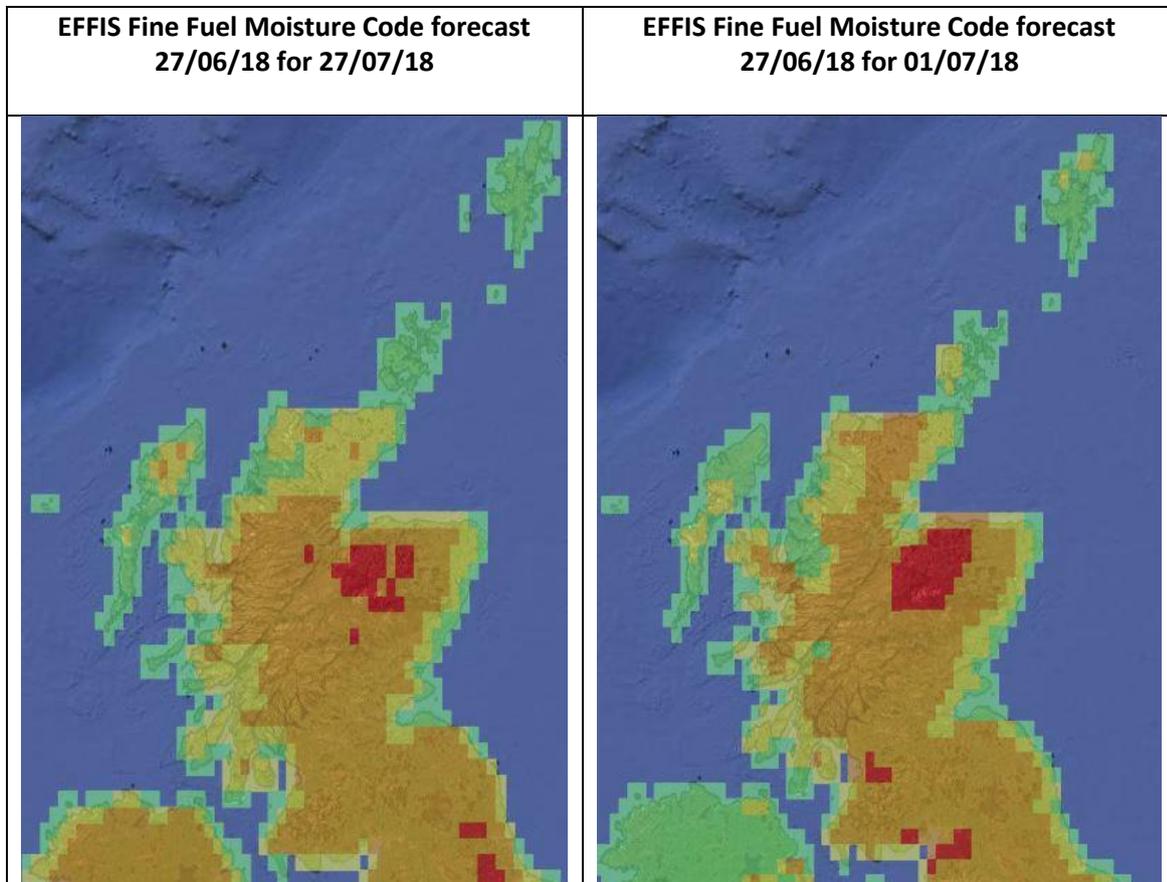


Wildfire Danger Assessment for Wed 27th June to Mon 1st July 2018 for Scotland.

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.



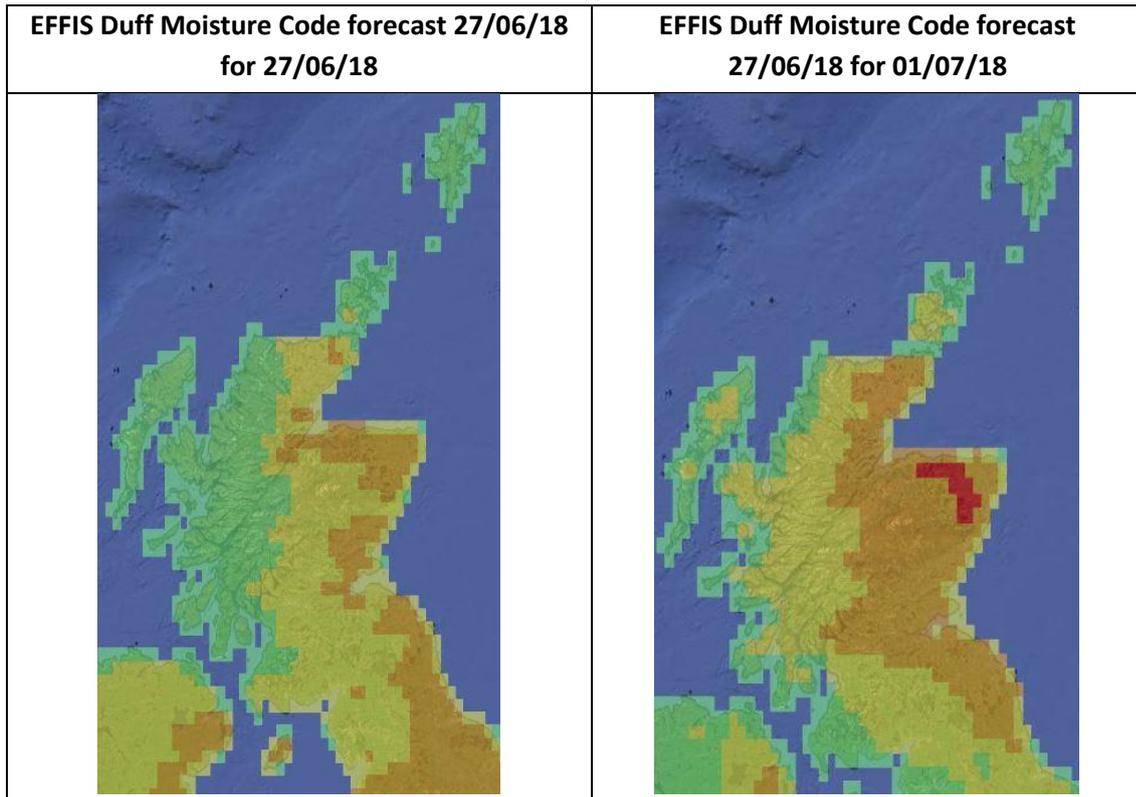
The EFFIS FFMC forecast for the period 27/06/18 - 01/07/18 indicates an ignition potential over the whole of Scotland from 27th June (today), until Monday 2nd July 2018.

Images courtesy of European Forest Fire Information Service (EFFIS)

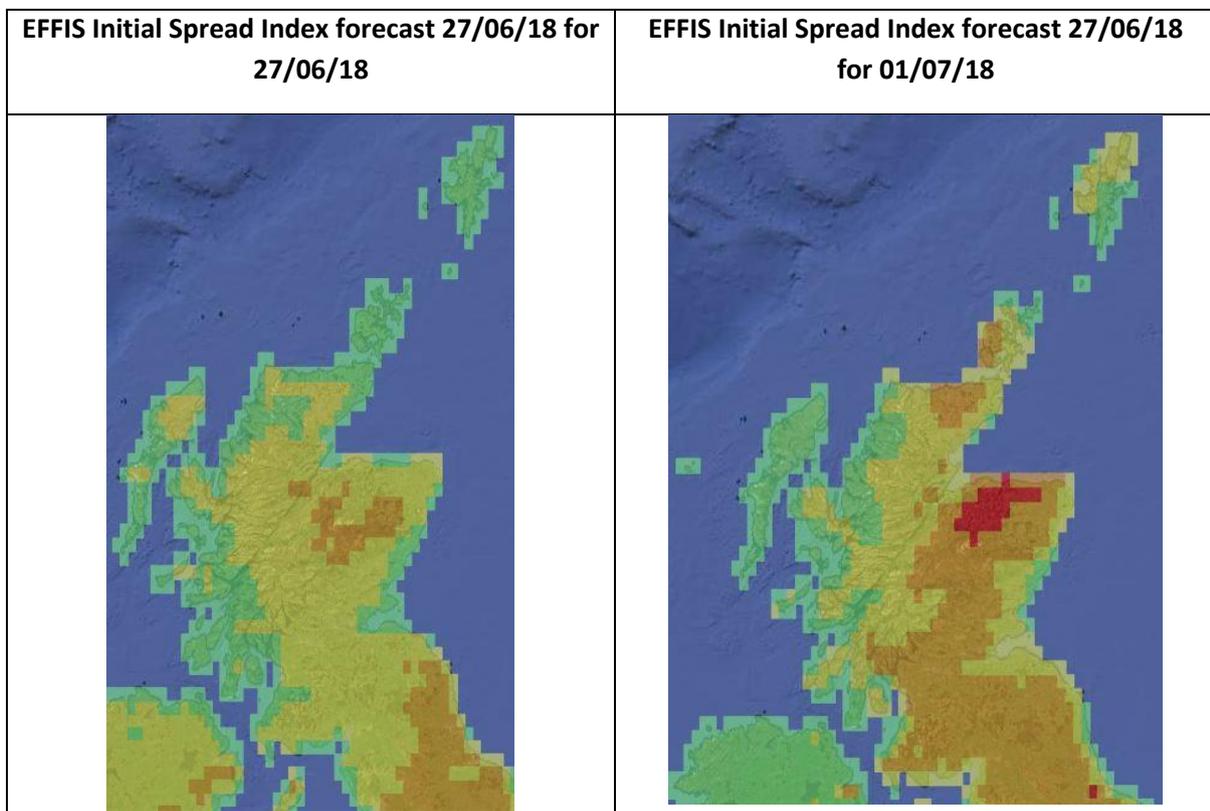
EFFIS FFMC Fire Danger class bands:

The scientific evidence indicates that significant numbers of wildfires often occur in the UK in the when FFMC is 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.

At this time of year the early summer seasonal condition of the fuels (vegetation) will be reasonably uniform over the country. All areas should have vegetation that is growing and therefore have some moisture in the live plant.



The Duff Moisture Code gives us an indication of the dryness of the deeper organic soil layers (to 7cm). We have had a long period little rain in the east of Scotland.



The Initial Spread Index (ISI) is based on FFMC, plus an additional factor for wind. **This ISI forecast for the period 27/06/18 to 02/07/18 indicates the potential for fires to spread everywhere in Scotland through to Tuesday next week.**

General weather forecast information:

There is a continuing anti-cyclonic high pressure weather system over the UK, creating a period of hot and dry weather for Scotland, with a few showers in NW Highlands over the weekend. Winds across Scotland are light – moderate but have variable directions around the country and in individual locations.

Discussion:

The key issue now is the dryness of dead fuels and the moss and litter layer. The rising FFMC and DMC values indicate that this fuel layer will support fires. Some grasses are also now curing (dying) on south facing slopes and thin soils. Moorland and peat areas have dried out considerably. The variable winds could create rapid shifts in head fire direction, with backing or flanking fires rapidly changing to become headfires. Significant rain is not forecast over most of Scotland, there may be some showers in NW Highlands, which will reduce fire danger a little when it happens.

There are still large areas of semi-natural vegetation with a lot of last year's dead vegetation. There is **extreme** ignition potential in these areas. Should a wildfire ignition occur it is likely **extreme** fire behaviour will occur, because of the dryness of the moss and litter layers. Deeper fuel layers are now drying out significantly with extending drought in the east, increasing the potential for re-ignitions and smouldering fire to occur.

Land managers should be considering what fire prevention and preparedness activities to do. The messages to the public are that they should exercise caution **throughout** Scotland over the weekend.

Fire Danger for period:

The fire danger for Scotland from 27th June to 2nd July is extreme.

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Date 26/06/18

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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
DMC	< 15.7	15.7 - 27.9	27.9 - 53.1	53.1 - 140.7	>= 140.7

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).