



Grassland fires, 2023-24

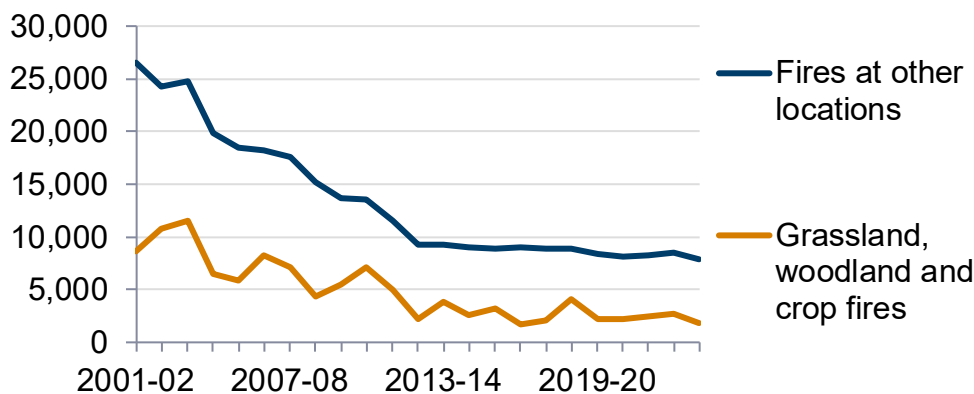
19 Dec 2024
SB 42/2024

Almost one in five attendances by a Fire and Rescue Authority (FRA) at fires in 2023-24 were grassland, woodland or crop related. In this bulletin, a grassland fire is a fire which has been assigned a location code of "grassland, woodland or crops" by the relevant FRA and should not be considered a measure of wildfires.



The Welsh FRAs attended 1,788 grassland, woodland and crop fires in 2023-24, a decrease of 32% compared with 2022-23. The number of these fires is prone to fluctuation and annual year on year percentage changes vary.

Figure 1: Numbers of fires on grassland, woodland and crops and other locations in Wales 2001-02 to 2023-24[p] [Note 1]



Description of Figure 1: A line chart showing the number of grassland, woodland and crop fires and fires at other locations in Wales between 2001-02 and 2023-24. Both time series show a general downward trend, though since 2011-12 this trend has been less marked.

[Note 1] 2022-23 data are revised.

[p] Provisional data

- In 2023-24, 7 in 10 fires on grassland, woodland and crops were started deliberately. ([Table 6](#))
- 61% of grassland, woodland and crop fires in 2023-24 occurred in the months May and June 2023 ([Table 7](#)). Met Office weather data shows that 36% of the hours of sunshine and only 5% of rainfall occurred in these months in 2023-24.

About this bulletin

This bulletin is complementary to data on fire incidents published in Nov 2024. It examines the impact and patterns in grassland, woodland and crop fires in the financial year from April 2023 to March 2024, and comparisons are made with April 2022 to March 2023.

The Welsh Government compiles these statistics from reports submitted by all three Fire and Rescue Authorities (FRAs) in Wales to the Home Office.

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Section 1: Fires and fire false alarms

Fires are classed as primary, secondary or chimney fires.

Primary fires include:

- any fire in a non-derelict buildings, vehicle, or outdoor structures
- any fire involving casualties or rescues
- any fire attended by five or more appliances.

Secondary fires are mainly outdoor fires including grassland and refuse fires unless they involve casualties or rescues, or are attended by five or more appliances. They include fires in single derelict buildings, derelict road vehicles and derelict outdoor structures.

For the definition of chimney fires please see the [Glossary](#).

Grassland, woodland and crop locations include primary fires in allotments, gardens, crops, woods and other agricultural locations, and secondary fires on heathland and as a result of intentional straw and stubble burning, as well as fires on grassland.

This section looks at the total number of grassland, woodland and crop fires that occurred as well as the total number of fires attended which includes fire-related false alarms.

Table 1 shows that Welsh FRAs attended 27,281 fires and fire false alarms in 2023-24. Of these, 9% or 2,509 (including 721 fire false alarms) related to grassland, woodland and crop locations. In 2023-24 attendances at grassland, woodland and crop fires and fire false alarms fell by 29% compared with 2022-23, and has fallen by 72% compared with the peak of 8,837 incidents in 2010-11.

Table 1: Number of grassland, woodland and crop fires and fire false alarms, by incident type, 2020-21 to 2023-24[p]

	2020-21	2021-22	2022-23[r]	2023-24[p]
Primary fires	3,796	3,944	3,919	3,924
of which were grassland, woodland and crops	180	140	180	185
Secondary fires	6,197	6,496	6,872	5,558
of which were grassland, woodland and crops	2,049	2,318	2,439	1,603
All fires [Note 1]	10,326	10,740	11,068	9,700
of which were grassland, woodland and crop fires	2,229	2,458	2,619	1,788
Fire false alarms	14,879	15,319	16,008	17,581
Fire false alarms with location recorded as grassland, woodland or crops	1,084	972	928	721
All fires and fire false alarms	25,205	26,059	27,076	27,281
of which grassland, woodland and crop fires and fire false alarms	3,313	3,430	3,547	2,509

Description of Table 1: The table gives the number of primary and secondary fires, and fire false alarms, and how many of these were grassland, woodland and crop related. The table shows the

number of primary grassland, woodland and crop fires increased slightly in 2023-24 compared to the previous year, whereas the number of grassland, woodland and crop secondary fires and fire false alarms decreased.

[Note 1] Includes chimney fires.

[r] Revised data.

[p] Provisional data.

Fires

Of the 9,700 fires attended in Wales in 2023-24, 1,788 (18%) occurred on grassland, woodland and crops. Whilst only 5% of all primary fires took place on grassland, woodland or crops, 29% of secondary fires occurred on grassland, woodland or crops.

In 2023-24, the number of grassland, woodland and crop fires attended by the Welsh FRAs decreased by 32% compared with 2022-23. Compared with the peak figure in 2003-04, the 2023-24 figure is 84% lower.

Numbers of fires in locations other than grassland, woodland and crops fell by 6% compared with 2022-23.

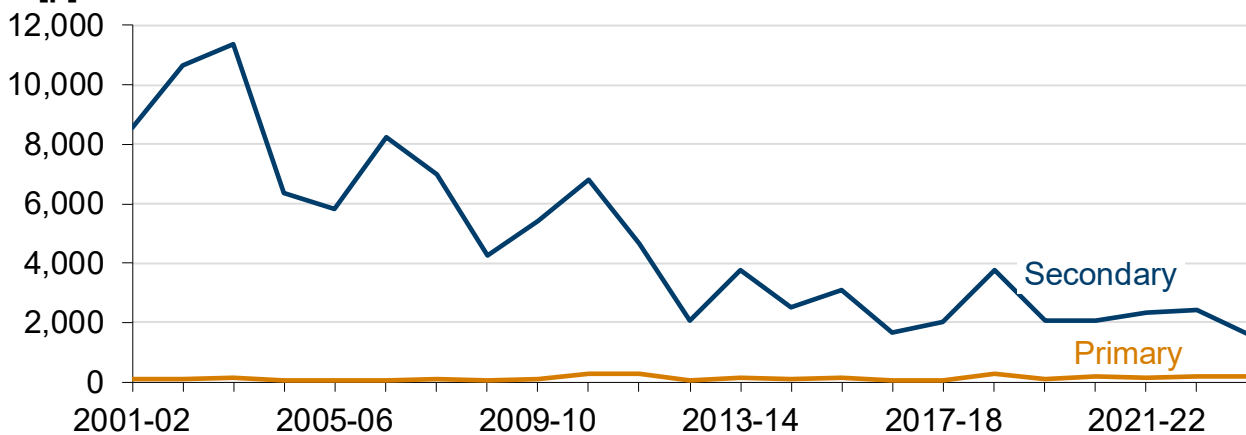
Since 2001-02 the proportion of fires occurring on grassland, woodland and crops ranges from a low of 16% (in 2016-17) up to 34% (in 2010-11).

The vast majority of grassland, woodland and crop fires attended are secondary fires (between 90% and 99% each year since 2001-02). By definition, the majority of secondary fires occur outdoors and so numbers of these fires are likely to be influenced by weather conditions.

Fire false alarms

4% of fire false alarms relate to grassland, woodland and crop locations in 2023-24. The majority (98%) of the fire false alarms attended in 2023-24 by the FRAs on grassland, woodland and crops were due to calls made with good intent; only 2% were due to malicious calls. In 2023-24 FRAs in Wales attended 22% fewer fire false alarms on grassland, woodland and crops than in the previous year.

Figure 2: Number of grassland, woodland and crop fires, by type, 2001-02 to 2023-24[p]



Description of Figure 2: A line chart showing the annual number of grassland, woodland and crop fires, split into primary and secondary fires. The chart shows that each year only a small number of fires were primary fires, and the majority are secondary fires. Following large decreases in secondary fires in the early part of the time series, recent years (since 2012-13) have seen numbers more stable with smaller year on year increases and decreases.

[p] Provisional data for 2023-24.

Primary grassland, woodland and crop fires

In 2023-24, 185 primary grassland, woodland and crop fires were attended in Wales, an increase of 3% on the number in 2022-23. The locations of these primary fires are shown in [Figure 3](#).

Almost two-thirds of primary grassland fires in 2023-24 occurred in the South Wales FRA Region (65%) and 30% were in Mid and West Wales. The remaining 5% were in North Wales. Only South Wales saw an increase in the number of primary grassland fires in 2023-24 compared to the previous year, up 28%. In North Wales numbers fell by 55% and in Mid and West Wales they were down 14%.

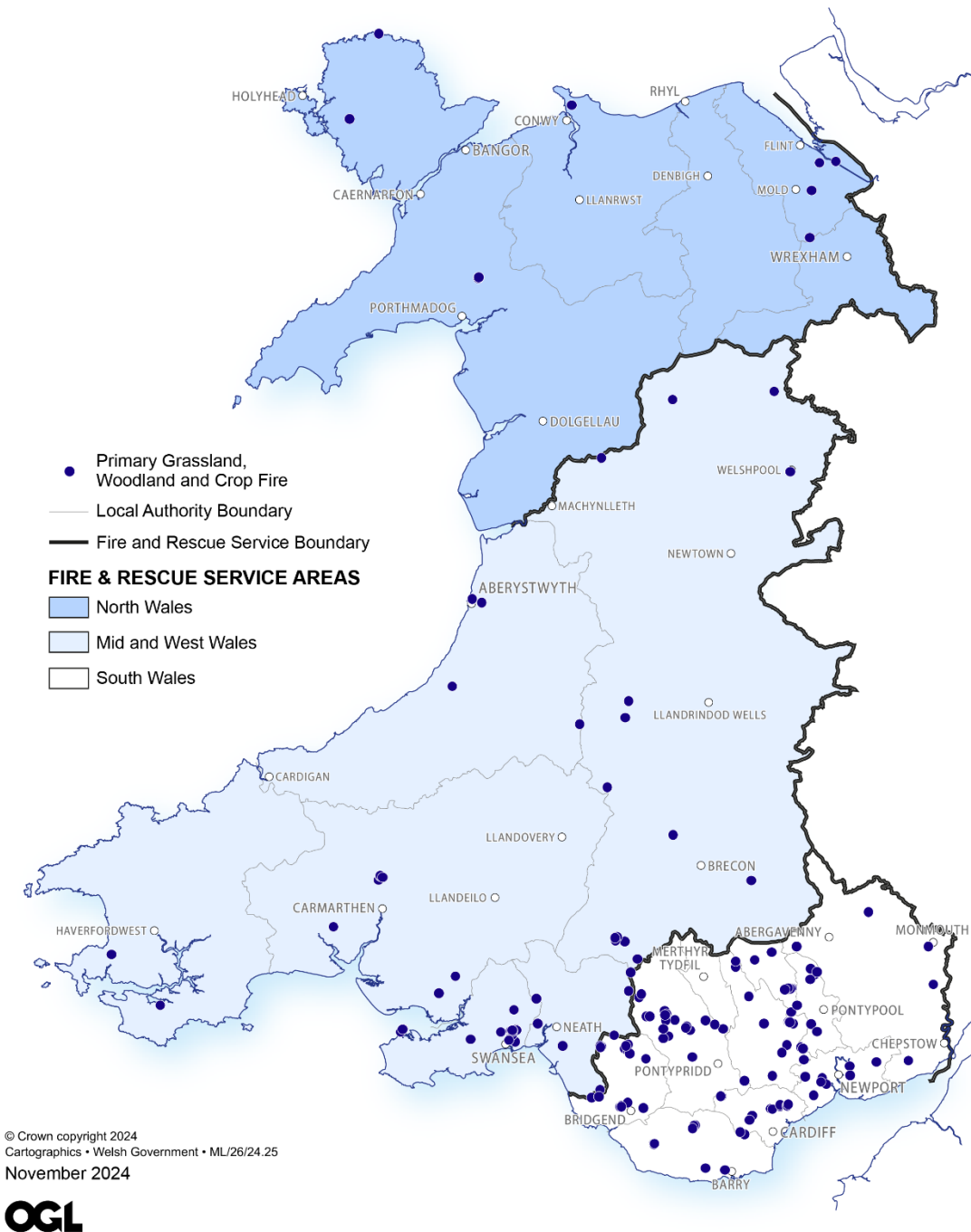
Table 2: Numbers of primary grassland, woodland and crop fires by FRA, 2014-15 to 2023-24[p]

	North Wales	Mid and West Wales	South Wales	Wales
2014-15	18	15	51	84
2015-16	20	28	70	118
2016-17	23	12	36	71
2017-18	13	14	41	68
2018-19	16	97	140	253
2019-20	11	44	57	112
2020-21	10	68	102	180
2021-22	14	53	73	140
2022-23	22	64	94	180
2023-24[p]	10	55	120	185
Percentage change 2022-23 to 2023-24	-55	-14	28	3

Description of Table 2: A table showing the number of primary fires occurring on grassland, woodland and crops from 2014-15 to 2023-24. Throughout the time series South Wales FRA have attended the most primary grassland fires each year.

[p] Provisional data

**FIGURE 3:
Grassland, woodland and crop
primary fires, across Wales, 2023-24**



Description of Figure 3; A map of Wales pinpointing the locations of primary grassland, woodland and crop fires in 2023-24. The map shows the majority of these fires occurred in the South Wales FRA region in 2023-24.

There was a total of 137 primary fires in woodland (74% of primary grassland, woodland and crop fires) in 2023-24. A further 13% occurred on stacked/baled and standing crops.

Table 3: Number of primary grassland, woodland and crop fires, by location, 2020-21 to 2023-24[p]

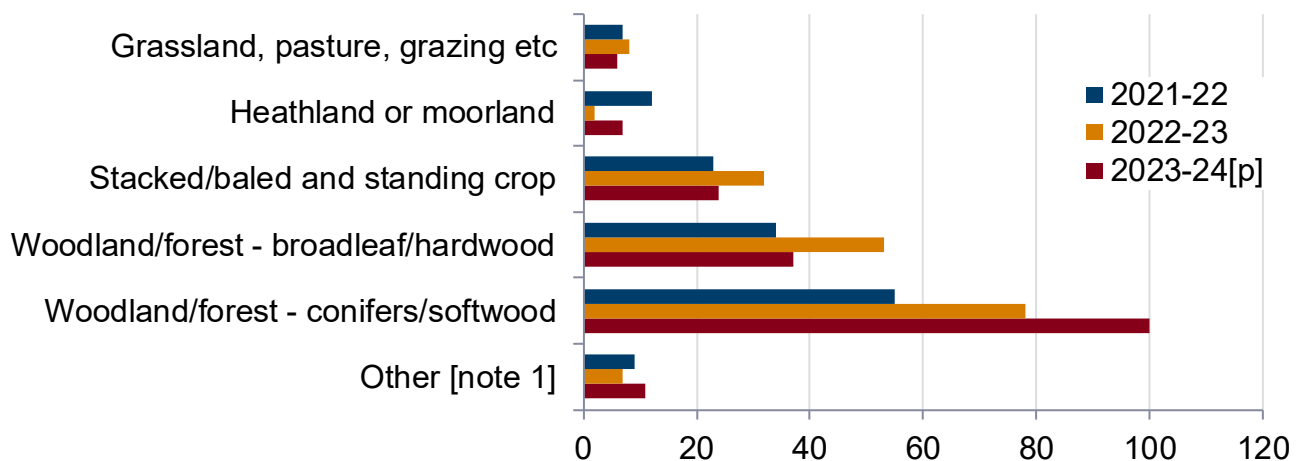
	2020-21	2021-22	2022-23	2023-24[p]
Grassland, pasture, grazing etc	9	7	8	6
Heathland or moorland	4	12	2	7
Stacked/baled and standing crop	19	23	32	24
Woodland/forest - broadleaf/hardwood	39	34	53	37
Woodland/forest - conifers/softwood	98	55	78	100
Other [note 1]	11	9	7	11
All primary grassland, woodland and crop fires	180	140	180	185

Description of Table 3: A table showing the number of primary grassland, woodland and crop fires by location type. ‘Woodland/forest - conifers/softwood’ fires are consistently the largest category of location, with those in ‘Woodland/forest - broadleaf/hardwood’ the second largest.

[Note 1] Includes domestic gardens, hedge, nurseries and market gardens, railway trackside vegetation, roadside vegetation, scrub land, straw/stubble burning and tree scrub.

[p] Provisional data.

Figure 4: Number of primary grassland, woodland and crop fires, by location, 2021-22 to 2023-24[p]



Description of Figure 4: a bar chart showing the number of primary grassland, woodland and crop fires by location type. ‘Woodland/forest - conifers/softwood’ fires are consistently the largest category of location, with those in ‘Woodland/forest - broadleaf/hardwood’ the second largest.

[Note 1] ‘Other’ shown in the above chart includes domestic gardens, hedge, nurseries and market gardens, railway trackside vegetation, roadside vegetation, scrub land and tree scrub.

[p] Provisional data.

Secondary grassland, woodland and crop fires

In 2023-24 there were 1,603 secondary grassland, woodland and crop fires in Wales, a fall of 34% compared with 2022-23; [Figure 5](#) shows the locations of these secondary fires. Almost half of the secondary grassland fires in 2023-24 occurred in the South Wales FRA region (49%), whilst 38% occurred in Mid and West Wales and 13% in North Wales. All FRAs saw a decrease compared with 2022-23; in North Wales numbers fell by 52%, Mid and West Wales saw a decrease of 29% and in South Wales there was a 31% fall.

Secondary fires can be affected by weather conditions, further analysis of weather data occurs in the section [Grassland, woodland and crop fires by month](#)

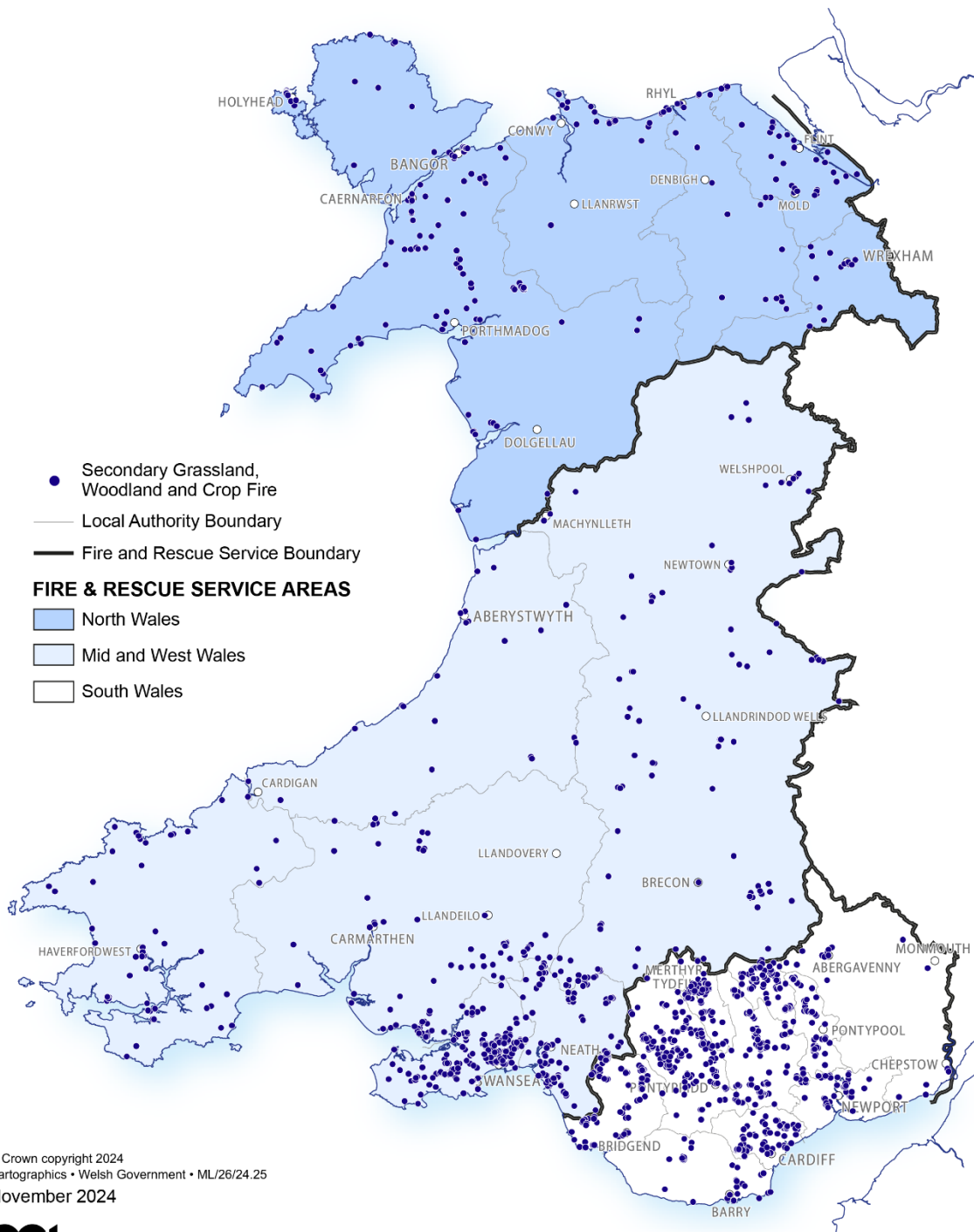
Table 4: Numbers of secondary grassland, woodland and crop fires by FRA, 2014-15 to 2023-24[p]

	North Wales	Mid and West Wales	South Wales	Wales
2014-15	393	835	1,301	2,529
2015-16	426	908	1,763	3,097
2016-17	276	474	895	1,645
2017-18	340	638	1,046	2,024
2018-19	638	1,169	1,954	3,761
2019-20	272	763	1,041	2,076
2020-21	301	798	950	2,049
2021-22	359	959	1,000	2,318
2022-23	450	854	1,135	2,439
2023-24[p]	216	603	784	1,603
Percentage change 2022-23 to 2023-24	-52	-29	-31	-34

Description of Table 4: A table showing a time series of the number of secondary fires occurring on Grassland, woodland or crops from 2014-15 to 2023-24. Throughout the time series South Wales FRA have attended the most secondary grassland fires each year.

[p] Provisional data

**FIGURE 5:
Grassland, woodland and crop
secondary fires, across Wales, 2023-24**



Description of Figure 5: A map of Wales showing the locations of secondary grassland, woodland and crop fires in 2023-24. The map highlights several clusters of these fires, for example in the south Wales valleys and Swansea in 2023-24.

All location categories of secondary grassland, woodland and crop fires saw a decrease compared with 2022-23. The category which saw the largest percentage decrease was hedge (down 47%) followed by canal/riverbank vegetation (down 44%). In 2023-24, 57% of secondary grassland, woodland and crop fires occurred on either 'grassland, pasture, grazing' or scrub land; these are consistently the two largest categories across the time series, accounting for between 56% and 64% each year since 200910.

Table 5: Number of secondary grassland, woodland and crop fires, by location, 2019-20 to 2023-24[p]

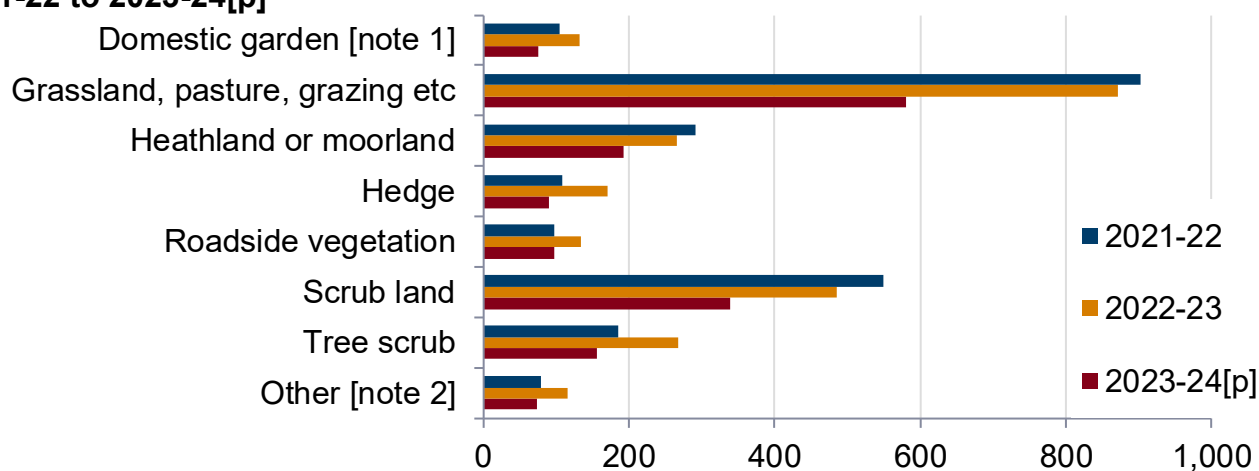
	2020-21	2021-22	2022-23	2023-24[p]
Canal/riverbank vegetation	50	38	62	35
Domestic garden (vegetation not equipment)	146	105	132	76
Grassland, pasture, grazing etc	688	902	872	580
Heathland or moorland	286	292	265	192
Hedge	106	108	170	90
Roadside vegetation	93	98	133	97
Scrub land	451	549	485	339
Tree scrub	189	185	267	155
Other [Note 1]	40	41	53	39
All secondary grassland, woodland and crop fires	2,049	2,318	2,439	1,603

Description of Table 5: A table showing a time series of the number of secondary grassland woodland or crop fires, by location type.

[Note 1] includes nurseries, market gardens, stacked/baled crop, woodland/forest - broadleaf/hardwood, woodland/forest - conifers/softwood, railway trackside vegetation and straw/stubble burning.

[p] Provisional data.

Figure 6: Number of secondary grassland, woodland and crop fires, by location, 2021-22 to 2023-24[p]



Description of Figure 6: A bar chart showing the number of secondary grassland woodland or crop fires in 2021-22, 2022-23 and 2023-24, by location type. The chart highlights how each year the largest categories of secondary fires are those in 'grassland, pasture and grazing' and 'scrub land'.

[Note 1] Vegetation not equipment.

[Note 2] 'Other' as shown in the above chart includes 'woodland/forest - broadleaf/hardwood', 'woodland/forest - conifers/softwood', 'nurseries and market garden', 'stacked and baled crop', canal/riverbank vegetation, railway trackside vegetation and straw/stubble burning.

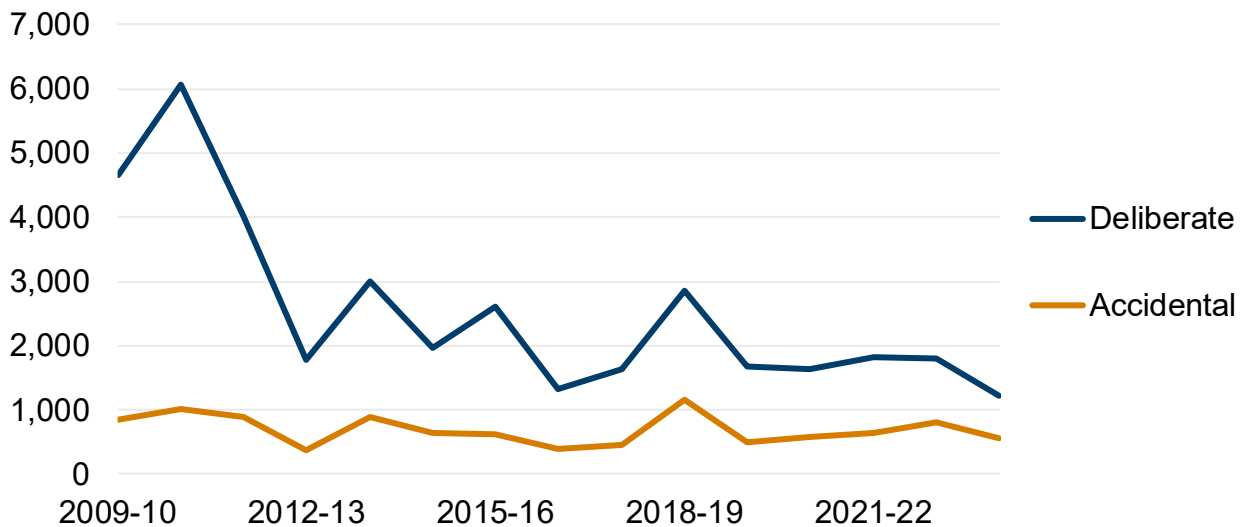
[p] Provisional data.

Grassland, woodland and crop fires by motive

Since the introduction of the Incident Recording System (IRS) in April 2009 for collecting FRA incident data, greater detail relating to secondary fires has been recorded. This allows us to show a time series by motive from this date for all grassland, woodland and crop fires where previously only data for primary fires were available.

The chart below illustrates how much more fluctuation there is in the time series for deliberate fires than accidental fires. However, peaks and troughs, while less marked in the accidental time series, often mirror those in the deliberate fires time series. This could imply the effects of the weather, land management strategies and fire prevention work on all grassland fires.

Figure 7: Grassland, woodland and crop fires by motive, 2009-10 to 2023-24[p]



Description of Figure 7: A line chart shows a time series of all grassland fires, split by motive. The time series starts in 2009-10 and the 2023-24 data are currently provisional. The chart shows that the deliberate fire time series is far more volatile than that for accidental fires.

[p] Provisional data for 2023-24.

69% of grassland, woodland and crop fires were deliberate in 2023-24, the same proportion as in the previous year. Numbers of deliberate grassland fires fell by 32% compared with 2022-23 (from 1,805 to 1,226 fires), whilst numbers of accidental grassland fires fell by 31% (from 814 to 562).

For both deliberate and accidental fires occurring on grassland, woodland and crops, the vast majority were secondary fires; 90% of deliberate grassland fires and 89% of accidental grassland fires were secondary.

Table 6: Number and percentage of grassland, woodland and crop fires, by motive, 2019-20 to 2023-24[p]

	Deliberate	Accidental	All	Deliberate %	Accidental %
Primary fires					
2019-20	81	31	112	72	28
2020-21	123	57	180	69	31
2021-22	99	41	140	71	29
2022-23	106	74	180	59	41
2023-24[p]	124	61	185	67	33
Secondary fires					
2019-20	1,604	472	2,076	77	23
2020-21	1,520	529	2,049	74	26
2021-22	1,720	598	2,318	74	26
2022-23	1,699	740	2,439	70	30
2023-24[p]	1,102	501	1,603	69	31
All fires					
2019-20	1,685	503	2,188	77	23
2020-21	1,643	586	2,229	74	26
2021-22	1,819	639	2,458	74	26
2022-23	1,805	814	2,619	69	31
2023-24[p]	1,226	562	1,788	69	31

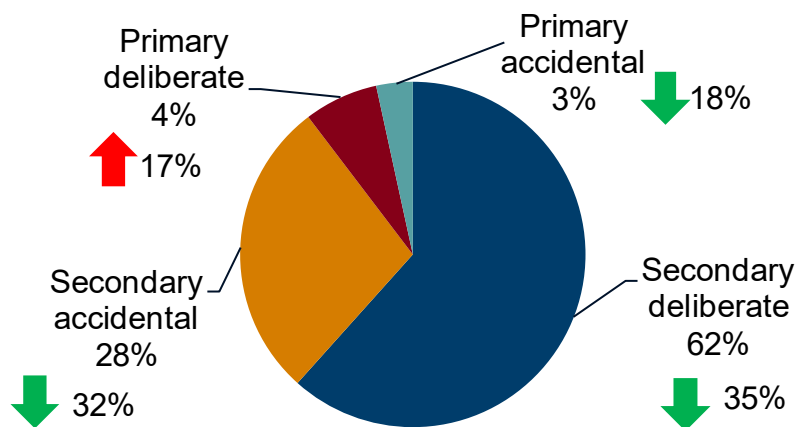
Description of Table 6: A table showing the number of grassland, woodland and crop fires, split by primary and secondary fires. The table also shows the proportions of these fires which were deliberate and accidental.

[p] Provisional data.

Deliberate secondary grassland, woodland and crop fires made up 62% of all grassland, woodland and crop fires in 2023-24.

Accidental secondary grassland fires made up 28% of all grassland, woodland and crop fires in 2023-24.

Figure 8: Grassland, woodland and crop fires by fire type and motive, 2023-24[p]



Description of Figure 8: A pie chart showing the proportion of grassland, woodland and crop fires which are ‘primary and deliberate’, ‘primary and accidental’, ‘secondary and deliberate’ and ‘secondary and accidental’. The largest category in the pie chart is for secondary deliberate fires, which make up 62% of grassland, woodland and crop fires. The arrows within the pie chart are the percentage change compared to the previous year, where the number of primary accidental, secondary deliberate and secondary accidental fires saw decreases compared with 2022-23, whilst numbers of primary deliberate fires rose.

[p] provisional data

Of the 562 accidental (primary and secondary) grassland, woodland and crop fires in 2023-24, 31% occurred on grassland, pasture, grazing and 18% on heathland and moorland.

There were 1,226 deliberate (primary and secondary) grassland, woodland and crop fires in 2023-24, 34% of which occurred on grassland, pasture, grazing and 24% on scrub land.

Grassland, woodland and crop fires by month

The majority of grassland, woodland and crop fires take place in the spring and summer months. June 2023 recorded the highest proportion (38%) of grassland fires for the financial year 2023-24 and increased to almost 3 times the number in June 2022.

August 2023 saw the largest decrease compared with the same month in the previous year; down 95% from 663 in August 2022 to 36 in August 2023.

Table 7: Number and percentage of grassland, woodland and crop fires, by month, 2021-22 to 2023-24[p]

	2021-22	2022-23	2023-24[p]	2021-22 %	2022-23 %	2023-24 %
April	823	557	229	33	21	13
May	102	206	423	4	8	24
June	200	232	674	8	9	38
July	202	473	151	8	18	8
August	107	663	36	4	25	2
September	144	187	48	6	7	3
October	38	48	28	2	2	2
November	35	23	26	1	1	1
December	19	18	34	1	1	2
January	36	16	51	1	1	3
February	54	114	12	2	4	1
March	698	82	76	28	3	4
Total fires	2,458	2,619	1,788	100	100	100

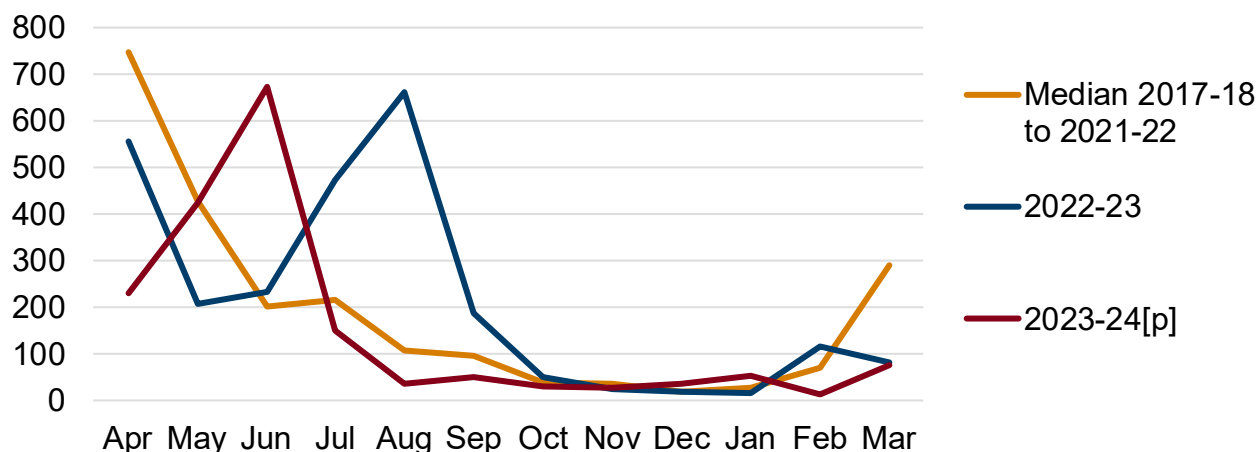
Description of Table 7: A table showing the number of grassland, woodland and crop fires occurring each month in 2021-22, 2022-23 and 2023-24. The table also shows the percentage of total fires for these financial years which occurred in each month.

[p] Provisional data.

In total, 7 months saw decreases compared with the same month in the previous year. After August 2023 (which saw a decrease of 95%), the next largest decreases were seen in February 2024 (down 89%), September 2023 (down 74%) and July 2023 (down 68%). In the remaining months, numbers fell by 59% in April 2023, by 42% in October 2023 and by 7% in March 2024.

The largest percentage increase was seen in January 2024 when there were more than 3 times as many fires compared with January 2023; however, it should be noted only 3% of the grassland, woodland and crop fires in 2023-24 occurred in January 2024. The largest increases in numbers were seen in June 2023 (442 additional fires) and May 2023 (217 additional fires).

Figure 9: Number of grassland, woodland and crop fires, by month, 2017-18 to 2021-22 median, 2022-23 and 2023-24[p]



Description of Figure 9: A line chart showing grassland fire data by month for 2022-23, 2023-24 and the median of the years 2017-18 to 2021-22. The chart shows some noticeable spikes, with very high numbers August 2022 and June 2023 (in comparison with the median and the previous year) and the relatively low numbers in March 2023 and March 2024.

[p] Provisional data.

The occurrence of outdoor fires is likely to be influenced by the weather. Data from the Met Office shows that in 2023-24, the months May and June 2023 had the most sunshine, the least rainfall and had the most fires. Over the last decade, in 7 of the 10 years the most fires were seen in April but this is the second year in a row when a month other than April had the most grassland fires. The Met Office have produced a [factsheet explaining further the links between weather and the occurrence of grassland fires](#).

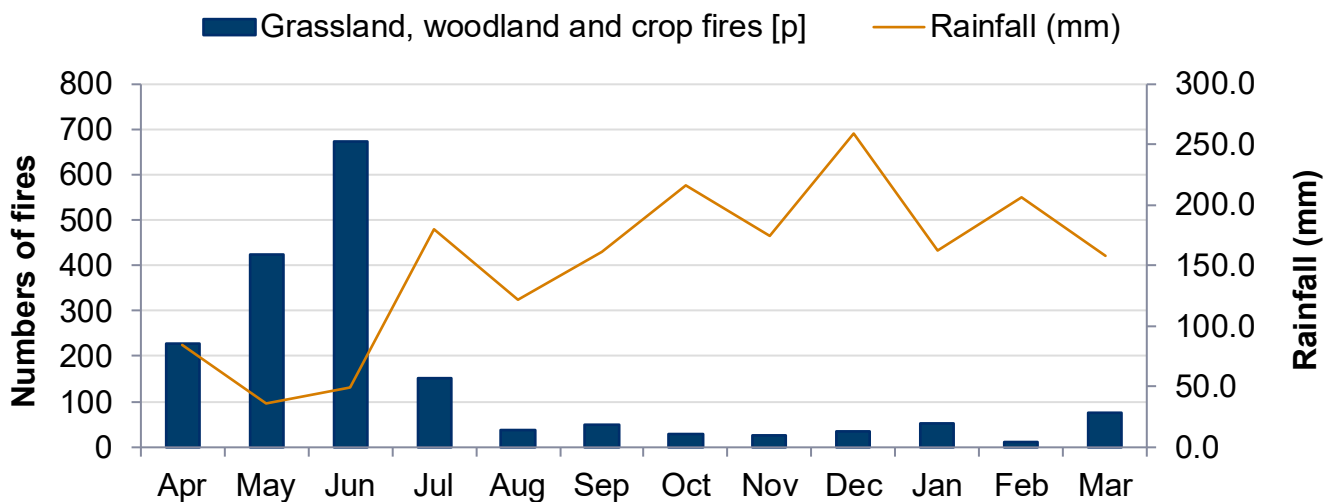
March 2024 saw the second fewest number of grassland fires for March in the time series (from 2009-10) but only a 7% decrease compared with March 2023.

However, weather data cannot explain all the fluctuations, and this may be due to the weather data not being detailed enough (either by time or geography) but there may also be other factors influencing the numbers of fires.

It should be noted that other weather conditions such as snow and ice may also affect the number of fires in the winter.

[Weather data are available from the Met Office.](#)

Figure 10: Number of grassland, woodland and crop fires and rainfall levels, by month, 2023-24

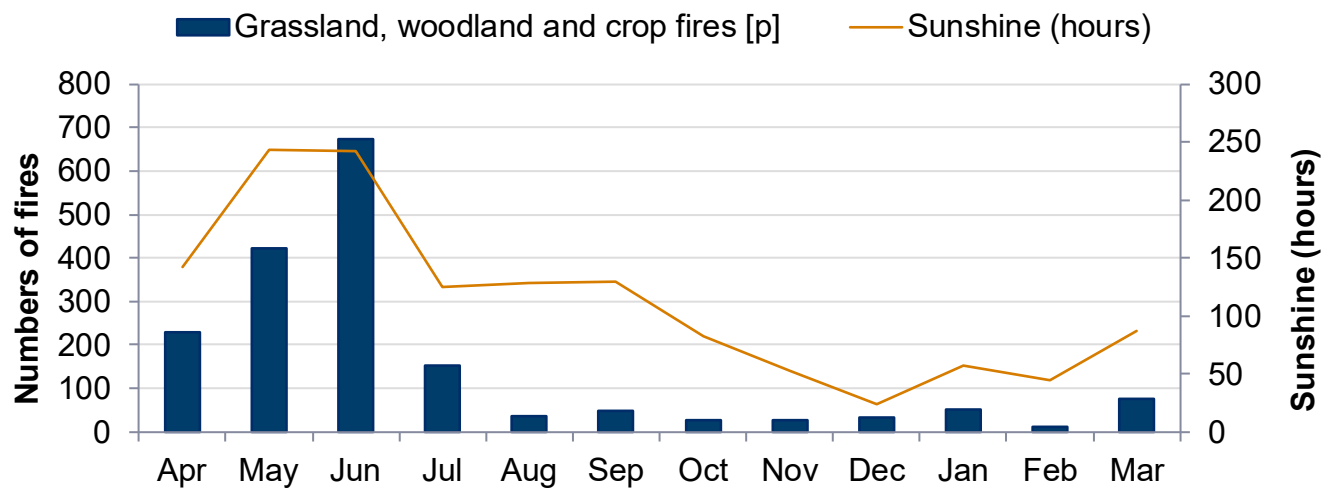


Description of Figure 10: A column chart showing the number of grassland, woodland and crop fires occurring each month in 2023-24, plotted against a line chart of the monthly levels of rainfall (in millimetres) over the same time period. The data indicate that the most fires occurred in spring and summer months when rainfall was relatively low.

Source: Incident Recording System, Met Office

[p] Provisional data

Figure 11: Numbers of grassland, woodland and crop fires and hours of sunshine, by month, 2023-24



Description of Figure 11: A column chart showing the number of grassland, woodland and crop fires occurring each month in 2023-24, plotted against a line chart of the monthly levels of sunshine (in hours) over the same time period. The data indicate that the most fires occurred in spring and summer months when there were most hours of sunshine.

Source: Incident Recording System, Met Office

[p] Provisional data

Fires by FRA and local authority

Table 8: Number and percentage of grassland, woodland and crop fires, by FRA, 2014-15 to 2023-24[p][note 1]

	North Wales	Mid and West Wales	South Wales	% in North Wales	% in Mid and West Wales	% in South Wales
2014-15	411	850	1,352	16	33	52
2015-16	446	936	1,833	14	29	57
2016-17	299	486	931	17	28	54
2017-18	353	652	1,087	17	31	52
2018-19	654	1,266	2,094	16	32	52
2019-20	283	807	1,098	13	37	50
2020-21	311	866	1,052	14	39	47
2021-22	373	1,012	1,073	15	41	44
2022-23	472	918	1,229	18	35	47
2023-24[p]	226	658	904	13	37	51
Percentage change 2022-23 to 2023-24	-52	-28	-26	[z]	[z]	[z]

Description of Table 8: A table showing the number and corresponding percentage of grassland, woodland and crop fires in each FRA each year. The table also gives the percentage change in 2023-24 compared with the 2022-23. The number of grassland, woodland and crop fires decreased in all 3 FRAs, by 52% in North Wales, by 28% in Mid and West Wales and by 26% in South Wales.

[p] Provisional data.

[z] Not applicable

[Note 1] percentages may not sum to 100 due to rounding.

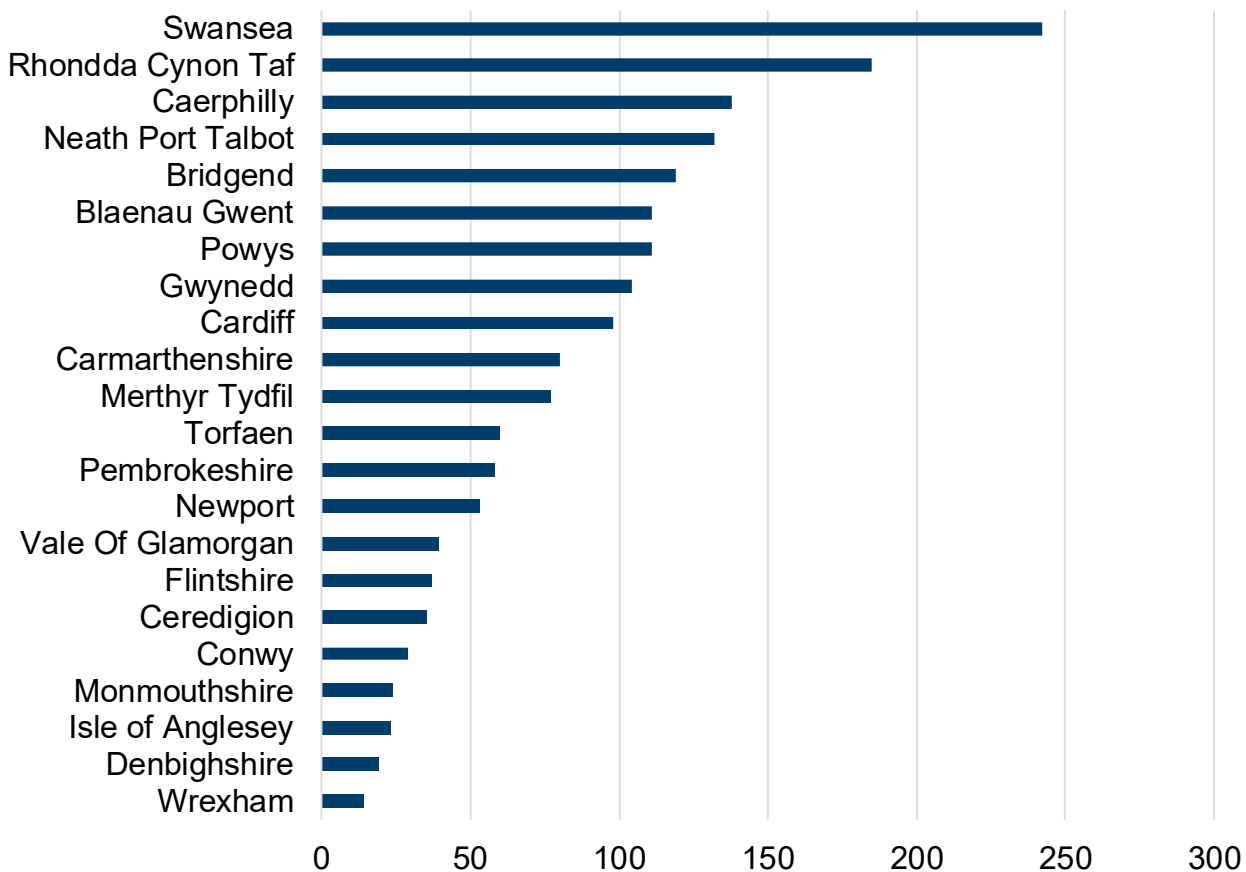
Swansea local authority had the highest number of grassland, woodland and crop fires in Wales in 2023-24 with 242 (equating to 14% of the grassland fires in Wales). Rhondda Cynon Taf had the next highest number, with 10% of grassland, woodland and crop fires in Wales in 2023-24. Wrexham had the smallest number with 14 (less than 1% of those in Wales), closely followed by Denbighshire with 19 fires.

18 local authorities saw a decrease in the number of grassland, woodland and crop fires in 2023-24 (compared with 2022-23); the largest percentage decreases were in Wrexham (down 81%), Isle of Anglesey (down 77%) and Newport (down 70%).

Only 4 local authorities saw increases in the number of grassland, woodland and crop fires in 2023-24; in Blaenau Gwent there was an increase of 32%, in both Bridgend and Gwynedd there were increases of 27% whilst in Merthyr Tydfil the number rose by 8%.

Compared with 2010-11 (the peak in the time series), all 22 local authorities have seen decreases, and in 15 local authorities there were decreases of 70% or more.

Figure 12: Number of grassland, woodland and crop fires, by FRA and local authority 2023-24[p] [Note 1]



Description of Figure 12: A bar chart showing the numbers of grassland, woodland and crop fires by local authority in 2023-24. The chart highlights those LAs with the most grassland fires (Swansea and Rhondda Cynon Taf) and shows the relatively low numbers throughout North Wales.

[Note 1] Local authorities have been assigned to incidents based on grid references; see the Key Quality Information for further details. Local Authority data are available on [StatsWales](https://stats.wales.gov.uk/).

[p] Provisional data.

In 18 local authorities, ‘grassland and pasture’ was the largest (or joint largest) category of location of grassland, woodland and crop fires in 2023-24. The remaining 4 local authorities were Isle of Anglesey (where 52% occurred on heathland), Gwynedd (38% occurring on heathland), Rhondda Cynon Taff (where 39% occurred on scrub land) and Torfaen (17% on Railway trackside vegetation).

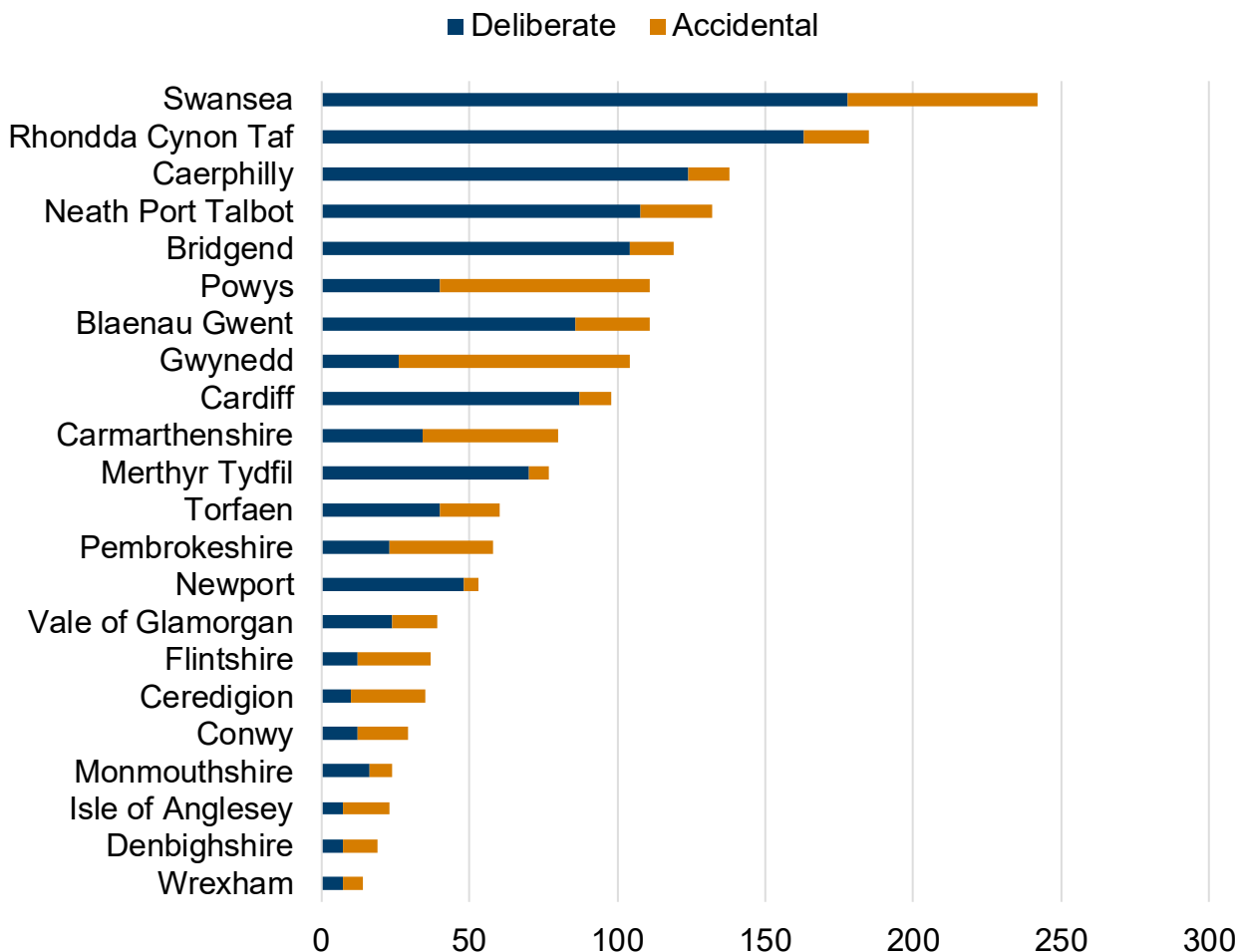
Deliberate fires by local authority

18 local authorities saw a decrease in the number of deliberate grassland, woodland and crop fires in 2023-24 compared with 2022-23. The largest percentage decreases were seen in Wrexham (down 83%) and Newport (down 71%).

4 local authorities saw increases in deliberate grassland fires, the largest percentage increase was in Ceredigion (up 25%) although only an increase of 2 fires.

All but one local authorities in Wales have seen decreases in deliberate grassland fires compared with 2010-11 (the peak in the timeseries), the largest percentage changes being in Wrexham (down 90%), Flintshire (down 88%), Isle of Anglesey (down 87%) and Rhondda Cynon Taf (down 87%).

Figure 13: Numbers of grassland, woodland and crop fires by local authority and motive, 2023-24[p] [Note 1]



Description of Figure 13: A bar chart showing the numbers of grassland fires which were accidental, and which were deliberate for LAs in 2023-24. The chart illustrates how LAs in North Wales tend to have a higher proportion of accidental fires whilst those in South Wales have a higher proportion of deliberate fires.

[Note 1] Local authorities have been assigned to incidents based on grid references; see the Key Quality Information for further details.

[p] Provisional data.

In 7 local authorities, over 80% of all grassland, woodland and crop fires were started deliberately, all being in the South Wales FRA region. The local authorities where the highest proportions of grassland, woodland and crop fires started deliberately occurred were Merthyr Tydfil and Newport (both 91%).

Gwynedd and Ceredigion had the smallest percentages of grassland fires started deliberately (25% and 29% respectively). In 2023-24 Gwynedd had the most accidental grassland fires in Wales, making up 14% of the accidental grassland fires in Wales.

Fire false alarms

Data on fire false alarms on grassland, woodland and crops became available with the introduction of IRS in April 2009.

There was a fall of 22% in the number of grassland, woodland and crop related fire false alarms attended by FRAs in 2023-24 (compared with 2022-23). All 3 FRAs saw a decrease in numbers, in North Wales there was a fall of 37%, in South Wales a 27% decrease and in Mid and West Wales numbers fell by 12%.

Only 2% of these fire false alarms in 2023-24 were due to malicious calls, with the remaining 98% due to good intent. Most malicious calls relating to grassland, woodland and crops occurred in South Wales (73%), which in turn equated to 3% of the grassland, woodland and crop fire false alarms attended in the region.

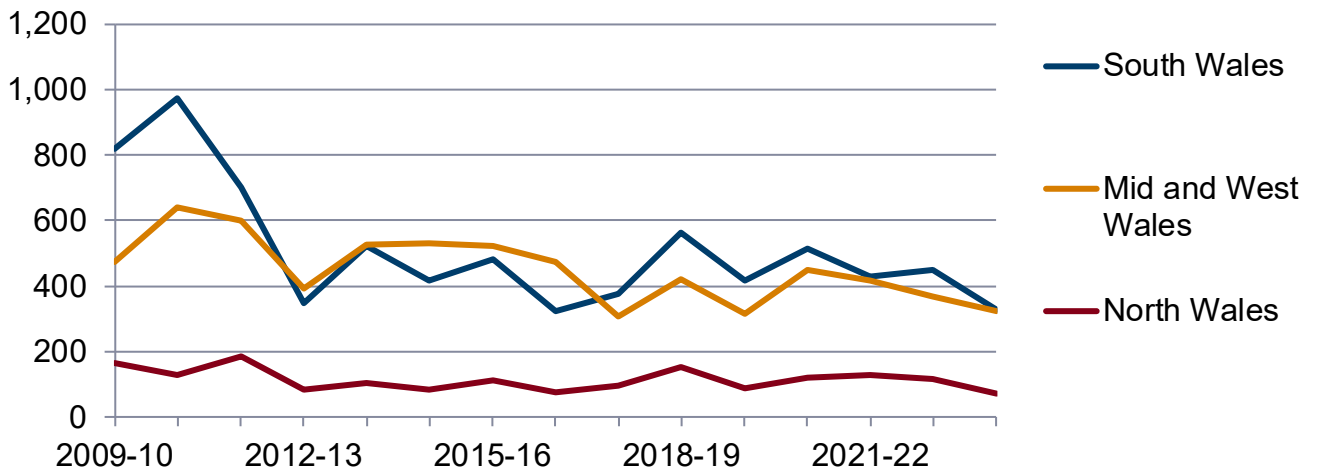
Table 9: Number of grassland, woodland and crop fire false alarms, by FRA, 2014-15 to 2023-24[p]

	North Wales	Mid and West Wales	South Wales	Wales
2014-15	81	531	416	1,028
2015-16	112	521	480	1,113
2016-17	76	475	321	872
2017-18	96	306	376	778
2018-19	153	421	565	1,139
2019-20	89	316	416	821
2020-21	121	450	513	1,084
2021-22	127	418	427	972
2022-23	114	366	448	928
2023-24[p]	72	321	328	721
Percentage change 2022-23 to 2023-24	-37	-12	-27	-22

Description of Table 9: A table showing the numbers of fire false alarms related to grassland, woodland and crop locations, by FRA. Since 2017-18, the majority of grassland, woodland and crop fire false alarms have occurred in South Wales and the fewest in North Wales.

[p] Provisional data

Figure 14: Number of grassland, woodland and crop related fire false alarms, by FRA, 2009-10 to 2023-24[p]



Description Figure 14: A line chart showing the number of grassland, woodland and crop related fire false alarms, for each FRA. The chart highlights the relatively low numbers in North Wales, which are consistently far lower than South Wales and Mid and West Wales.

[p] Provisional data for 2023-24.

Section 2: Casualties from grassland, woodland and crop fires

Since 2011-12 there have been fewer than 10 casualties each year resulting from grassland, woodland and crop fires.

There has been one fatal casualty in a grassland, woodland and crop fire since 2001-02, which occurred in 2007-08. Since 2001-02 there have been 115 non-fatal casualties in these fires; 43% of the injuries incurred were burns and 32% were sent for precautionary checks.

Data on rescues from fires became available with the introduction of IRS in April 2009. Since then, there have been 2 rescues of an uninjured person from a grassland, woodland or crop fire, 1 in 2010-11 and 1 in 2015-16.

There were 2 non-fatal casualties in a grassland, woodland and crop fires in 2023-24, 2 fewer than in 2022-23, although numbers tend to be small and are prone to fluctuation. These 2 casualties equate to less than 1% of all non-fatal fire casualties in Wales in 2023-24.

Over the last 10 years a third of non-fatal grassland, woodland and crop fire casualties were the result of fires which were started deliberately.

During this same time period, 44% of grassland, woodland and crop related casualties occurred in South Wales, 38% in Mid and West Wales and 18% in North Wales.

Table 10: Number of casualties and rescues from grassland, woodland and crop fires, 2014-15 to 2023-24

	Fatalities	Non-fatal casualties	Rescues (no injury)
2014-15	0	6	0
2015-16	0	6	1
2016-17	0	2	0
2017-18	0	5	0
2018-19	0	2	0
2019-20	0	6	0
2020-21	0	3	0
2021-22	0	3	0
2022-23	0	4	0
2023-24[p]	0	2	0

Description of Table 10: A table showing the number of grassland, woodland and crop related fatalities, non-fatal casualties and non-injured rescued people. Numbers of casualties are low, and a trend is difficult to determine.

[p] Provisional data.

Section 3: Area of damage caused by grassland, woodland and crop fires

Fires are classified according to the size of area damaged in the course of a fire. In 2023-24, 49% of primary grassland, woodland and crop fires in Wales damaged 20 square metres or less. A further 31% damaged over 200 square metres. Primary grassland, woodland and crop fires damaging 20 square metres or less saw a small decrease compared to the previous year. Primary grassland, woodland and crop fires damaging between 21-200 square metres and 200+ square metres saw increases compared to the previous year.

For secondary fires, the majority (66%) damaged 20 square metres or less. Almost a fifth of secondary fires damaged between 21 and 200 square metres and 16% damaged an area over 200 square metres.

Overall, the number of grassland, woodland and crop fires in 2023-24 in each category of area damaged decreased; those which damaged less than 20 square metres decreased in number by 35%. The number of fires damaging 21 to 200 square metres fell by 34% whilst the number damaging more than 200 squares fell by 9%.

Table 11: Number and percentage of grassland, woodland and crop fires by area damaged, 2021-22 to 2023-24[p]

	2021-22	2022-23	2023-24[p]	2021-22 %	2022-23 %	2023-24 %
Primary fires	140	180	185	100	100	100
0-20 sq m	86	95	91	61	53	49
21-200 sq m	17	33	37	12	18	20
201+ sq m	37	52	57	26	29	31
Secondary fires	2,318	2,439	1,603	100	100	100
0-20 sq m	1,374	1,675	1,054	59	69	66
21-200 sq m	444	478	298	19	20	19
201+ sq m	500	286	251	22	12	16
All fires	2,458	2,619	1,788	100	100	100
0-20 sq m	1,460	1,770	1,145	59	68	64
21-200 sq m	461	511	335	19	20	19
201+ sq m	537	338	308	22	13	17

Description of Table 11: A table showing the number of grassland, woodland and crop fires, split by primary/secondary and size of area damaged. The table also shows the percentages of fires in each category of fire size for primary and secondary fires.

[p] Provisional data

In 2023-24, 59 grassland, woodland and crop fires took place on National Park land; 81% of these were secondary fires. Over the last 10 years there have been 679 grassland, woodland and crop fires on National Park land, equating to 3% of all grassland, woodland and crop fires in the period.

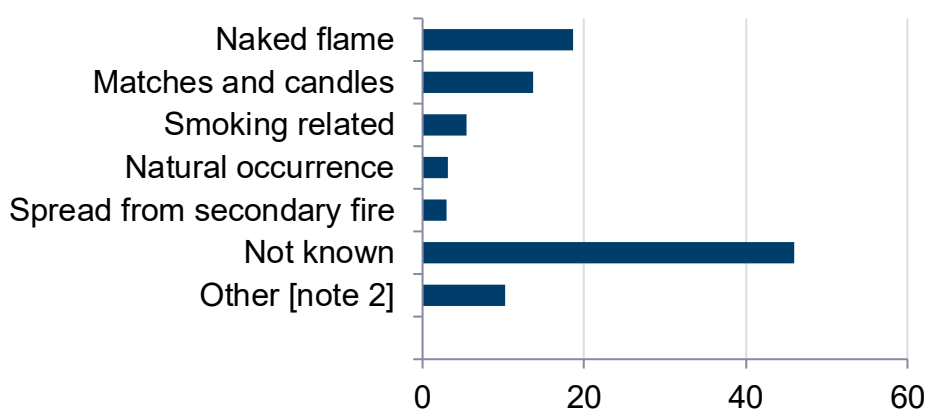
Where a cause of rapid fire growth was recorded, strong winds was the reason in 90% of primary grassland, woodland and crop fires in 2023-24. Comparative data for secondary fires is not available. Over the last 10 years, 48% of primary fires where strong winds were a factor damaged over 10,000 square metres.

Section 4: Source of ignition and cause of grassland, woodland and crop fires

Information is available on the source of primary fires, but not secondary fires. Figure 15 looks at the source of the flame, spark or heat that first ignited the fire. This differs from the cause of the fire, which refers to why the fire started, for instance deliberate (not shown in figure 16), careless handling, overheating or natural causes (which are classed as accidental causes).

In 19% of the primary grassland fires over the last 5 years the source of ignition was a naked flame and a further 14% were due to matches and candles. In 46% of primary grassland fires in the last 5 years, the source was unknown.

Figure 15: Percentage of primary grassland, woodland and crop fires by source of ignition, 2019-20 to 2023-24 (aggregated) [note 1]



Description of Figure 15: A bar chart showing the source of ignition of primary grassland, woodland and crop fires. Most fires in this time period were started with a naked flame or matches/candles (for those fires where the source is known).

[Note 1] Accidental and deliberate grassland fires.

[Note 2] Includes bombs and explosives, fireworks, fuel/chemical, other, wet hay, cooking appliance, vehicles and other domestic style appliance.

Source of ignition of grassland, woodland and crop fires by motive

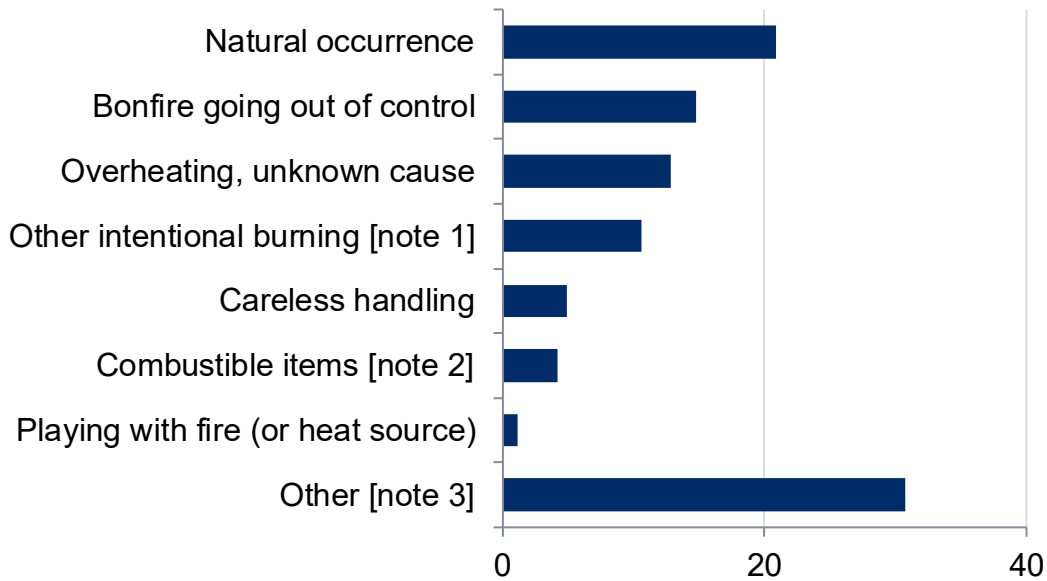
As may be expected, for most deliberate fires over the last 5 years (2019-20 to 2023-24) the source of ignition was a naked flame (24%) or matches and candles (18%). A further 6% were started with smokers' materials. In 47% of deliberate fires the source was unknown.

The sources of accidental fires over the same period are more varied; 9% spread from secondary fires, 8% occurred naturally and 8% started with a naked flame. In 44% of accidental fires the source was unknown.

Cause of accidental grassland, woodland and crop fires

A third of primary fires over the last 5 years were caused accidentally.

Figure 16: Percentage of accidental primary grassland, woodland and crop fires, by main cause, 2019-20 to 2023-24 (aggregated)



Description Figure 16: A bar chart showing the proportion of accidental primary grassland, woodland and crop fires and their cause, aggregated for the last 5 years. The largest single category of known causes of accidental fires was from natural occurrence (21%). The next largest proportion of accidental fires was from a bonfire going out of control (15%), but the category shown in the chart as 'Other' is the largest (31%), this category is a summation of a number of smaller categories.

[Note 1] Intentional burning might be for the purpose of forest management, ecological restoration, land clearing or wildfire fuel management. The FRA would be called if such a fire goes out of control.

[Note 2] Being placed too close to heat source or fire

[Note 3] Other in the above chart includes 'Not applicable', 'Fault in equipment or appliance', 'Faulty fuel supply', 'Negligent use of equipment or appliance (heat source)', 'Accumulation of flammable material', and 'Person too close to heat source (or fire).

Section 5: Additional analysis - Calendar year data

This analysis has been included as we are aware that users often refer to data on the situation in the calendar year rather than the financial year, and also to question the impact of the Easter break on the patterns seen.

For much of the time series there has been a regular peak in grassland, woodland and crop fires in April (beginning of the financial year) and March (end of the financial year), which *may* be linked to the timing of Easter. Analysis of calendar year data can be useful, as this limits periods of Easter in a year to one and also to show the peak period for fires as a continuous time.

Numbers of grassland, woodland and crop fires and fire false alarms fell by 38% in 2023 (compared with 2022). Numbers of fires and fire false alarms were at their lowest for the time series, seeing decreases of 42% and 28% respectively compared with the previous year.

In 2023 the number of primary grassland fires fell by 13% compared with 2022, whilst numbers of secondary fires fell by 44% compared with 2022.

Table 12: Numbers of fires and fire false alarms and numbers which are grassland, woodland and crop related – calendar years 2018 to 2023[p]

	2018	2019	2020	2021	2022[r]	2023[p]
Primary	4,459	4,212	3,924	3,844	3,993	3,951
of which grassland [note 1]	244	106	191	115	210	182
Secondary	7,616	6,278	6,079	5,980	7,681	5,691
of which grassland [note 1]	3,494	2,173	2,084	1,924	2,985	1,679
Total fires [note 2]	12,433	10,844	10,319	10,156	11,957	9,876
of which grassland [note 1]	3,738	2,279	2,275	2,039	3,195	1,861
Fire false alarms	14,485	14,243	14,765	14,968	16,014	17,089
of which grassland [note 1]	1,057	852	1,069	859	1,066	772
All fires and fire false alarms	26,918	25,087	25,084	25,124	27,971	26,965
of which grassland [note 1]	4,795	3,131	3,344	2,898	4,261	2,633

Description of Table 12: A table showing the number of primary fires, secondary fires and fire false alarms in calendar years. It also shows the number of these related to grassland, woodland and crop locations.

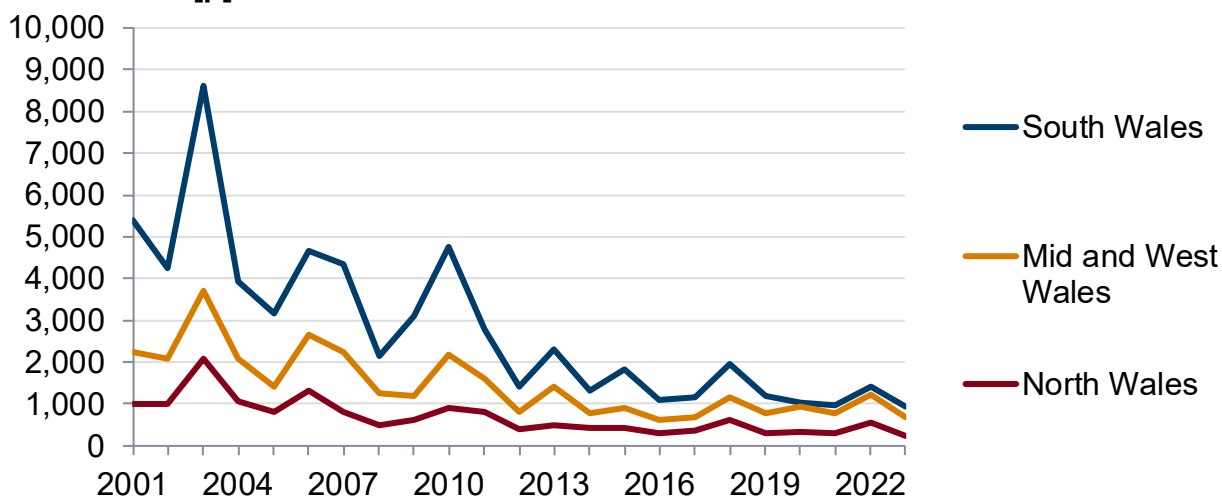
[Note 1] Grassland, woodland and crops

[Note 2] Includes chimney fires

[r] Revised data.

[p] Provisional data.

Figure 17: Numbers of grassland, woodland and crop fires by FRA, calendar years 2001 to 2023[p]



Description of Figure 17: A line chart showing the number of grassland, woodland and crop fires, by FRA, in calendar years. The chart shows how, over time the numbers in the 3 FRAs have become closer together, although throughout the time series South Wales has had the most fires, and North Wales the fewest.

[p] Provisional data

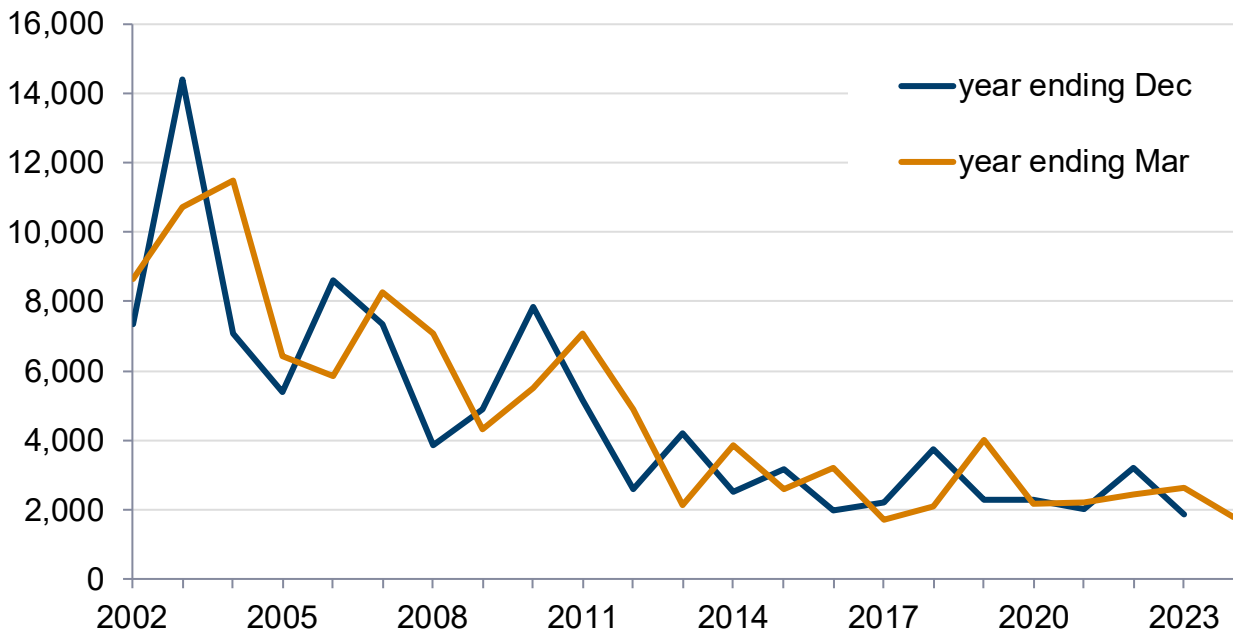
Since 2001 all 3 FRAs have seen a general downward trend, with numbers of grassland, woodland and crop fires falling by 83% in South Wales, 76% in North Wales and 70% in Mid and West Wales. Compared with 2022 all FRAs saw a decrease, down 56% in North Wales, down 45% in Mid and West Wales and South Wales saw a fall of 33%.

Comparisons between calendar year and financial year

A comparison between calendar years and financial years as shown in figure 18 shows similar patterns with peaks and troughs displaced by 3 months (i.e. a peak seen in calendar year 2003 will be seen in financial year 2003-04). This is intuitively true since calendar years and financial years have 9 months in common (for example, calendar year 2003 shares 9 months with financial year 2003-04).

The most recent financial and calendar years both saw decreases (down 32% and 42% respectively), the larger decrease seen in calendar year (2023) is due to the low numbers of grassland, woodland and crop fires in March 2023 compared to the high number of such fires in March in 2022. Since March 2023 is part of financial year 2022-23, the financial year 2023-24 is not affected by these differences.

Figure 18: Grassland, woodland and crop fires - comparing years financial 2001-02 to 2023-24 with calendar years 2002 to 2023



Description of Figure 18: A line chart comparing the time series trend for calendar years and financial years in grassland, woodland and crop fires. The purpose of the chart is to show whether a different trend would be seen if the data were reported in calendar years rather than financial years.

[p] Data for financial year 2023-24 and calendar year 2023 are provisional.

Easter holidays

The Easter period as referred to in this analysis starts the Saturday before Good Friday and ends the Sunday after Easter Sunday. As such the Easter period in 2023 occurred wholly within April 2023, and therefore falls entirely within 2023-24. Easter in 2024 occurred partly in March 2024 and partly in April 2024. The Easter days occurring in March 2024 are included in the analysis below. Financial year 2023-24 therefore has 25 days of Easter (16 in 2023 and 9 in 2024).

The percentage of grassland fires occurring during Easter decreased from 10% in the financial year 2022-23 to 8% in 2023-24. Calendar year analysis shows the proportion at Easter went down from 8% in 2022 to 6% in 2023.

Table 13: Analysis of grassland, woodland and crop fires at Easter, 2014 to 2024
[Note 1]

	Days of Easter (y/e Mar)	Fires (y/e Mar) [Note 2]	% of fires occurring at Easter (y/e Mar)	Days of Easter (y/e Dec)	Fires (y/e Dec) [Note 2]	% of fires occurring at Easter (y/e Dec)
2015	20	482	18	16	551	17
2016 [Note 3]	19	565	18	17	94	5
2017	10	65	4	16	550	25
2018	24	579	28	16	48	1
2019	8	19	0	16	510	22
2020	16	510	23	16	416	18
2021	21	472	21	16	275	13
2022	11	219	9	16	268	8
2023[p]	16	268	10	16	110	6
2024[p]	25	136	8	[x]	[x]	[x]

Description of Table 13: A table showing the number of fires in the 16-day period around Easter. The table shows this period in calendar and financial years. The nature of Easter means that in a financial year the number of 'days of Easter' varies, whereas in a calendar year it remains the same. The table shows that the percentage of fires occurring at Easter (in both financial and calendar years varies a great deal (between 0% and 28% for financial years and between 1% and 25% for calendar years shown in the table)

[Note 1] For the purposes of this table, Easter is defined as the 16-day period starting on the Saturday before Good Friday and ending on the Sunday after Easter Monday. For most years this period matches the Easter school holidays. See Key Quality Information for dates.

[Note 2] Grassland, woodland and crop fires occurring in defined Easter period.

[Note 3] The period used in 2016 starts on Friday 25th March to Sunday 10th April, mirroring the school holidays in this year.

[p] Data for financial year 2023-24 and calendar year 2023 are provisional.

[x] Data not available yet

Table 14: Daily rates of grassland, woodland and crop fires at Easter, 2015 to 2024 [Note 1]

	April & March			March/April		
	at Easter (y/e Mar)	(y/e Mar) [Note 2]	Each year (y/e Mar)	at Easter (y/e Dec)	(y/e Dec) [Note 2]	Each year (y/e Dec)
2015	24.1	16.4	7.2	34.4	31.6	8.7
2016 [Note 3]	29.7	32.7	8.8	5.5	14.9	5.5
2017	6.5	11.0	4.7	34.4	17.6	6.1
2018	24.1	14.3	5.7	3.0	4.4	10.2
2019	2.4	8.1	11.0	31.9	16.1	6.2
2020	31.9	17.3	6.0	26.0	18.3	6.2
2021	22.5	17.0	6.1	17.2	18.3	5.6
2022	19.9	25.0	6.7	16.8	20.6	8.8
2023	16.8	10.5	7.2	6.9	5.1	5.1
2024[p]	5.4	5.0	4.9	[x]	[x]	[x]

Description of Table 14: A table showing daily rates at Easter, March and April and annually, giving an indication of whether numbers of fires at Easter are higher than at other times. The daily rate for the combined months of April and March is shown as in these months there are usually higher numbers of fires and they span the Easter period).

[Note 1] For the purposes of this table, Easter is defined as the 16-day period starting on the Saturday before Good Friday and ending on the Sunday after Easter Monday. For most years this period matches the Easter school holidays. See Key Quality Information for dates.

[Note 2] In the financial year April is at the beginning of the period whilst March is at the end (for instance, April 2022 and March 2023 are included in 2022-23 whilst in the calendar year March and April are consecutive months).

[Note 3] The period used in 2016 starts on Friday 25th March to Sunday 10th April, mirroring the school holidays in this year.

[p] Data for financial year 2023-24 and calendar year 2023 are provisional.

[x] Data not available yet

In 2023-24 the daily rate of fires at Easter was higher than the daily rate in April 2023 and March 2024 combined. Unusually the daily rate for April 2023 and March 2024 was only slightly higher than the annual daily rate. There's only one financial year (2018-19) in the time series where the annual daily rate was higher than the rate in April and March.

For the calendar year 2023 the daily rate at Easter 2023 was higher than the daily rate in March 2023 and April 2023 combined; the March to April 2023 rate was similar to the annual daily rate.

Glossary

Accidental fires

Includes those where the fire was ignited by accident or the cause was not known or unspecified.

Cause of fire

The defect, act or omission leading to ignition of the fire.

Chimney fires

Reportable fires in occupied buildings where the fire was confined within the chimney structure and did not involve casualties or rescues or are attended by 5 or more appliances. Data on chimney fires do not fall within the scope of this bulletin.

Deliberate

Include those where deliberate ignition is merely suspected.

Fire false alarms

Events in which the FRA was called to a reported fire which turned out not to exist. This bulletin does not include data on Special Service Incident False Alarms. False alarms are categorised as follows:

Malicious Fire False Alarms

Calls made with the intention of getting the fire and rescue service to attend a non-existent fire-related event, including deliberate and suspected malicious intentions.

Good Intent Fire False Alarms

Calls made in good faith in the belief that the fire and rescue service really would attend a fire.

Fire False Alarms Due to Apparatus

Calls initiated by fire alarm and fire-fighting equipment operating (including accidental initiation of alarm apparatus by persons).

Fatal casualty (fire related)

A person whose death is attributed to a fire even if the death occurred weeks or months later. There are also occasional cases where it becomes apparent subsequently that fire was not the cause of death. The figures for fatalities are thus subject to revision.

Fire Data Reports (FDR1 and FDR3)

The method of data collection via paper forms prior to the Incident Recording System (introduced in April 2009). FDR1 was used to record primary fires, FDR3 for secondary fires, chimney fires and false alarms.

Fire and Rescue Authorities (FRAs)

The statutory bodies which oversee the policy and service delivery of a fire and rescue service. The three authorities in Wales are North Wales, Mid and West Wales and South Wales.

Grassland, woodland and crop fires

From 2009-10 grassland, woodland and crop fires include fires in gardens, crops, woods, nurseries/market gardens, heathland/moorland, grassland/pasture/grazing, scrub land, railway trackside vegetation, roadside vegetation and roadside vegetation. Prior to this date grassland fires referred to primary fires in allotments, gardens, crops, woods and other agricultural locations and secondary fires on grassland, heathland and as a result of intentional straw and stubble burning. This is a broader definition than the land use definition in agricultural publications.

Incident Recording System (IRS)

The electronic based system for recording fires, false alarms and Special Service Incidents. IRS replaced the FDR1 and FDR3 paper forms in April 2009.

Location

The type of premises, property or countryside in which the fire started. This is not necessarily the type of premises in which most casualties or damage occurred as a result of the fire.

Non-fatal casualties

Recorded as being in one of four classes of severity as follows:

- (i) Victim went to hospital, injuries appear to be serious
- (ii) Victim went to hospital, injuries appear to be slight
- (iii) First aid given at scene
- (iv) Precautionary check recommended – this is when an individual is sent to hospital or advised to see a doctor as a precaution, having no obvious injury or distress.

Non-fatal casualties marked as 'not fire-related' have not been excluded due to widespread inappropriate use of this field.

Primary fires

All reportable fires in non-derelict buildings, vehicles and outdoor structures or any fire involving casualties, rescues, or fires attended by five or more appliances.

Reportable fire

An event of uncontrolled burning involving flames, heat or smoke and which the FRA attended.

Secondary fires

The majority of outdoor fires including grassland and refuse fires unless they involve casualties or rescues, property loss or five or more appliances attend. They include fires in single derelict buildings. They are reported in less detail than other fires and consequently less information concerning them is available.

Source of ignition

The source of the flame, spark or heat that started the fire.

Quality information

General information relating to data quality for fire and rescue incidents, operational fire data and FRA performance data can be found in the [Quality Report](#).

Background

The analysis in this bulletin relates to fire and rescue service incidents between April 2023 and end March 2024 whilst making comparisons with April 2022 to March 2023 and earlier years. On 10 November 2004 the Fire and Rescue Services Act 2004, which devolved fire and rescue services to the National Assembly for Wales (now the responsibility of the Welsh Government), was brought into effect. In Wales, these services are provided by three Fire and Rescue Authorities (FRAs). The three FRAs cover varied geographical areas with a wide variety of risks including: fires in homes; outdoor fires; fires in business premises; road traffic collisions; rail or air crashes; chemical spills; building collapses; and trapped people or animals.

North Wales FRA provides cover for a population of almost 700,000 across a geographical area of 2,400 square miles. It employs over 900 operational and non-operational support staff from its headquarters and its 44 fire stations.

Mid and West Wales FRA covers over half the area of Wales and a population of over 900,000. There are 58 fire stations and around 1,300 employees.

South Wales FRA serves a population of over 1.5 million people covering 1,085 square miles. It employs around 1,700 staff including over 1,400 fire-fighters who operate from 47 fire stations throughout South Wales.

Prevention

Following the exceptional forest fires in Easter 2003 caused by weather conditions, Forest Research used geospatial mapping and qualitative techniques (interviews, observation, and surveys) to characterise and understand the problem of wildfires, focusing on the social factors behind the issue. Their [information paper includes details of measures put in place to avoid similar occurrences](#).

The Welsh Government has issued [guidance on heather and grass burning](#). Currently, burning is only allowed during the following periods:

- 1 October - 31 March in Uplands
- 1 November - 15 March elsewhere

A license is required at all other times and can only be obtained in very specific circumstances. Application for burning during restricted periods can be made through the Welsh Government Website at the above link. It is also illegal to burn between sunset and sunrise. In addition, a Burning Management Plan has to be completed for all proposed burnings.

Burning in Wales is controlled by [The Heather and Grass Burning \(Wales\) Regulations 2008](#) and [The Heather and Grass Burning Code](#), which gives advice on burning best practice.

Easter holidays

Numbers of fires in March and April may be affected by Easter holidays (bank holidays and school holidays). As the timing of Easter can change this can impact on the financial year in which the school holidays may fall. For the purpose of this bulletin 'Easter' is taken from the Saturday before Good Friday to the Sunday after Easter Monday. School closures due to the COVID-19 pandemic have also been noted.

Main school Easter holidays for the last few years are listed below:

- 2024 – Monday 25th March to Friday 5th April. Fires occurring between Saturday 23rd March and Sunday 31st March (inclusive) are included in the analysis of fires at Easter in 2023-24. The remainder of the Easter holidays in 2024 are outside the scope of this bulletin.

Good Friday 29th March Easter Monday 1st April

- 2023 – Monday 3rd April to Friday 14th April. The Easter period in 2023 falls in the financial year 2023-24.

Good Friday 7th April Easter Monday 10th April

For earlier years please see previous publications in this series.

Official statistics status

All official statistics should show the standards of the [Code of Practice for Statistic \(UK Statistics Authority\)](#).

These are accredited official statistics. They were independently reviewed by the Office for Statistics Regulation (OSR) in June 2012. They comply with the standards of trustworthiness, quality and value in the Code of Practice for Statistics.

It is Welsh Government's responsibility to maintain compliance with the standards expected of accreditation. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with OSR promptly. Accreditation can be cancelled or suspended at any point when the highest standards are not maintained, and reinstated when standards are restored.

Accredited official statistics are called National Statistics in the Statistics and Registration Service Act 2007.

Statement of compliance with the Code of Practice for Statistics

Our statistical practice is regulated by the Office for Statistics Regulation (OSR). OSR sets the standards of trustworthiness, quality and value in the Code of Practice for Statistics that all producers of official statistics should adhere to.

All of our statistics are produced and published in accordance with a number of statements and protocols to enhance trustworthiness, quality and value. These are set out in the Welsh Government's [Statement of Compliance](#).

These [accredited official statistics](#) demonstrate the standards expected around trustworthiness, quality and public value in the following ways.

Trustworthiness

These statistics are compiled from administrative data systems in use in the Fire and Rescue Services in Wales.

These statistics are pre-announced on the [Statistics and Research area of the Welsh Government website](#). Access to the data during processing is restricted to those involved in the production of the statistics, quality assurance and for operational purposes. Pre-release access is restricted to eligible recipients in line with the [Code of Practice](#).

Quality

Statistics published by Welsh Government adhere to the Statistical Quality Management Strategy which supplements the Quality pillar of the Code of Practice for Statistics and the European Statistical System principles of quality for statistical outputs.

Accuracy

Since April 2009 incident data (relating to fires, false alarms and SSIs) have been submitted by the FRAs via the Incident Recording System (IRS). On 5 January 2016 responsibility for fire and rescue policy in England transferred from the Department for Communities and Local Government (CLG) to the Home Office, this resulted in IRS also being managed by the Home Office. IRS does not currently collect data from FRAs in Northern Ireland.

Data submitted to IRS are automatically checked in the following ways:

- only the applicable questions are asked
- all dates and or times are complete and in the correct format
- dates and or times are in a valid order
- only appropriate options are displayed

Due to the potential complexity of incidents recorded it is not possible for IRS to check that all data submitted is logical; unusual circumstances can be checked by having a process for quality control and assurance by the FRAs. The FRAs complete records in IRS in accordance with [guidance](#) available from the Home Office.

Upon receipt of data at Welsh Government some general sense checks are carried out and queried as necessary.

Prior to IRS data were collected via the paper-based forms FDR1 and FDR3. The change in collection method has allowed a greater volume of data to be captured:

- Recording data on SSIs
- All fires are recorded; pre-IRS statistics were based on a sampled dataset.

- Recoding some detail on secondary fires and chimney fires; pre-IRS, only aggregates were previously available.

For more details of the information collected and held on IRS please see ['Further details'](#).

The incident data are extracted from IRS annually (usually around July/August) and marked provisional at first publication. All bulletins and StatsWales tables excluding the six- month data (usually published in February/March) and the FRA Performance data are based on this dataset. Due to the nature of the live system, whilst accurate at the time of extraction, totals may change and therefore be revised due to updated information. No revisions were made to the 2022-23 grassland, woodland and crop data. 2023-24 data are currently marked as provisional and may be revised in future publications.

A key piece of information that the IRS collects for all incidents is the accurate incident location. For all incidents it is mandatory to have the grid location (easting and northing co-ordinates), in addition for addressable locations the address details can be recorded.

Within the IRS forms system, for addressable locations the user locates the address using a gazetteer and this determines the co-ordinates. For non-addressable locations the user will either select the location on a map or use a mobile data terminal to determine the location. These grid references submitted by the FRAs are used to determine the local authority in which the incident occurred.

Accessibility and clarity

Welsh fire statistics are published in an accessible, orderly, pre-announced manner on the Welsh Government website at 9:30am on the day of publication.

In our outputs, we aim to provide a balance of commentary, summary tables, charts and maps. The aim is to 'tell the story' in the output, without the output becoming overly long and complicated. We provide additional, detailed data on [StatsWales](#).

Comparability and coherence

Since 2009-10 the three FRAs have recorded all their fire incidents using the IRS. This may affect some of the incident categories especially when data are compared with years prior to 2009-10. Following a quality assurance exercise carried out by the Department for Communities and Local Government (CLG) on the 2009-10 and 2010-11 two possible discontinuities (due to the change in data collection method) were discovered. One relates to types of incident, notably outdoor primary fires and the second to non-fatal casualties. More information is given on this subject in the Comparability section of [Fire Statistics publication](#).

Numbers of non-fatal casualties presented in this bulletin include those recorded as 'not fire related'. This is the result of an exercise CLG undertook which found that the 'not fire related' casualty marker had been widely misused. Data published by the Home Office for England and the Scottish Fire and Rescue Service for Scotland also include these casualties. However the second performance indicator (FRS/RRC/S/002) listed in the Fire and Rescue Authority performance

releases and StatsWales table exclude those casualties and so the data are not directly comparable.

The [Fire Statistics Quality Report](#) covers the general principles and processes leading up to the production of our fire statistics. The report covers various topics including definitions, coverage, timeliness, relevance and comparability.

Timeliness and punctuality

This Statistical Bulletin is pre-announced and then published on the [Statistics & Research website](#). Furthermore, should the need arise to postpone an output this would follow the Welsh Government's Revisions, Errors and Postponements arrangements.

Data for this bulletin are taken from the same dataset as the annual Fire Statistics (and the Deliberate fires bulletin if published) which is usually extracted in July each year. This bulletin is usually published in the October around 7 months after the financial year end. The delayed publication of the 2023-24 bulletin is due to a review of all our fire publications.

Rounding and symbols

The following symbols may have been used in this release:

- [p] provisional
- [r] revised
- [x] not available
- [z] not applicable

UK comparisons

Whilst England and Scotland do not publish specific grassland fires bulletins, data by location are available in their annual publications.

Data for England (published by the Home Office since April 2016):

- [Fire statistics England \(Home Office\)](#)
- [Fire statistics monitor \(Home Office\)](#)

Data for Scotland (published by Scottish Fire and Rescue Service since 2015) – not currently badged as national or official statistics.

- [Fire and Rescue Incident Statistics 2023-24 \(Scottish Fire and Rescue Service\)](#)
- [Pre 2014-15 data \(Scottish Government\)](#)

Limited Northern Ireland data are available in an [annual report from Northern Ireland Fire and Rescue Service](#).

Value

The Welsh Government uses the information in this bulletin to monitor the trends in grassland, woodland and crop fires occurring in Wales. This helps to assess the effectiveness of current policies, and the data can be used for future policy development. The data are also used as evidence for national fire safety initiatives and campaigns.

The data are used by the FRAs for comparisons and benchmarking. The data aids the allocation of resources and the provision of community safety projects.

We regularly review our data collections and outputs to ensure that they are relevant, collect reliable data and meet user needs. We also consult our users on a number of fire data collections issues. This is part of an ongoing exercise covering all fire and rescue statistics in order to better understand user requirements and priorities for the future. As part of this, Welsh Government policy colleagues, fire and rescue services and others have provided information on how they use fire statistics.

You are welcome to contact us directly with any comments about how we meet these standards. Alternatively, you can contact OSR by emailing regulation@statistics.gov.uk or via the OSR website.

Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural wellbeing of Wales. The Act puts in place seven wellbeing goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators (“national indicators”) that must be applied for the purpose of measuring progress towards the achievement of the wellbeing goals, and (b) lay a copy of the national indicators before Senedd Cymru. Under section 10(8) of the Well-being of Future Generations Act, where the Welsh Ministers revise the national indicators, they must as soon as reasonably practicable (a) publish the indicators as revised and (b) lay a copy of them before the Senedd. These national indicators were laid before the Senedd in 2021. The indicators laid on 14 December 2021 replace the set laid on 16 March 2016.

Information on the indicators, along with narratives for each of the wellbeing goals and associated technical information is available in the [Wellbeing of Wales report](#).

Further information on the [Well-being of Future Generations \(Wales\) Act 2015](#).

The statistics included in this bulletin could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local wellbeing assessments and local wellbeing plans.

Further details

The document is available on the Welsh Government [website](#).

More information is available in the form of [StatsWales tables](#) that accompany this release.

Accessible Excel tables from the bulletin are also published under the heading 'Data' on the [Grassland fires 2023-24](#) webpage. These tables show the full available time series.

Analysis of annual Welsh fire incident data can be found in the bulletin '[Fire and Rescue Incident Statistics, 2023-24](#)'. The bulletin includes charts and information on fires, false alarms and Special Service Incidents, on all location types (dwellings, road vehicles and so on), causes of fires and the presence of smoke alarms.

The [Evaluation of the Arson Prevention Programme](#) focuses on three of the main initiatives; Arson Reduction Teams (ARTs); the Arson Small Grants Programme; and the Grassland Fire Initiative.

We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to stats.inclusion@gov.wales.

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