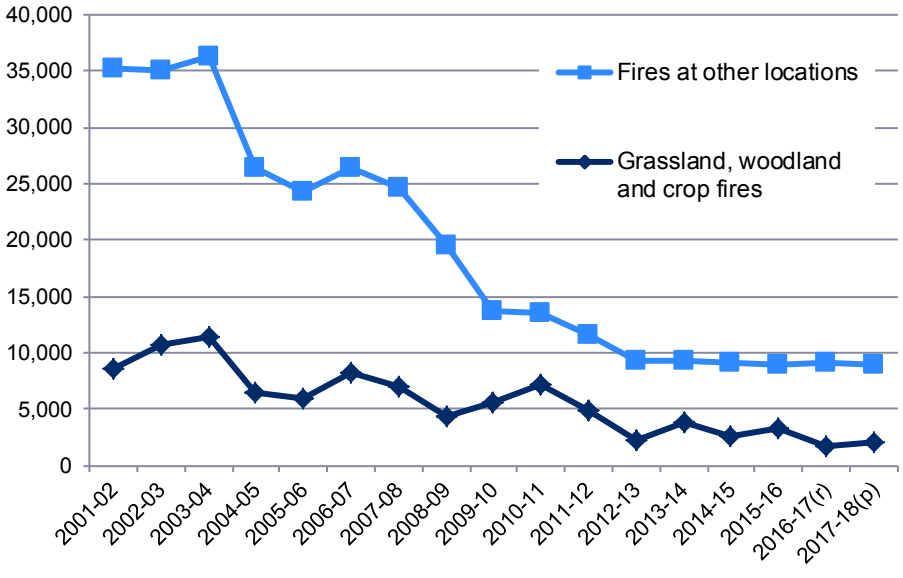
Grassland fires, 2017-18

24 October 2018
SB 67/2018

Around one in ten attendances by a Fire and Rescue Authority (FRA) at fires or false alarms in 2017-18 were grassland, woodland or crop related.

The Welsh FRAs attended 2,090 grassland, woodland and crop fires in 2017-18, up 22 per cent on the 2016-17 figure. The number of these fires is prone to fluctuation and the 2017-18 figure continues a period of instability in these numbers. The 2017-18 figure is the second lowest in the time series (from 2001-02).

Chart 1: Numbers of fires on grassland, woodland and crops and other locations



(r) Revised data
(p) Provisional data

- In 2017-18, over three quarters of fires on grassland, woodland and crops were started deliberately. (Table 4)
- In April 2017 the number of grassland, woodland and crop fires doubled compared with April 2016 and accounted for 38 per cent of the grassland fires in the year. Met Office weather data shows April 2017 saw around 70 per cent less rainfall but also around 8 per cent fewer hours of sunshine (Table 5), compared with April 2016.

About this bulletin

This bulletin is complementary to data on fire incidents published in August 2018. It examines the impact and patterns in grassland, woodland and crop fires in the financial years 2001-02 to 2017-18, where data for 2017-18 are currently provisional. 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

Fires are classed as primary, secondary or chimney fires.

Primary fires include all fires in non-derelict buildings and vehicles or in outdoor structures, or any fire involving casualties or rescues, or fires 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. Numbers of grassland, woodland and crop fire related false alarms are not available prior to 2009-10.

Table 1 shows that Welsh FRAs attended 25,181 fires and fire false alarms in 2017-18. Of these, 11 per cent or 2,868 (including 778 fire false alarms) related to grassland, woodland and crop locations. In 2017-18 attendances at grassland, woodland and crop fires and fire false alarms rose by 11 per cent compared with 2016-17 but remained 59 per cent lower than in 2009-10.

Table 1: Number of grassland, woodland and crop fires and fire false alarms, by incident type

	2013-14	2014-15	2015-16	2016-17(r)	2017-18(p)
Primary fires	4,790	4,561	4,678	4,757	4,315
of which were grassland, woodland and crops	*128*	*84*	*118*	*71*	*68*
Secondary fires	7,801	6,541	6,998	5,576	6,299
of which were grassland, woodland and crops	*3,748*	*2,529*	*3,097*	*1,645*	*2,022*
All fires (a)	**13,169**	**11,651**	**12,108**	**10,750**	**11,020**
of which were grassland, woodland and crop fires	***3,876***	***2,613***	***3,215***	***1,716***	***2,090***
Fire false alarms	15,312	15,485	14,493	14,790	14,161
Fire false alarms with location recorded as grassland, woodland or crops	*1,156*	*1,028*	*1,113*	*872*	*778*
All fires and fire false alarms	**28,481**	**27,136**	**26,601**	**25,540**	**25,181**
of which grassland, woodland and crop fires and fire false alarms	***5,032***	***3,641***	***4,328***	***2,588***	***2,868***

(a) Includes chimney fires.
(r) Revised data.
(p) Provisional data.

Whilst only 2 per cent of all primary fires took place on grassland, woodland or crops, nearly a third (32 per cent) of secondary fires occurred on grassland , woodland or crops.

Fire false alarms: A relatively lower proportion of fire false alarms (5 per cent) relate to grassland, woodland and crops. The majority (98 per cent) of the fire false alarms attended in 2017-18 by the FRAs on grassland, woodland and crops were due to calls made with good intent; only 2 per cent were due to malicious calls. In 2017-18 FRAs in Wales attended 11 per cent fewer fire false alarms on grassland, woodland and crops than in the previous year.

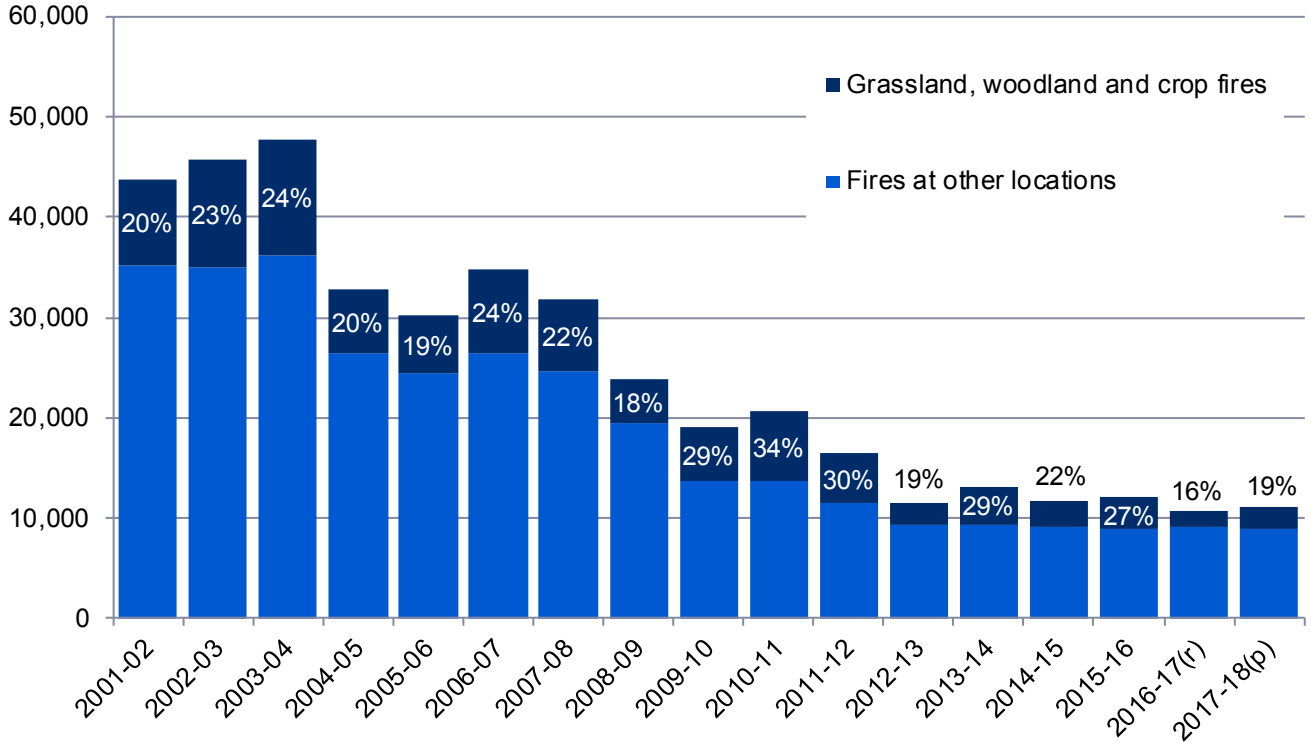
Fires: Of the 11,020 fires attended in Wales, 2,090 (19 per cent) occurred on grassland, woodland and crops.

In 2017-18, the number of grassland, woodland and crop fires (excluding fire false alarms) attended by the Welsh FRAs rose by 22 per cent compared with 2016-17, but it is still the second lowest in the time series and is 76 per cent lower than the figure in 2001-02. In recent years (since 2012-13) numbers have decreased and increased in alternate years with the largest year on year decrease being 56 per cent and the largest increase being 81 per cent.

Fires in locations other than grassland, woodland and crops fell by 1 per cent (compared with 2016-17) and have fallen by 75 per cent compared with 2001-02. Charts 1 and 2 show how the number of fires (and of those, grassland, woodland and crop fires) varies each year.

Chart 2 shows the proportion of fires attended which occurred on grassland, woodland or crops, since 2001-02. In that period the proportion of fires occurring on grassland, woodland and crops range from a low of 16 per cent (in 2016-17) up to 34 per cent (in 2010-11).

Chart 2: Number of fires attended by Fire and Rescue Authorities in Wales, by location

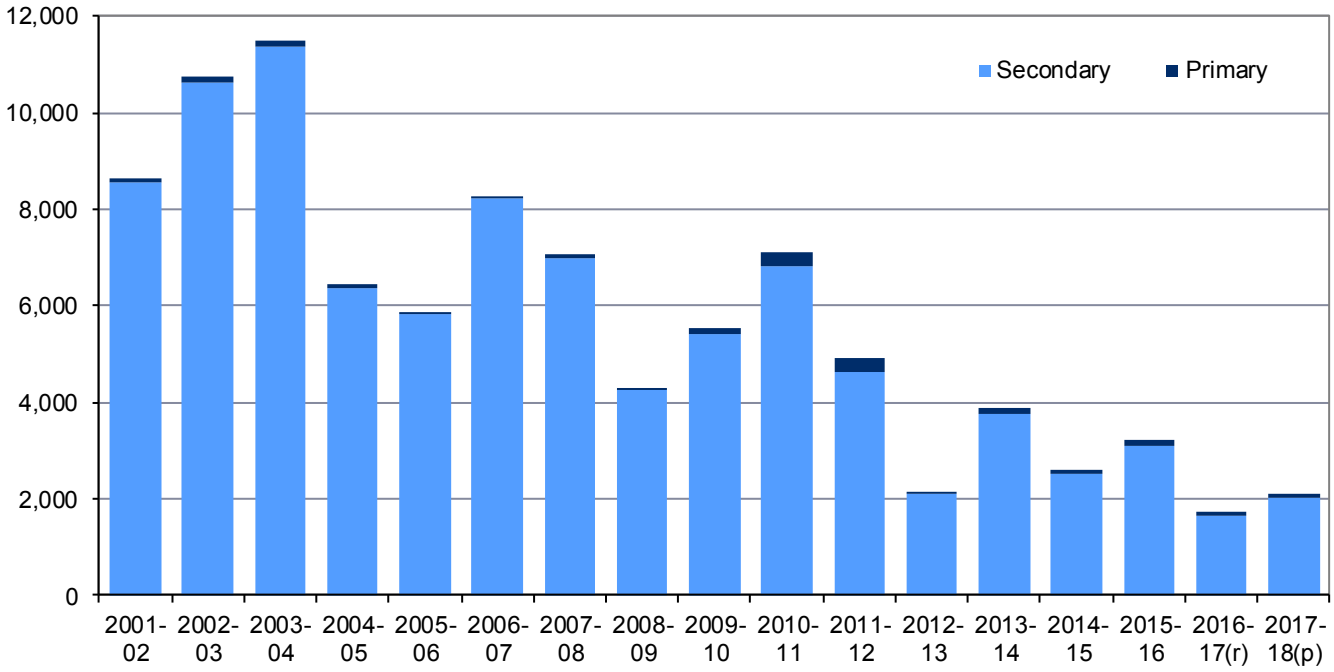


(r) Revised data
(p) Provisional data

Chart 3 shows the vast majority of grassland, woodland and crop fires attended are secondary fires (between 95 and 99 per cent each year since 2001-02), and further shows the fluctuations in numbers. By definition, the majority of secondary fires occur outdoors and so numbers of these fires are likely to be influenced by weather conditions; for instance, 2012-13, which saw the third lowest number of grassland, woodland and crop fires in the time series, was one of the wettest financial years since records began. Conversely 2003-04, the peak in the chart below, was a relatively dry year, seeing 11 per cent less rain than the average over 2001-02 to 2017-18.

However the annual weather data cannot explain all the fluctuations; rainfall in 2016-17 was relatively low (being 17 per cent lower than the average over the period, and even lower than levels seen in 2003-04) and yet the number of grassland fires is the lowest (for the time period). The relationship between these fires and the weather is considered further in charts 7 and 8, utilising monthly data.

Chart 3: Number of grassland, woodland and crop fires, by type

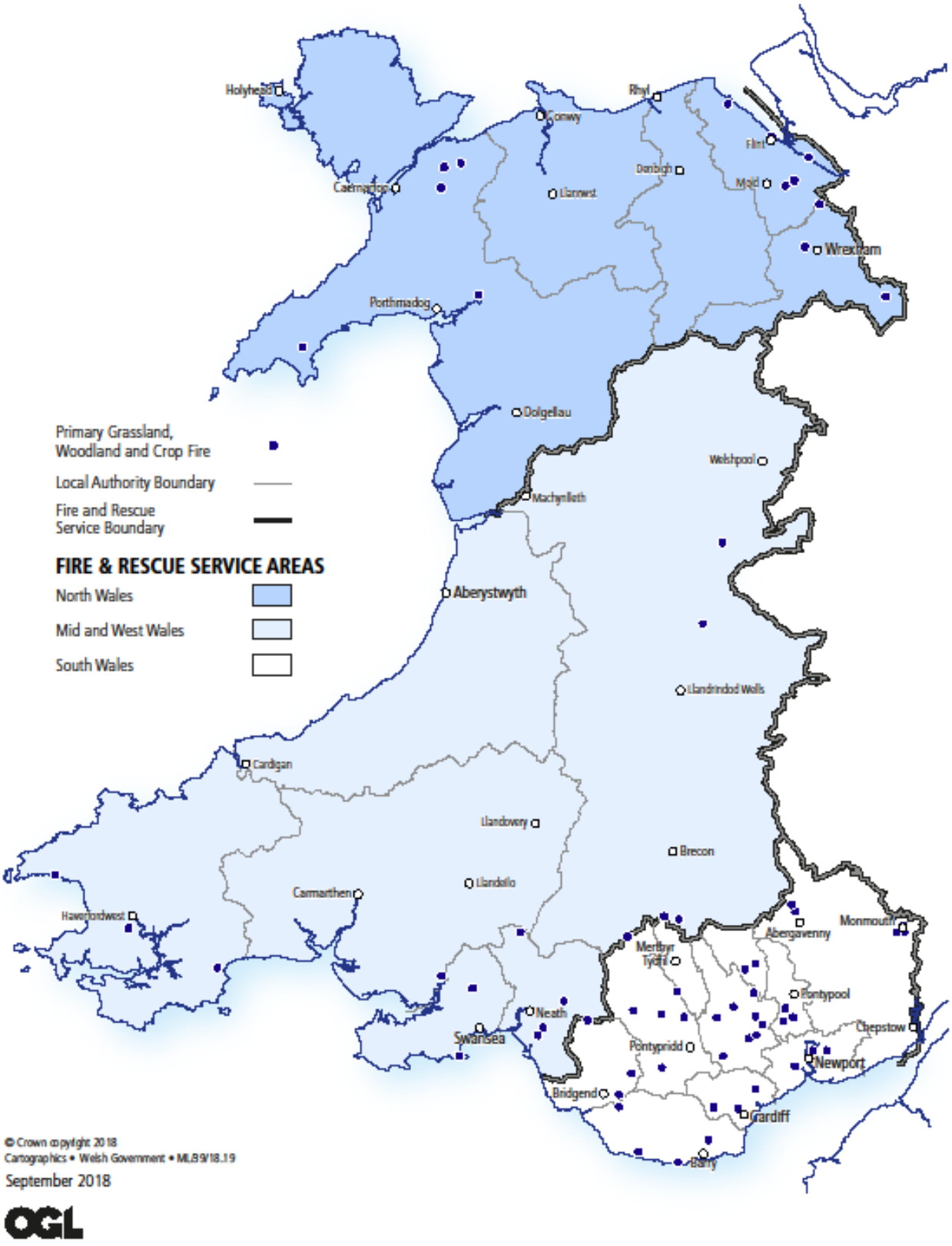


(r) Revised data.
(p) Provisional data.

Primary grassland, woodland and crop fires

In 2017-18, 68 primary grassland, woodland and crop fires were attended in Wales, and their locations are shown in the map on the following page. Three fifths of primary grassland fires in 2017-18 occurred in the South Wales FRA Region, around a fifth were each in North Wales and Mid and West Wales.

Grassland, Woodland and Crop Primary Fires across Wales, 2017-18



Data mapped above are based on grid references; see the Key Quality Information for further details.

Only 2 per cent of all primary fires occurred on grassland, woodland or crops. Numbers of primary fires on grassland in 2017-18 fell slightly compared with the previous year and it is the lowest number since 2012-13[1].

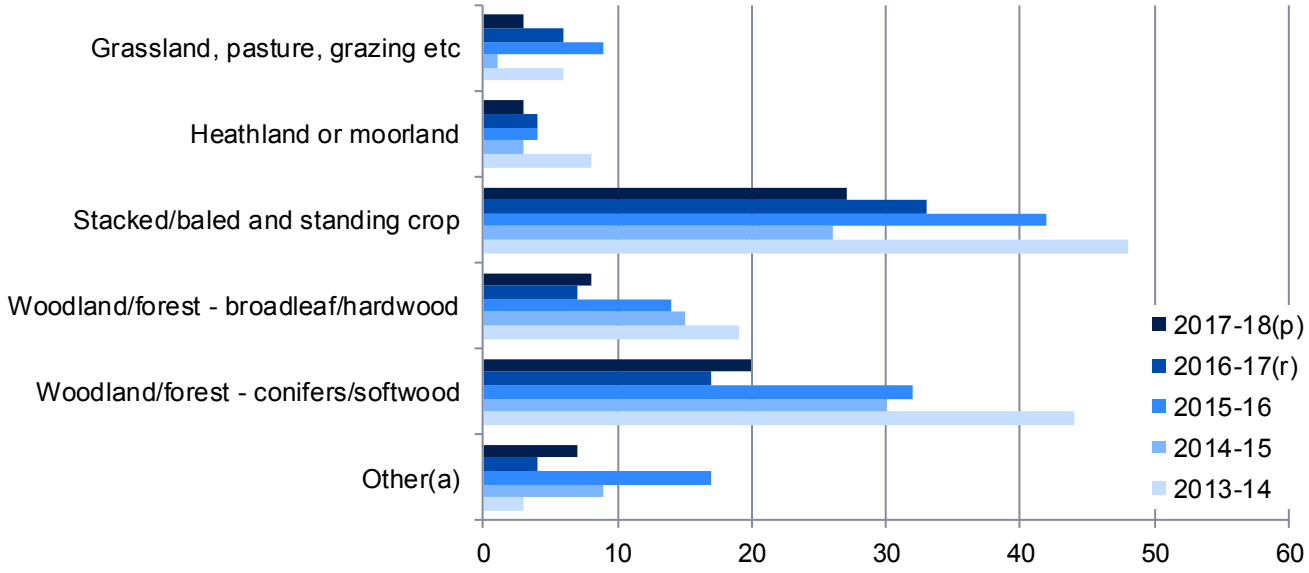
Over two fifths of primary grassland fires in 2017-18 occurred in woodland and a similar proportion occurred on stacked or baled crops. Table 2 and chart 4 show that these two categories have consistently been the largest categories for primary grassland, woodland and crop fires. Since 2009-10 half the fires occurring on stacked or baled crops occurred in the months July to September.

Table 2: Number of primary grassland, woodland and crop fires, by location

	2013-14	2014-15	2015-16	2016-17(r)	2017-18(p)
Grassland, pasture, grazing etc	6	1	9	6	3
Heathland or moorland	8	3	4	4	3
Stacked/baled and standing crop	48	26	42	33	27
Woodland/forest - broadleaf/hardwood	19	15	14	7	8
Woodland/forest - conifers/softwood	44	30	32	17	20
Other (a)	3	9	17	4	7
All primary grassland, woodland and crop fires	**128**	**84**	**118**	**71**	**68**

(a) Domestic gardens, hedge, nurseries and market gardens, roadside vegetation, scrub land and tree scrub.
(r) Revised data
(p) Provisional data.

Chart 4: Number of primary grassland, woodland and crop fires, by location



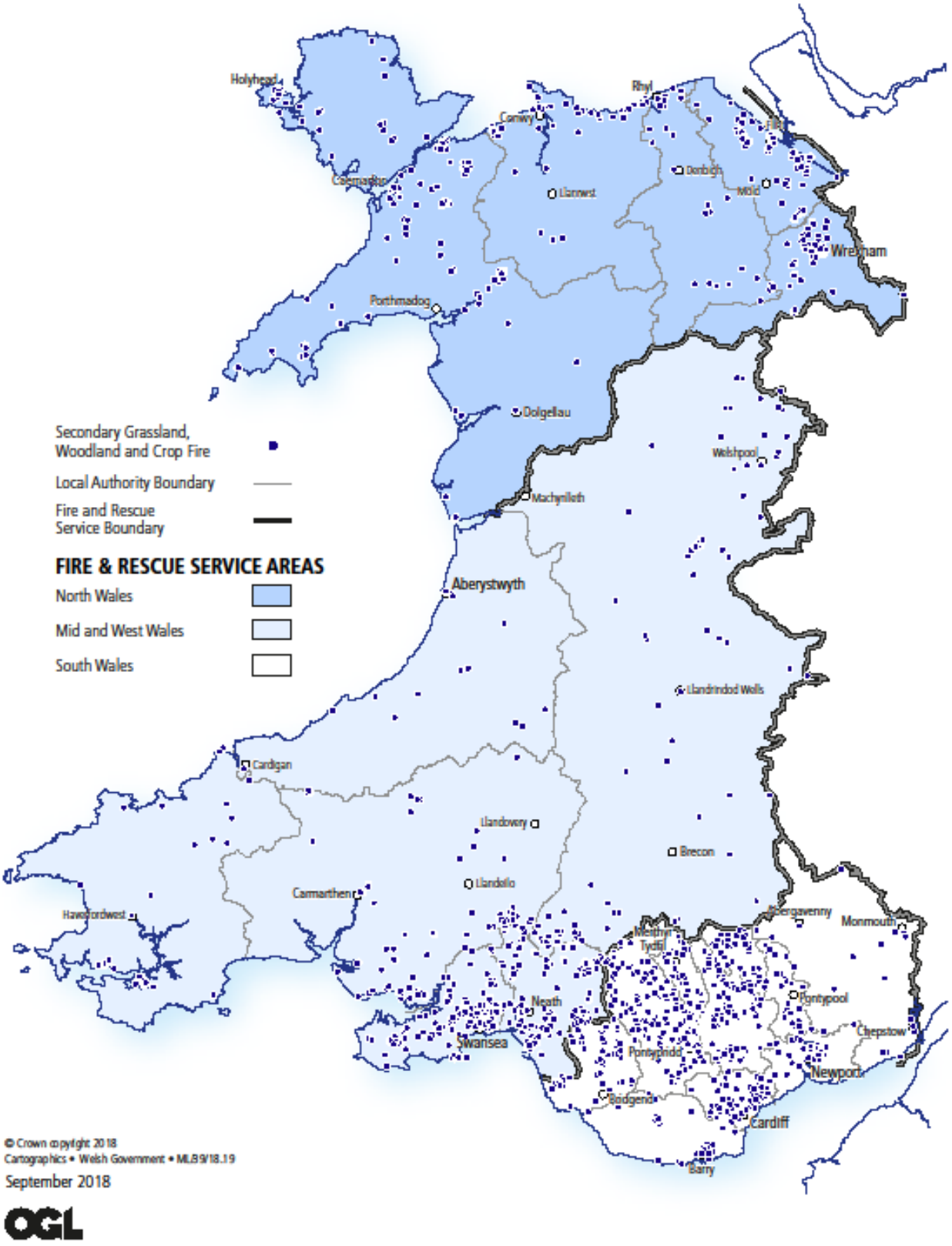
(a) 'Other' shown in the above chart includes domestic gardens, hedge, nurseries and market gardens, roadside vegetation, scrub land and tree scrub.
(r) Revised data
(p) Provisional data.

Secondary grassland, woodland and crop fires

In 2017-18 there were 2,022 secondary grassland, woodland and crop fires in Wales, the map on the next page shows their locations. More than half the secondary grassland fires in 2017-18 occurred in the South Wales FRA region, whilst almost a third occurred in Mid and West Wales and less than a fifth in North Wales.

[1] More data are available on StatsWales and the accompanying Excel tables

Grassland, Woodland and Crop Secondary Fires across Wales, 2017-18



Data mapped above are based on grid references; see the Key Quality Information for further details.

Of all secondary fires that were reported in Wales in 2017-18, grassland, woodland and crop fires accounted for 32 per cent. Overall, in 2017-18, secondary fires on grassland rose by 23 per cent compared with the previous year.

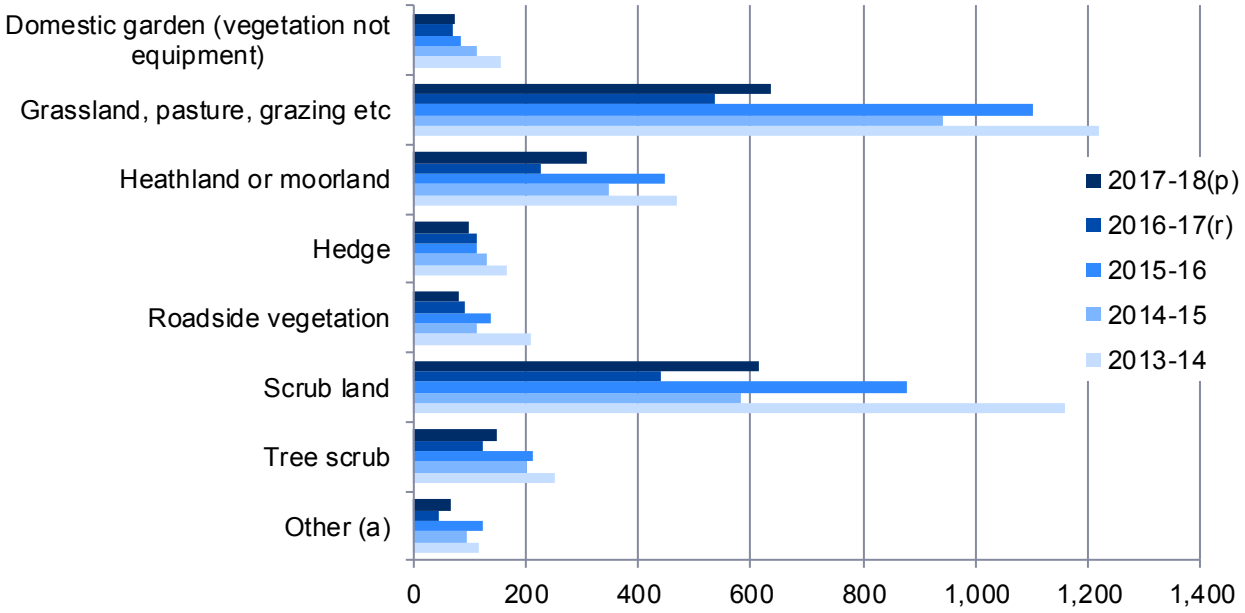
Most location types in the table below saw an increase in the number of these fires; the only decreases occurred in fires in hedges and roadside vegetation; the largest percentage increase occurred in canal and riverbank vegetation (76 per cent), whilst scrub land saw the largest increase in numerical terms (173 more fires than in the previous year) . In 2017-18, 62 per cent of secondary grassland, woodland and crop fires occurred on either 'grassland, pasture, grazing etc.' or scrub land; these are consistently the two largest categories across the time series, accounting for between 56 and 64 per cent since 2009-10.

Table 3: Number of secondary grassland, woodland and crop fires, by location

	2013-14	2014-15	2015-16	2016-17(r)	2017-18(p)
Canal/riverbank vegetation	70	40	40	17	30
Domestic garden (vegetation not equipment)	157	114	83	70	72
Grassland, pasture, grazing etc	1,220	942	1,103	535	635
Heathland or moorland	470	349	446	225	310
Hedge	165	132	112	113	100
Roadside vegetation	210	113	138	91	79
Scrub land	1,158	581	879	441	614
Tree scrub	253	202	213	124	147
Other (a)	45	56	83	29	35
All secondary grassland, woodland and crop fires	**3,748**	**2,529**	**3,097**	**1,645**	**2,022**

(a) Nurseries, market gardens, stacked/baled crop, woodland/forest - broadleaf/hardwood, woodland/forest - conifers/softwood, railway trackside vegetation and straw/stubble burning.
(r) Revised data
(p) Provisional data.

Chart 5: Number of secondary grassland, woodland and crop fires, by location



(a) 'Other' as shown in the above chart includes 'woodland/forest - broadleaf/hardwood' and 'woodland/forest - conifers/softwood', 'nurseries and market garden', 'stacked and baled crop', canal/riverbank vegetation, railway trackside vegetation.
(r) Revised data
(p) Provisional data.

Grassland, woodland and crop fires by motive

In 2017-18 there were 1,634 deliberate grassland, woodland and crop fires in Wales, an increase of 24 per cent compared with the previous year; however this followed a previous fall of almost 50 per cent. The number of corresponding accidental fires rose by 15 per cent to 456, following 35 per cent reduction in the previous year.

Around 7 in 10 primary grassland, woodland and crop fires were deliberate in 2017-18. There was no change in the number of deliberate primary grassland fires, and numbers of accidental primary grassland fires saw a slight decrease in 2017-18.

Since the introduction of the Incident Recording System (IRS) in April 2009 for collecting FRA incident data, greater detail relating to secondary fires has become available. There were 1,586 deliberate secondary grassland, woodland and crop fires in 2017-18, 25 per cent more than in the previous year but it is the second lowest number in the available time series (from 2009-10). The number of accidental secondary fires also increased, by 16 per cent to 436. Almost 8 in 10 secondary grassland, woodland and crop fires were deliberate.

Of the 456 accidental grassland, woodland and crop fires in 2017-18, 26 per cent occurred on heathland and moorland and 25 per cent on grassland, pasture, grazing etc. Of the 1,634 deliberate grassland, woodland and crop fires in 2017-18, 34 per cent occurred on scrub land and 32 per cent on grassland, pasture, grazing etc.

Table 4: Number and percentage of grassland, woodland and crop fires, by motive

	Number			Percentage		
	Deliberate	Accidental	All	Deliberate	Accidental	All
Primary fires						
2013-14	86	42	128	67	33	100
2014-15	58	26	84	69	31	100
2015-16	85	33	118	72	28	100
2016-17(r)	48	23	71	68	32	100
2017-18(p)	48	20	68	71	29	100
Secondary fires						
2013-14	2,912	836	3,748	78	22	100
2014-15	1,910	619	2,529	76	24	100
2015-16	2,518	579	3,097	81	19	100
2016-17(r)	1,270	375	1,645	77	23	100
2017-18(p)	1,586	436	2,022	78	22	100
All fires						
2013-14	2,998	878	3,876	77	23	100
2014-15	1,968	645	2,613	75	25	100
2015-16	2,603	612	3,215	81	19	100
2016-17(r)	1,318	398	1,716	77	23	100
2017-18(p)	1,634	456	2,090	78	22	100

(r) Revised data
(p) Provisional data.

Grassland, woodland and crop fires by month

The majority of grassland, woodland and crop fires take place in the spring and summer months. April 2017, May 2017 and July 2017 recorded the highest proportions (38 per cent, 23 per cent and 10 per cent respectively) of grassland fires for the financial year 2017-18. Numbers of fires in February 2018 almost trebled to 133 compared with 45 in February 2017, although they had more than halved in the previous year. In contrast numbers in March 2018 were noticeably low, seeing only a quarter of the number in March 2017 (down from 271 to 68). This equates to only 3 per cent of the annual total; previously (since 2009-10) fires in March had made up at least 12 per cent (2013-14) of the annual total but as much as 29 per cent (2012-13).

Table 5: Number and percentage of grassland, woodland and crop fires, by month

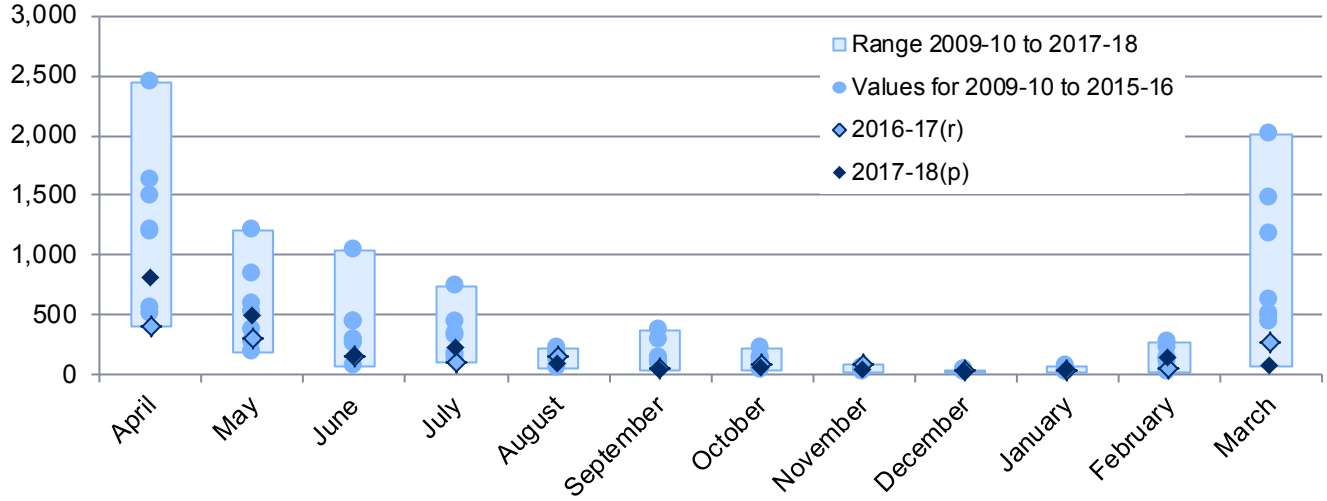
	Number					Percentage				
	2013-14	2014-15	2015-16	2016-17(r)	2017-18(p)	2013-14	2014-15	2015-16	2016-17	2017-18
April	1,196	561	1,486	400	803	31	21	46	23	38
May	592	185	275	302	481	15	7	9	18	23
June	433	278	284	159	146	11	11	9	9	7
July	732	437	163	109	214	19	17	5	6	10
August	176	139	116	148	81	5	5	4	9	4
September	107	286	130	52	36	3	11	4	3	2
October	40	56	105	84	44	1	2	3	5	2
November	57	43	13	81	37	1	2	0	5	2
December	33	30	12	33	18	1	1	0	2	1
January	13	22	13	32	29	0	1	0	2	1
February	18	134	112	45	133	0	5	3	3	6
March	479	442	506	271	68	12	17	16	16	3
Total fires	**3,876**	**2,613**	**3,215**	**1,716**	**2,090**	**100**	**100**	**100**	**100**	**100**

(r) Revised data
(p) Provisional data.

Four months of 2017-18 saw increases compared with the previous year. The largest increases in numbers of grassland, woodland and crop fires were seen February 2018 (almost 3 times the number in February 2017), April 2017 (double the number in April 2016) and July 2017 (almost double the number in July 2016); the largest decreases were in March 2018 (down 75 per cent on March 2017), November 2017 (down 54 per cent on November 2016) and October 2017 (down 48 per cent compared with October 2016). On average there were 27 grassland fires each day in April 2017, over double the number in April 2016 but almost half the number in April 2015.

Chart 6 identifies the grassland, woodland and crop fire data in 2017-18 and 2016-17, along with showing the years 2008-09 to 2015-16 and highlights which months are most volatile in grassland fire occurrences. From the chart we can see little variation in the numbers in the months October to January, but there is a wider spread during the spring to summer months March through to July. The chart also shows that in each of the last two years numbers of grassland fires have been in the lower end of the range for each month.

Chart 6: Number of grassland, woodland and crop fires, by month



(r) Revised data.
(p) Provisional data.

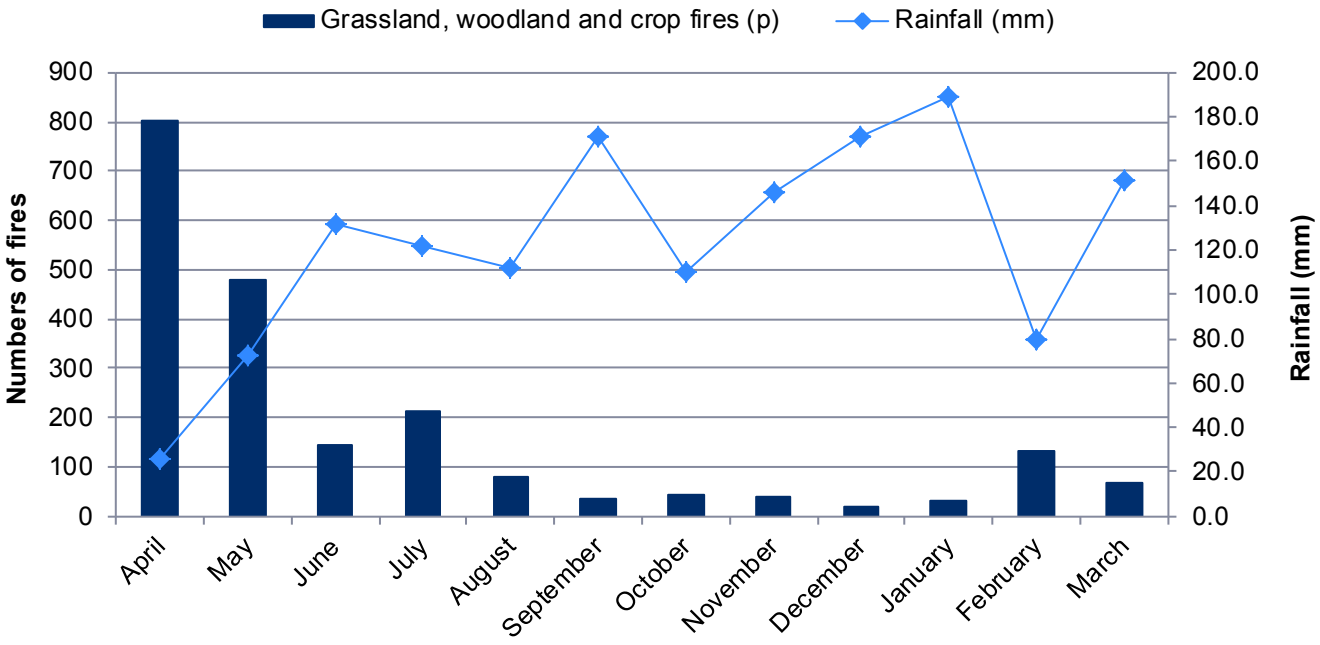
The occurrence of outdoor fires is likely to be influenced by the weather. Data from the Met Office shows that in 2017-18, April 2017 (the month with the most grassland fires in 2017-18) was the 8th driest April since April 2010. Numbers of fires in March 2018 were noticeably low, the month having only 3 per cent of the grassland fires in 2017-18. In contrast February had a relatively high number of grassland fires and in fact outnumbered March. Weather data in these months showed February has more hours of sunshine and less rainfall than March. However, weather data cannot explain all the fluctuations however; for example March 2017 had the most amount of rainfall in the year (2016-17) but still had 16 per cent of the grassland fires in 2016-17. 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.

The months December and January saw the fewest fires (only 1 per cent of all grassland, woodland and crop fires for each month in 2017-18), and these months saw low levels of sunshine, more rainfall and more than average number of rain days (days where more than 1.0 mm of rain fell). Other weather conditions such as snow and ice may also affect the number of fires in the winter, for instance between 24 February and 4 March 2018 the country suffered a cold wave due to the 'Beast from the East' which brought widespread unusually low temperatures and heavy snowfall to large areas.

Weather data are available from the Met Office.

Chart 7 shows the relationship between the number of grassland, woodland and crop fires and the levels of rainfall each month in 2017-18. Broadly speaking, when the levels of rainfall are high (as in September, December and January) the number of fires are low and those months with low levels of rainfall (April and May) had higher numbers of fires.

Chart 7: Number of grassland, woodland and crop fires and rainfall levels, by month, 2017-18

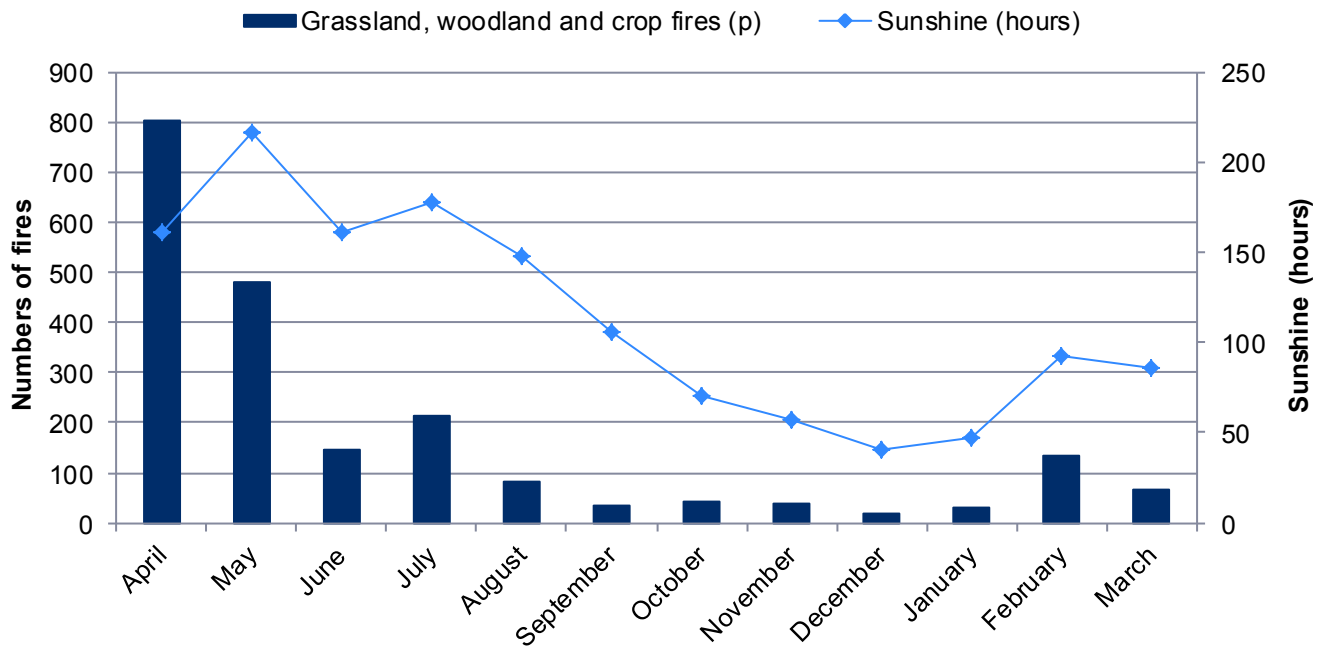


Source: Incident Recording System, Met Office

(p) Provisional data

The correlation with sunshine is seen in chart 8; where there were more hours of sunshine (for instance in April and May) they coincide with higher numbers of fires, whilst the months September to January have fewer hours of sunshine and fewer fires. The charts also show month on month changes, for instance levels of rainfall fell between January and February, whilst levels of sunshine rose and the number of fires also increased.

Chart 8: Numbers of grassland, woodland and crop fires and hours of sunshine, by month, 2017-18



Source: Incident Recording System, Met Office

(p) Provisional data

Fires and false alarms by Fire and Rescue Authority and Local Authority

Throughout the time series shown in table 6, South Wales FRA attended more than half of the grassland, woodland and crop fires occurring in Wales each year. Of the 2,090 grassland fires in 2017-18, 52 per cent were in South Wales, 31 per cent were in Mid and West Wales and 17 per cent were in North Wales.

Table 6: Number and percentage of grassland, woodland and crop fires, by Fire and Rescue Authority

	Number				Percentage		
	North Wales	Mid and West Wales	South Wales	Wales	North Wales	Mid and West Wales	South Wales
2009-10	675	1,471	3,370	5,516	12	27	61
2010-11	829	1,934	4,332	7,095	12	27	61
2011-12	837	1,441	2,620	4,898	17	29	53
2012-13	282	724	1,139	2,145	13	34	53
2013-14	480	1,224	2,172	3,876	12	32	56
2014-15	411	850	1,352	2,613	16	33	52
2015-16	446	936	1,833	3,215	14	29	57
2016-17(r)	299	486	931	1,716	17	28	54
2017-18(p)	353	652	1,085	2,090	17	31	52
Percentage change 2016-17 to 2017-18	18	34	17	22	.	.	.

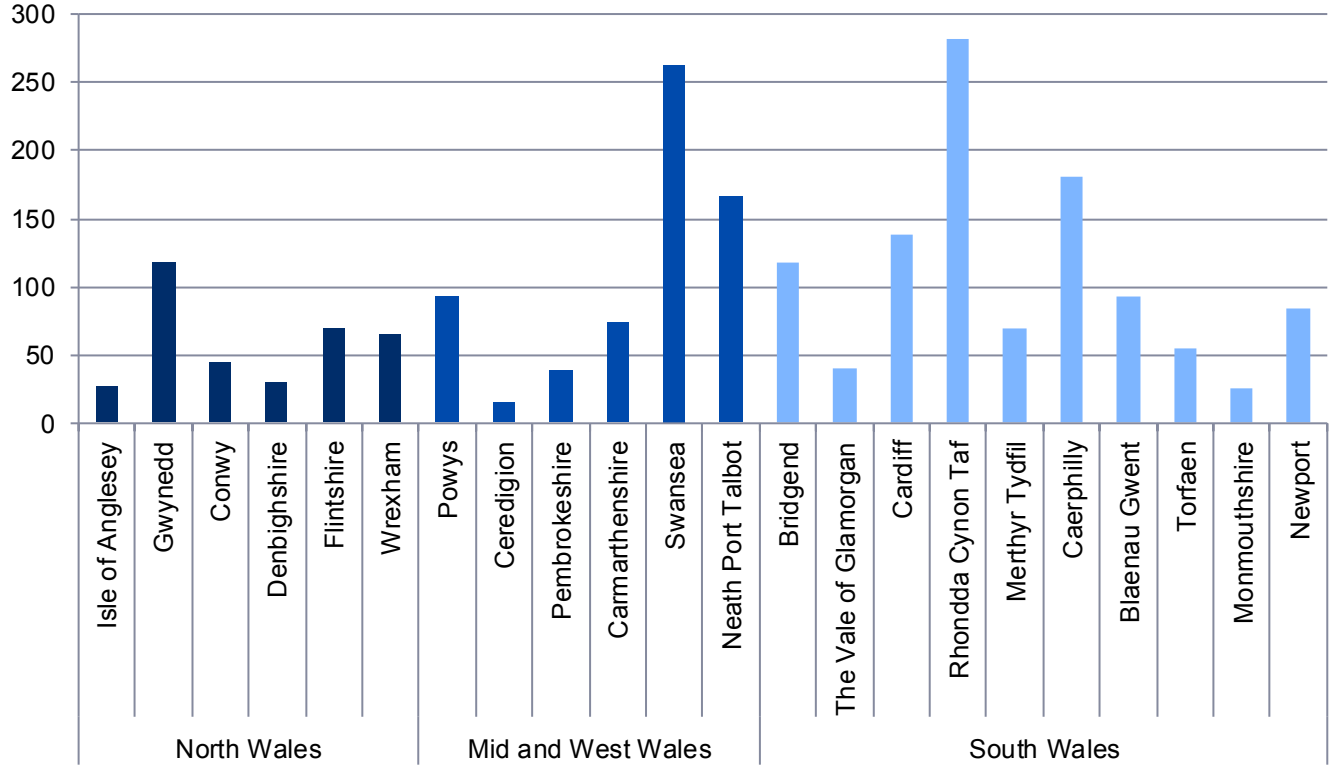
(r) Revised data
(p) Provisional data.
. Not applicable

The number of grassland, woodland and crop fires rose in all three FRAs in 2017-18; in Mid and West Wales by 34 per cent, in North Wales by 18 per cent and in South Wales by 17 per cent. Since 2001-02 the number of grassland, woodland and crop fires has fallen by 79 per cent in South Wales, 72 per cent in Mid and West Wales and 66 per cent in North Wales.

Rhondda Cynon Taf and Swansea Local Authorities (LAs) had the highest number of grassland, woodland and crop fires in Wales in 2017-18 with over 250 in each authority (each with 13 per cent of fires); Ceredigion had the smallest number with 15 (less than 1 per cent of those in Wales). Similar proportions were seen in earlier years.

Only 7 LAs saw a decrease in the number of grassland, woodland and crop fires in 2017-18 (compared with 2016-17); the largest decreases were in Denbighshire (25 per cent) and the Vale of Glamorgan (24 per cent). The largest increases were seen in Pembrokeshire (70 per cent) and Cardiff (53 per cent). Since 2009-10 all LAs have seen decreases, and 17 have seen numbers of grassland fires at least halve.

Chart 9: Number of grassland, woodland and crop fires, by Fire and Rescue Authority and Local Authority 2017-18(p)(a)



(a) Local authorities have been assigned to incidents based on grid references; see the Key Quality Information for further details.
(p) Provisional data.

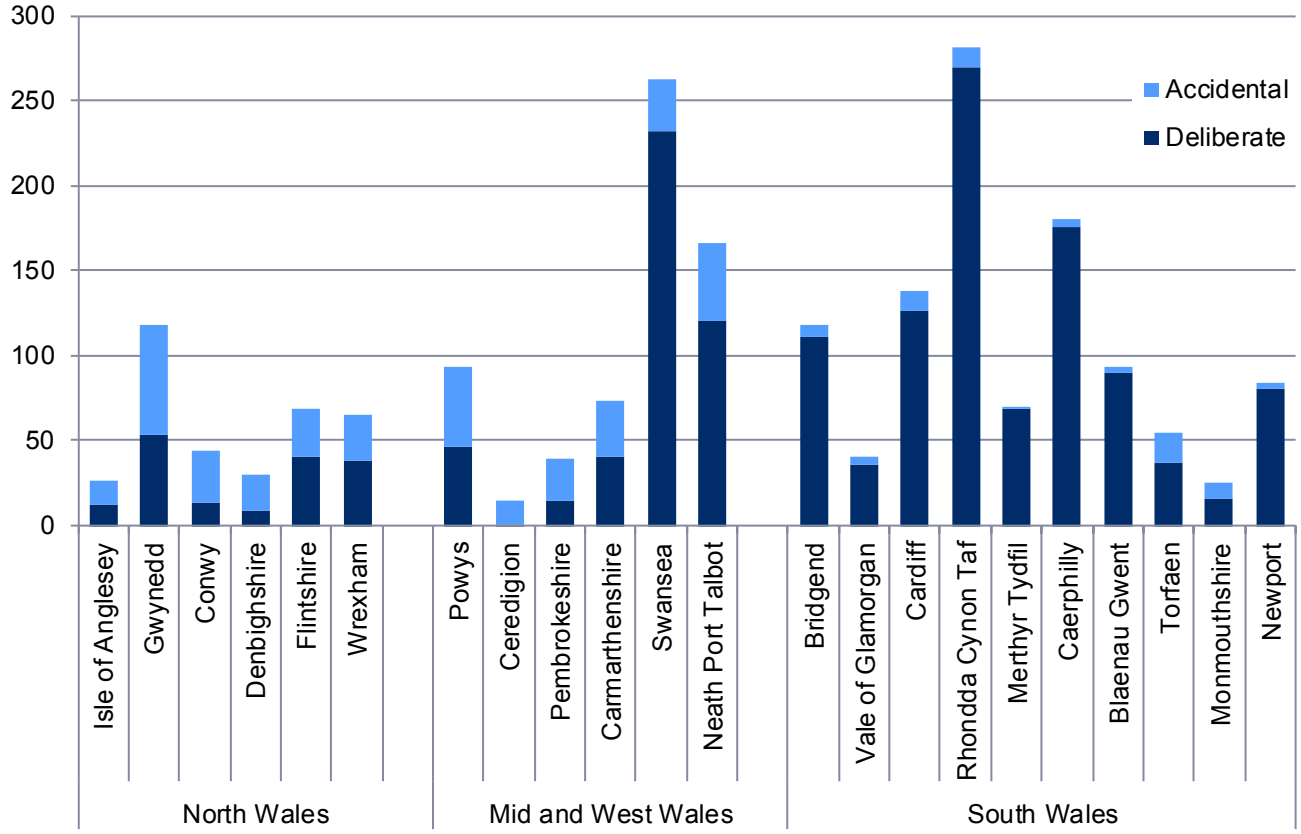
In 10 LAs, 'grassland and pasture' were the largest category of location of grassland ,woodland and crop fires in 2017-18; of these Blaenau Gwent had the highest percentage, with 53 per cent of grassland, woodland and crop fires occurring on grassland and pasture. Fires on scrub land made up the largest category of grassland fires in 6 LAs, with the largest percentages being in Rhondda Cynon Taf (56 per cent) and Bridgend (54 per cent). For the remaining 6 LAs the largest category was heathland or moorland (4 of which were in the North Wales FRA region), where Gwynedd had the highest percentage at 49 per cent.

In 7 LAs, over 90 per cent of all grassland, woodland and crop fires were started deliberately, all 7 being in the South Wales FRA region. The highest proportion which were started deliberately occurred in Merthyr (99 per cent) closely followed by Caerphilly and Blaenau Gwent where the respective percentage was 97 per cent. Ceredigion had the smallest percentage of fires started deliberately (7 per cent). As in most other years in the time series, Gwynedd had the highest number of accidental grassland fires in Wales, with almost half occurring on heathland or moorland.

Only 6 LAs saw decreases in the number of deliberate grassland, woodland and crop fires in 2017-18 (compared with 2016-17). The largest decrease was in Denbighshire (31 per cent), but numbers are low so this equates to only 4 fewer fires. Pembrokeshire saw the largest percentage increase, but due to low numbers this only means 9 more fires. As has already been observed, numbers can be volatile, increasing one year and falling the next. In 2017-18, 6 LAs had more than 100 deliberate grassland, woodland and crop fires, up from 3 LAs in 2016-17. The three which have risen above 100 fires are

Neath Port Talbot, Bridgend and Cardiff, but they still show a decrease compared with 2015-16. All LAs have seen decreases compared with 2009-10, the largest percentage changes being in Conwy (82 per cent) and Torfaen (78 per cent).

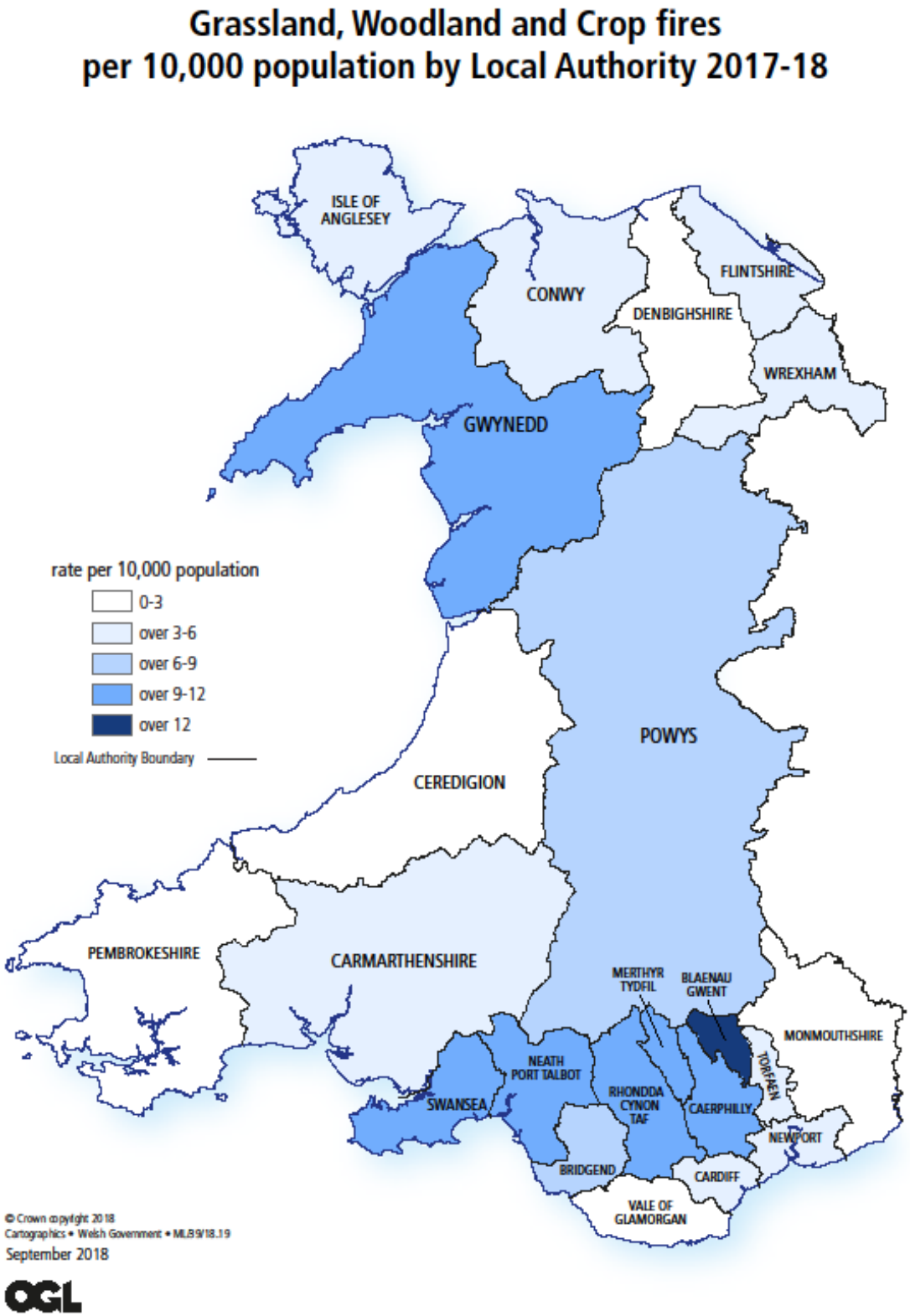
Chart 10: Numbers of grassland, woodland and crop fires by local authority and motive, 2017-18(a)(p)



(a) Local authorities have been assigned to incidents based on grid references; see the Key Quality Information for further details.
(p) Provisional data.

The map below shows rates of grassland fires per 10,000 population for each local authority in Wales in 2017-18.

Blaenau Gwent has the highest rate in 2017-18 with 13 fires occurring for every 10,000 people (down from 14 in 2016-17); Ceredigion has the lowest rate at 2, a similar rate to that in 2016-17.



Fire false alarms

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

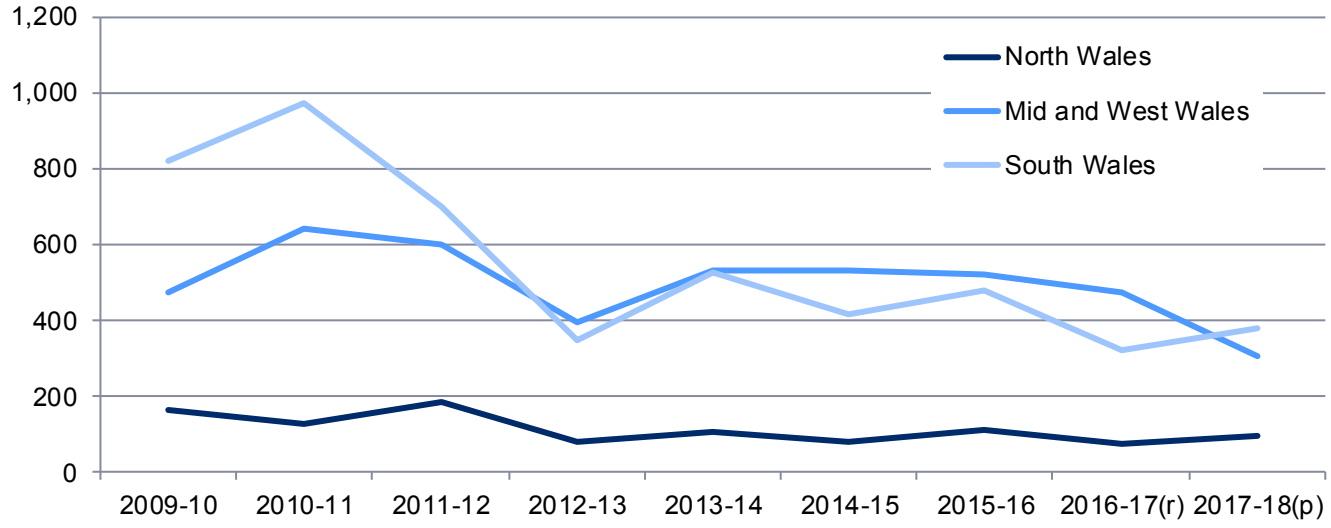
There was a fall of 11 per cent in the number of grassland, woodland and crop related fire false alarms attended by FRAs in 2017-18 (compared with 2016-17), this follows a 22 per cent drop in the previous year. The fall in 2017-18 was the result of a 36 per cent drop in Mid and West Wales. Both North Wales and South Wales had increases in numbers, of 26 per cent and 17 per cent respectively. All 3 FRSs have seen decreases compared with 2009-10, of 54 per cent in South Wales, 41 per cent in North Wales and 35 per cent in Mid and West Wales. Only 2 per cent of these fire false alarms in 2017-18 were due to malicious calls, with the remaining 98 per cent due to good intent. South Wales had the highest number of malicious calls relating to grassland, woodland and crop fire false alarms, which in turn equated to 3 per cent of the grassland, woodland and crop fire false alarms attended in the region.

Table 7: Number of grassland, woodland and crop fire false alarms, by Fire and Rescue Authority

	North Wales	Mid and West Wales	South Wales	Wales
2009-10	164	474	818	1,456
2010-11	128	640	974	1,742
2011-12	183	599	701	1,483
2012-13	81	394	348	823
2013-14	105	528	523	1,156
2014-15	81	531	416	1,028
2015-16	112	521	480	1,113
2016-17(r)	76	475	321	872
2017-18(p)	96	306	376	778
Percentage change 2016-17 to 2017-18	26	-36	17	-11

(r) Revised data
(p) Provisional data

Chart 11: Number of grassland, woodland and crop related fire false alarms, by Fire and Rescue Authority



(r) Revised data.
(p) Provisional data.

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 grassland, woodland and crop fires since 2001-02, which occurred in 2007-08. Since 2001-02 there have been 95 non-fatal casualties in these fires; 46 per cent of the injuries incurred were burns and almost a third 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 5 non-fatal casualties in 2017-18, 3 more than in 2016-17 but similar to numbers seen in 2014-15 and 2015-16; these 5 casualties equate to 1 per cent of all non-fatal fire casualties in Wales in 2017-18. Of these 5 casualties, 3 suffered burns and 2 were sent for precautionary checks or given first aid.

4 of the 5 casualties in 2017-18 were the result of accidental fires. Fires started deliberately have accounted for almost a third of non-fatal casualties from grassland, woodland and crop fires since 2009-10.

Since 2009-10, 45 per cent of grassland, woodland and crop related casualties occurred in North Wales, 36 per cent in Mid and West Wales and 19 per cent in South Wales.

Table 8: Number of casualties and rescues from grassland, woodland and crop fires

	Fatalities	Non-fatal casualties	Rescues (no injury) (a)
2009-10	0	8	0
2010-11	0	10	1
2011-12	0	10	0
2012-13	0	5	0
2013-14	0	1	0
2014-15	0	6	0
2015-16	0	6	1
2016-17(r)	0	2	0
2017-18(p)	0	5	0

(a) Data not collected prior to 2009-10.
(r) Revised data.
(p) Provisional data.
.. Data not available.

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 2017-18, 59 per cent of primary grassland, woodland and crop fires in Wales damaged 20 square metres or less. A further 28 per cent were over 200 square metres, equating to 19 fires, the second lowest number in the available time series.

For secondary fires it is also the case that the majority (56 per cent) damaged 20 square metres or less. The proportion of secondary fires which damaged an area over 200 square metres was 17 per cent whilst over a quarter had damage of between 21 and 200 square metres.

The number of grassland, woodland and crop fires in 2017-18 which damaged an area of over 200 square metres rose by 39 per cent compared with 2016-17, but this follows a 65 per cent decrease in the previous year.

Table 9 Number and percentage of grassland woodland and crop fires by area damaged

	Number					Percentage				
	2013-14	2014-15	2015-16	2016-17(r)	2017-18(p)	2013-14	2014-15	2015-16	2016-17	2017-18
Primary fires										
0-20 sq m	58	51	53	40	40	45	60.7	45	56	59
21-200 sq m	31	12	18	9	9	24	14	15	13	13
201+ sq m	39	21	47	22	19	30	25	40	31	28
Total	**128**	**84**	**118**	**71**	**68**	**100**	**100**	**100**	**100**	**100**
Secondary fires										
0-20 sq m	2,092	1,518	1,557	1,026	1,138	56	60	50	62	56
21-200 sq m	1,076	635	834	374	531	29	25	27	23	26
201+ sq m	580	376	706	245	353	15	15	23	15	17
Total	**3,748**	**2,529**	**3,097**	**1,645**	**2,022**	**100**	**100**	**100**	**100**	**100**
All fires										
0-20 sq m	2,150	1,569	1,610	1,066	1,178	55	60	50	62	56
21-200 sq m	1,107	647	852	383	540	29	25	27	22	26
201+ sq m	619	397	753	267	372	16	15	23	16	18
Total	**3,876**	**2,613**	**3,215**	**1,716**	**2,090**	**100**	**100**	**100**	**100**	**100**

(r) Revised data.
(p) Provisional data

In 2017-18, 54 grassland, woodland and crop fires took place on National Park land; 96 per cent of these were secondary fires. Since 2009-10 there have been 844 grassland, woodland and crop fires on National park land, equating to 3 per cent of all grassland, woodland and crop fires and 95 per cent of these fires (since 2009-10) were secondary fires.

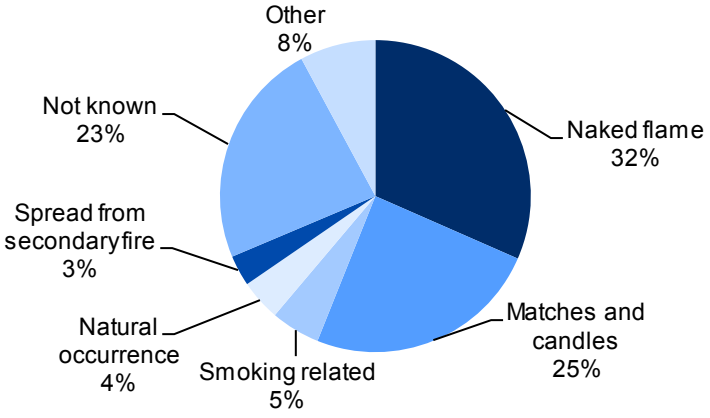
In 9 per cent of primary grassland, woodland and crop fires in 2017-18, strong winds were a rapid growth factor. Comparative data for secondary fires is not available. Since 2009-10 over two fifths of primary fires where strong winds were a factor damaged over 10,000 square metres, two thirds damaged over 1,000 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. Chart 12 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 chart 13), careless handling, overheating or natural causes (which are classed as accidental causes).

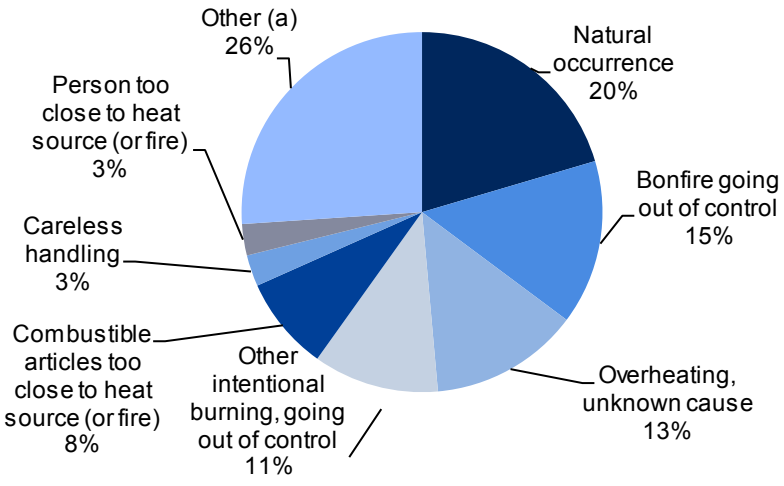
In 32 per cent of the primary grassland fires over the last 5 years the source of ignition was a naked flame and a further 25 per cent were due to matches and candles.

Chart 12: Percentage of primary grassland, woodland and crop fires, 2013-14 to 2017-18, by source of ignition



The causes of accidental primary grassland, woodland and crop fires are varied. In chart 13, 26 per cent of these fires are shown as having 'other' causes. They include negligent use of equipment, fault in equipment or appliance, faulty fuel supply and person too close to heat source (or fire) as well as unspecified causes (over a fifth of these fires have not got a specified cause). In the last 5 years, 20 per cent of accidental primary grassland, woodland and crop fires were determined to have been caused naturally and 15 per cent were due to bonfires going out of control.

Chart 13: Percentage of accidental primary grassland, woodland and crop fires, 2013-14 to 2017-18, by main cause



(a) 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 'Playing with fire (or heat source).

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.

As has been noted earlier in the bulletin there is regularly a peak in grassland, woodland and crop fires seen 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.

Attendance at grassland, woodland and crop fires and fire false alarms rose by 6 per cent in 2017 (compared with 2016); numbers of fires rose by 10 per cent, and fire false alarms fell by 5 per cent.

In 2017 the number of primary grassland fires was unchanged from 2016, whilst, over the same period, the number of secondary fires rose by 11 per cent (just over 200 more fires).

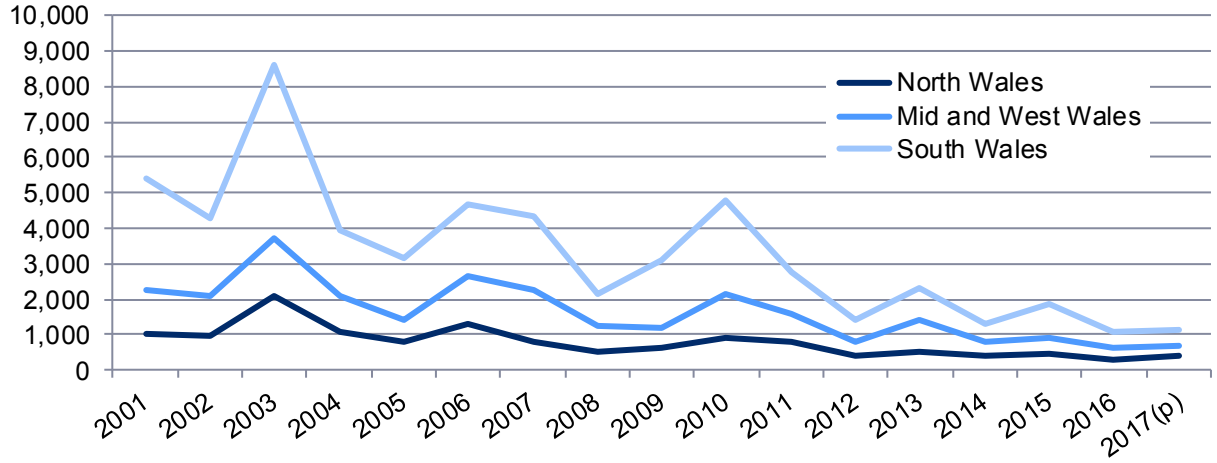
Table 10: Numbers of fires and fire false alarms and numbers which are grassland, woodland and crop related – calendar year

	2010	2011	2012	2013	2014	2015	2016(r)	2017(p)
Primary	6,632	5,756	4,932	4,896	4,538	4,591	4,885	4,354
of which Grassland(a)	276	243	94	137	76	115	76	76
Secondary	14,160	10,549	6,769	8,276	6,344	6,958	5,905	6,466
of which Grassland(a)	7,557	4,927	2,515	4,081	2,449	3,067	1,923	2,132
Total fires(b)	21,604	16,941	12,394	13,919	11,408	12,036	11,199	11,231
of which Grassland(a)	7,833	5,170	2,609	4,218	2,525	3,182	1,999	2,208
Fire false alarms	17,344	15,435	15,805	15,433	15,392	14,351	15,161	14,077
of which Grassland(a)	1,784	1,427	1,066	1,152	1,030	1,090	900	851
All fires and fire false alarms	38,948	32,376	28,199	26,841	29,311	26,387	26,360	25,308
of which Grassland(a)	9,617	6,597	3,675	5,370	3,555	4,272	2,899	3,059

(a) Grassland, woodland and crops
(b) Includes chimney fires
(r) Revised data.
(p) Provisional data.

Chart 14 shows all 3 FRAs have seen a general downward trend since 2001, with numbers of grassland woodland and crop fires falling by 79 per cent in South Wales, 69 per cent in Mid and West Wales and 62 per cent in North Wales. However in 2017 all FRAs saw increases, of 29 per cent in North Wales, 14 per cent in Mid and West Wales and 4 per cent in South Wales.

Chart 14: Numbers of grassland, woodland and crop fires by fire and rescue authority – calendar year

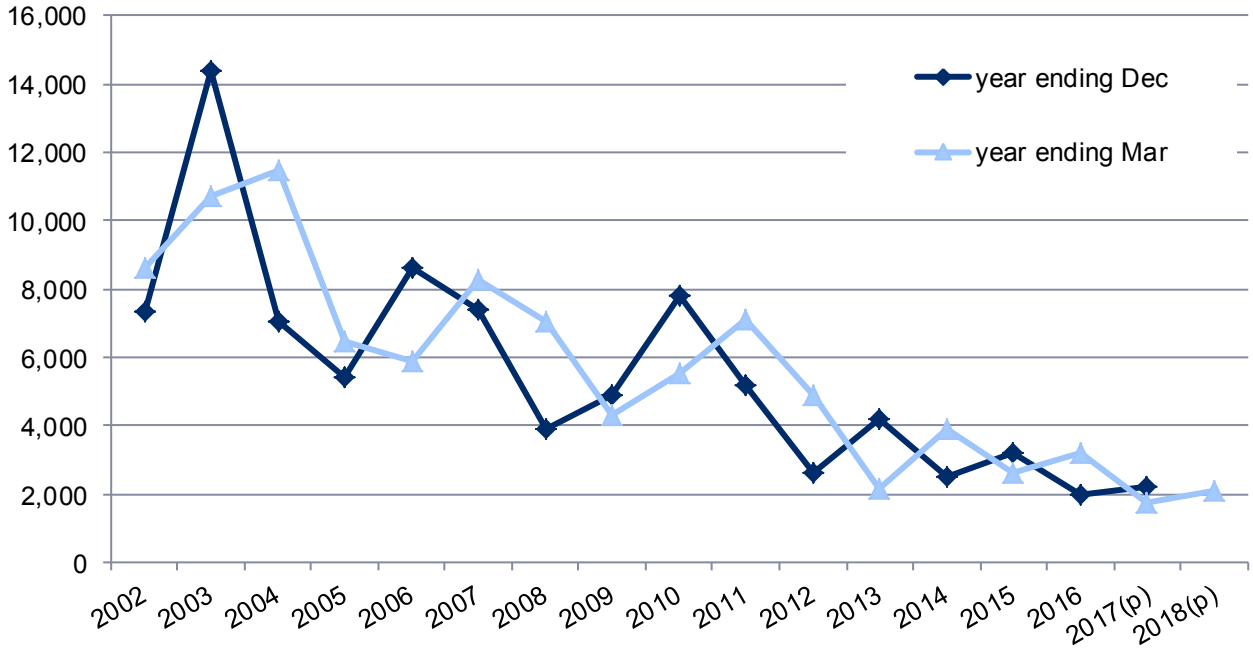


(p) Provisional data

Comparisons between calendar year and financial year

A comparison between calendar years and financial years as shown in chart 15 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 (e.g. calendar year 2003 shares 9 months with financial year 2003-04).

Chart 15: Grassland, woodland and crop fires - comparing calendar year data with financial year



(p) Data for financial year 2017-18 and calendar year 2017 are provisional.

Easter holidays

Table 11 shows the numbers, percentages and daily rates of grassland, woodland and crop fires occurring around Easter each year. For both financial year 2017-18 and calendar year 2017 around a quarter of the fires recorded were at Easter time, an increase from the 4 per cent (compared with 2016-17) and 5 per cent (compared with 2016).

The table also makes a comparison with the daily rate for the year and the daily rate for the combined months of April and March (usually numbers of fires are high in these two months and span the Easter period). As expected the annual daily rates for both calendar years and financial years are lower than the rates for Easter and the months of March and April.

The highest daily rate at Easter in a calendar year occurred in 2011, when there were 79 fires per day compared with 51 per day in the whole of March and April 2011. The highest daily rate at Easter in a financial year occurred in 2013-14 (96 fires per day) when there were only 7 days of Easter; for the combined months of April 2013 and March 2014 there were on average 27 grassland fires per day.

However numbers at Easter and March and April are far more volatile, indicating that in some years fires are more spread out though out the month and less focussed at Easter.

Table 11: Analysis of grassland, woodland and crop fires at Easter (a)

	Year Ending March						Year ending December					
				Daily rate						Daily rate		
	Days of Easter	Fires (b)	% of fires occuring at Easter	at Easter	April & March (c)	Each year	Days of Easter	Fires (b)	% of fires occuring at Easter	at Easter	March /April (c)	Each year
2010	21	644	12	31	53	15	16	490	6	31	73	21
2011	11	467	7	42	64	19	16	1,264	24	79	51	14
2012	17	1,341	27	79	46	13	16	498	19	31	27	7
2013	24	658	31	27	18	6	16	906	21	57	30	12
2014	7	669	17	96	27	11	16	467	18	29	17	7
2015	20	482	18	24	16	7	16	551	17	34	32	9
2016(d)	19	565	18	30	33	9	17	94	5	6	15	5
2017(p)	10	65	4	7	11	5	16	550	25	34	18	6
2018(p)	18	551	26	31	14	6	~	~	~	~	~	~

(a) 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.

(b) Grassland, woodland and crop fires.

(c) In the financial year April is at the beginning of the period whilst March is at the end (e.g. April 2017 and March 2018 in 2017-18) whilst in the calendar year March and April are consecutive months.

(d) 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 2017-18 and calendar year 2017 are provisional.
~ Data not available yet

Glossary

Accidental fires include those where the fire was ignited by accident or the cause was not known or unspecified.

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

Chimney fires are 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 fires include those where deliberate ignition is merely suspected.

Fire False Alarms are events in which the Fire and Rescue Authority 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** are 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** are 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** are calls initiated by fire alarm and fire-fighting equipment operating (including accidental initiation of alarm apparatus by persons)**.**

Fatal casualty (fire related) is 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) were 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) are 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 fires, from 2009-10, include fires in gardens, crops, woods, nurseries/market gardens, heathland/moorland, grassland/pasture/grazing etc., 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) is 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 is 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 are 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 include 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 is an event of uncontrolled burning involving flames, heat or smoke and which the fire and rescue authority attended.

Secondary fires are 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.

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

Key quality information

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

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

South Wales Fire and Rescue Authority serves a population of over 1.5 million people covering 1,085 square miles. It employs over 1,700 staff including nearly 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 etc. Burning (Wales) Regulations 2008 and The Heather and Grass Burning Code, which gives advice on burning best practice.

Relevance

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

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

Accuracy

Since April 2009 incident data (relating to fires, false alarms and Special Service Incidents) have been submitted by the Fire and Rescue Authorities 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 held by the Home Office. IRS does not currently collect data from FRAs in Northern Ireland.

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:

- Data on Special Service Incidents are now recorded
- All fires are recorded; pre-IRS statistics were based on a sampled dataset.
- Some detail on secondary fires and chimney fires are now recorded; pre-IRS, only aggregates were previously available.

For more details of the information collected and held on IRS please see 'Further details' on page 33.

The incident data are extracted from IRS annually (around June/July) and marked provisional at first publication. All bulletins and StatsWales tables excluding the quarterly data published in January/February 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. 2017-18 data are currently marked as provisional and may be revised in future publications.

The table below compares the provisional 2016-17 data (extracted from IRS in July 2017) which was published in July 2017 (and in Grassland, woodland and crop fires 2016-17 in October 2017) with the revised data (extracted in July 2018) as published in this bulletin. No revision was necessary to the total number of primary or secondary fires, as seen below.

Comparison of provisional data with revised data (2016-17)

	Provisional 2016-17 Published in August 2017	Revised 2016-17 Published in August 2018	Percentage change
Primary grassland, woodland and crop fires	71	71	0.0
Secondary grassland, woodland and crop fires	1,645	1,645	0.0

The table below shows little revision has been required to the published numbers of grassland fires and for the last 4 years and percentage changes have been less than 0.05 per cent.

Percentage changes for revised data

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Grassland, woodland and crop fires							
Primary	1.8	0.4	3.3	0.0	0.0	0.0	0.0
Secondary	-1.8	0.1	0.0	0.0	0.0	0.0	0.0

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.

Rounding and symbols

Data collected via the FDR1 and FDR3 paper forms (i.e. data prior to 2009-10) are based on sampled datasets. Items and totals have been rounded separately to the nearest final digit, and therefore totals shown may differ slightly from the sum of the items. No rounding has been applied to data from 2009-10 onwards.

The following symbols may have been used in this release:

- negligible (less than half the final digit shown)

. not applicable

.. not available

~ not available yet

* disclosive or not sufficiently robust for publication

p provisional

r revised

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 extracted in June/July each year. This is the second year we have published this bulletin in October (7 months after year end) improving on the timeliness (the 2015-16 bulletin was published in February 2017, 11 months after year end).

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 Fire and Rescue Authorities 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 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 Fire and Rescue Authority performance 2015-16 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.

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.

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

- 2018 – Local Authorities were grouped as per the linked Minister's statement with 16 LAs in Group A (Easter holiday Friday 30th March – Friday 13th April 2018) and the remaining 6 in Group B (Easter holidays Monday 26th March - Friday 6th April 2018)

  Most of Easter 2018 falls outside the scope of this bulletin with only two days for those in Group A and 6 days for those in Group B. Good Friday 30th March, Easter Monday 2nd April.

- 2017 - Monday 10th April to Friday 21st April. The whole Easter period falls outside of the scope of this bulletin. Good Friday 14th April, Easter Monday 17th April.

- 2016 - Friday 25th March to Friday 8th April. The first week of the school holidays falls within 2015-16; the remainder of the holiday falls within 2016-17. Good Friday 25th March, Easter Monday 28th March.
- 2015 - Monday 30th March to Friday 10th April. Only the 30th and 31st March fall in the financial year 2014-15, the remainder of the holiday falls within 2015-16. Good Friday 3rd April, Easter Monday 6th April.
- In academic years prior to 2014/15 Easter holidays may have varied slightly between local authorities but would have occurred around the time of Good Friday and Easter Monday
- 2014 - Good Friday 18th April, Easter Monday 21st April. School holidays would have fallen wholly in financial year 2014-15.
- 2013 – Good Friday 29th March, Easter Monday 1st April. School holidays would have partially fallen in financial year 2012-13 and partially in 2013-14.

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

Fire statistics monitor

Data for Scotland (published by Scottish Fire and Rescue Service since 2015)

Data for 2014-15 onwards

Pre 2014-15 data (published by the Scottish Government)

Limited Northern Ireland data is published by Northern Ireland Fire and Rescue Service.

National Statistics status

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Statistics.

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Statistics. They are awarded National Statistics status following an assessment by the UK Statistics Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

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

Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being 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 Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016.

Information on the indicators, along with narratives for each of the well-being goals and associated technical information is available in the Well-being of Wales report.

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

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

Further details

The document is available at: https://gov.wales/statistics-and-research/grassland-fires/?lang=en

Fire Statistics Data Quality Report

Incident Recording System Questions and Lists

More information is available in the form of StatsWales tables that accompany this release.

Analysis of annual Welsh fire incident data can be found in the bulletin 'Fire and Rescue Incident Statistics, 2017-18':

The bulletin includes charts and information on fires, false alarms and Special Service Incidents, on all location types (dwellings, road vehicles etc.), 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.

Next update

Grassland fires 2018-19 to be published in October 2019.

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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