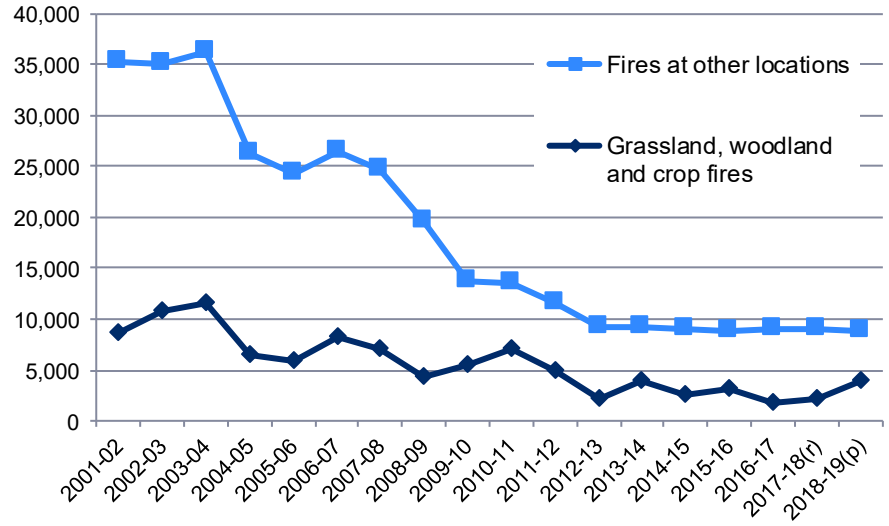
Grassland fires, 2018-19

31 October 2019
SB 49/2019

Almost one in five attendances by a Fire and Rescue Authority (FRA) at fires or false alarms in 2018-19 were grassland, woodland or crop related.

The Welsh FRAs attended 4,015 grassland, woodland and crop fires in 2018-19, almost double the number in 2017-18. The number of these fires is prone to fluctuation and the 2018-19 figure continues a period of instability in these numbers. This latest figure is the highest since 2011-12.

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



(r) Revised data
(p) Provisional data

- In 2018-19, around 7 in 10 fires on grassland, woodland and crops were started deliberately. (Table 4)
- In July 2018 there were almost 9 times as many grassland, woodland and crop fires compared with July 2017 and this month accounted for 46 per cent of the grassland fires in the 2018-19. Met Office weather data shows July 2018 saw around 40 per cent more hours of sunshine and around half the amount of rainfall (Table 5) compared with July 2017.

About this bulletin

This bulletin is complementary to data on fire incidents published in August 2019. It examines the impact and patterns in grassland, woodland and crop fires in the financial years 2001-02 to 2018-19, where data for 2018-19 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:

- 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. Numbers of grassland, woodland and crop fire related false alarms are not available prior to 2009-10.

Table 1 shows that Welsh FRAs attended 27,399 fires and fire false alarms in 2018-19. Of these, almost a fifth or 5,153 (including 1,138 fire false alarms) related to grassland, woodland and crop locations. In 2018-19 attendances at grassland, woodland and crop fires and fire false alarms rose by 80 per cent compared with 2017-18, but remained 26 per cent lower than in 2009-10.

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

	2014-15	2015-16	2016-17	2017-18(r)	2018-19(p)
Primary fires	4,561	4,678	4,757	4,316	4,392
of which were grassland, woodland and crops	*84*	*118*	*71*	*68*	*253*
Secondary fires	6,541	6,998	5,576	6,301	8,185
of which were grassland, woodland and crops	*2,529*	*3,097*	*1,645*	*2,024*	*3,762*
All fires (a)	**11,651**	**12,108**	**10,750**	**11,023**	**12,912**
of which were grassland, woodland and crop fires	***2,613***	***3,215***	***1,716***	***2,092***	***4,015***
Fire false alarms	15,485	14,493	14,790	14,161	14,487
Fire false alarms with location recorded as grassland, woodland or crops	*1,028*	*1,113*	*872*	*778*	*1,138*
All fires and fire false alarms	**27,136**	**26,601**	**25,540**	**25,184**	**27,399**
of which grassland, woodland and crop fires and fire false alarms	***3,641***	***4,328***	***2,588***	***2,870***	***5,153***

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

Fire false alarms: 8 per cent of fire false alarms relate to grassland, woodland and crop locations. The majority (97 per cent) of the fire false alarms attended in 2018-19 by the FRAs on grassland, woodland and crops were due to calls made with good intent; only 3 per cent were due to malicious calls. In 2018-19 FRAs in Wales attended 46 per cent more fire false alarms on grassland, woodland and crops than in the previous year.

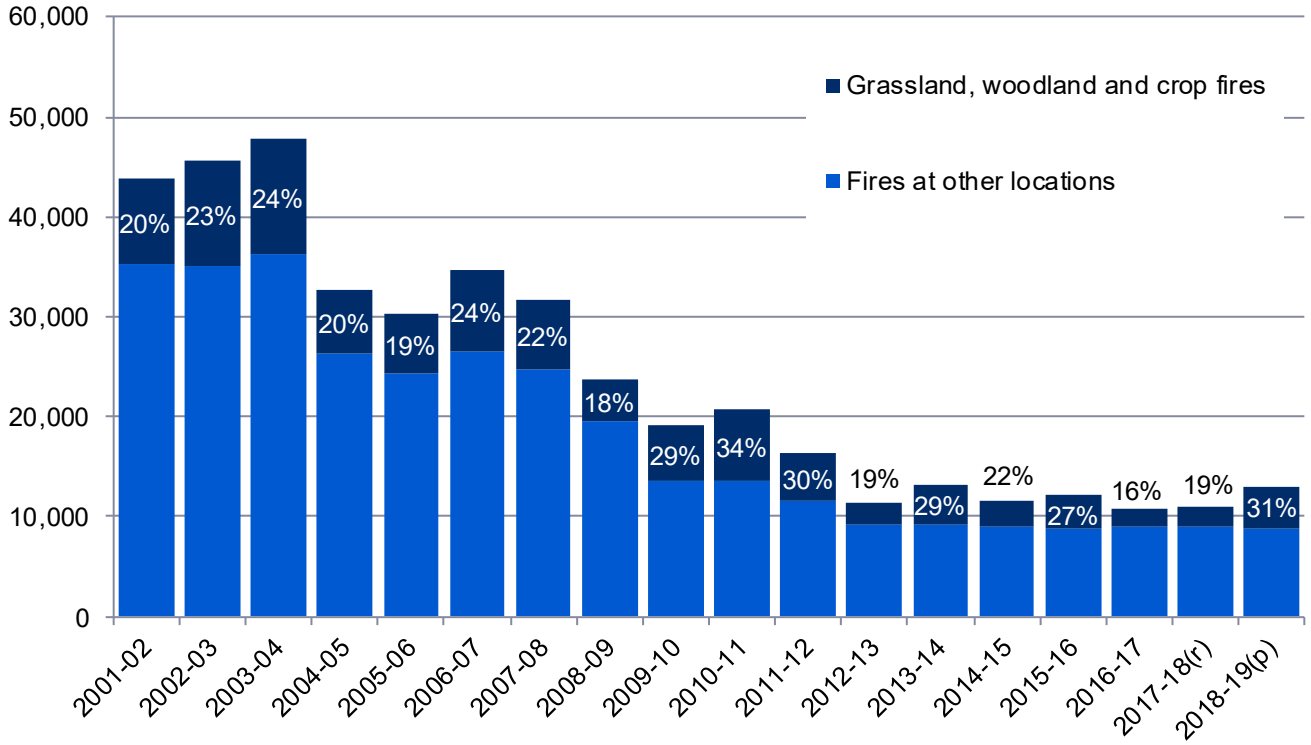
Fires: Of the 12,912 fires attended in Wales, 4,015 (31 per cent) occurred on grassland, woodland and crops. Whilst only 6 per cent of all primary fires took place on grassland, woodland or crops, 46 per cent of secondary fires occurred on grassland, woodland or crops.

In 2018-19, the number of grassland, woodland and crop fires (excluding fire false alarms) attended by the Welsh FRAs increased by 92 per cent compared with 2017-18, and it is the highest figure since 2011-12. However it is less than half the figure in 2001-02 and a little over a third of the peak figure from 2003-04. In recent years (since 2012-13) numbers had decreased and increased in alternate years but 2018-19 saw the second annual increase in a row.

Numbers of fires in locations other than grassland, woodland and crops fell slightly but saw no percentage change compared with 2017-18. Overall since 2001-02 they have fallen by 75 per cent. 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. During this 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

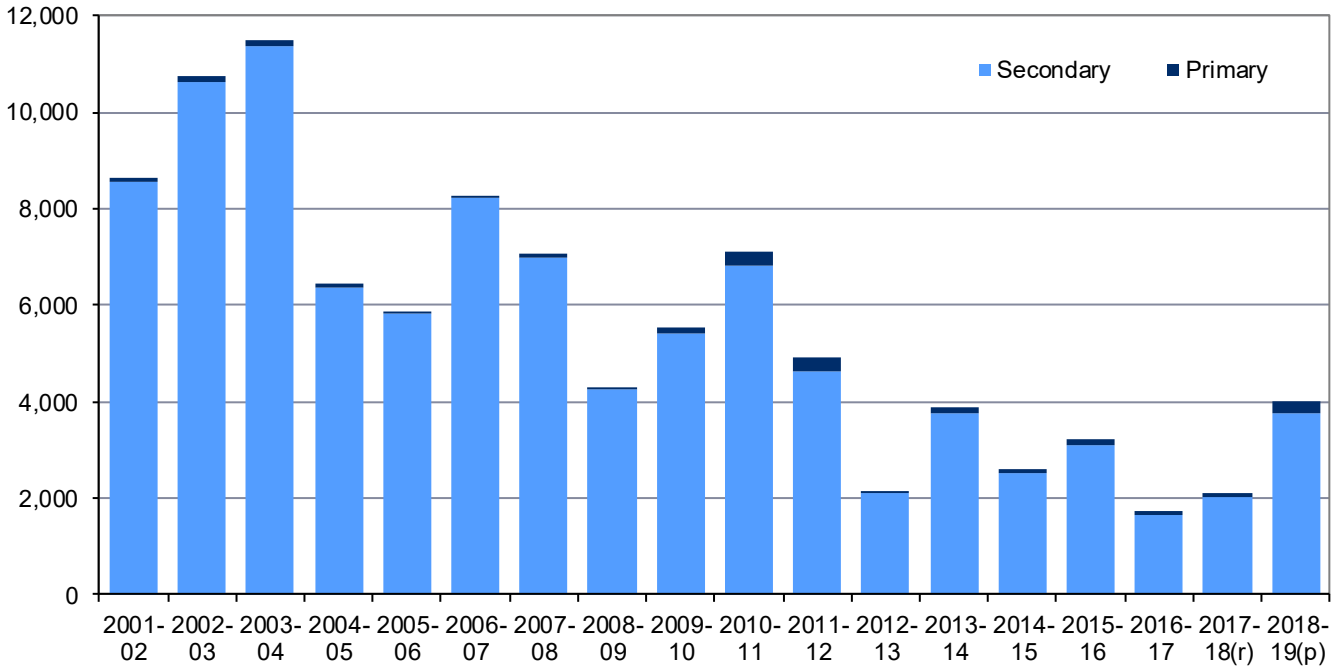


(r) Revised data
(p) Provisional data

Chart 3 shows the vast majority of grassland, woodland and crop fires attended are secondary fires (between 94 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 saw the third lowest number of grassland, woodland and crop fires in the time series and 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 10 per cent less rain than the average over 2001-02 to 2018-19.

However the annual weather data cannot explain all the fluctuations; rainfall in 2016-17 was relatively low (being 14 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

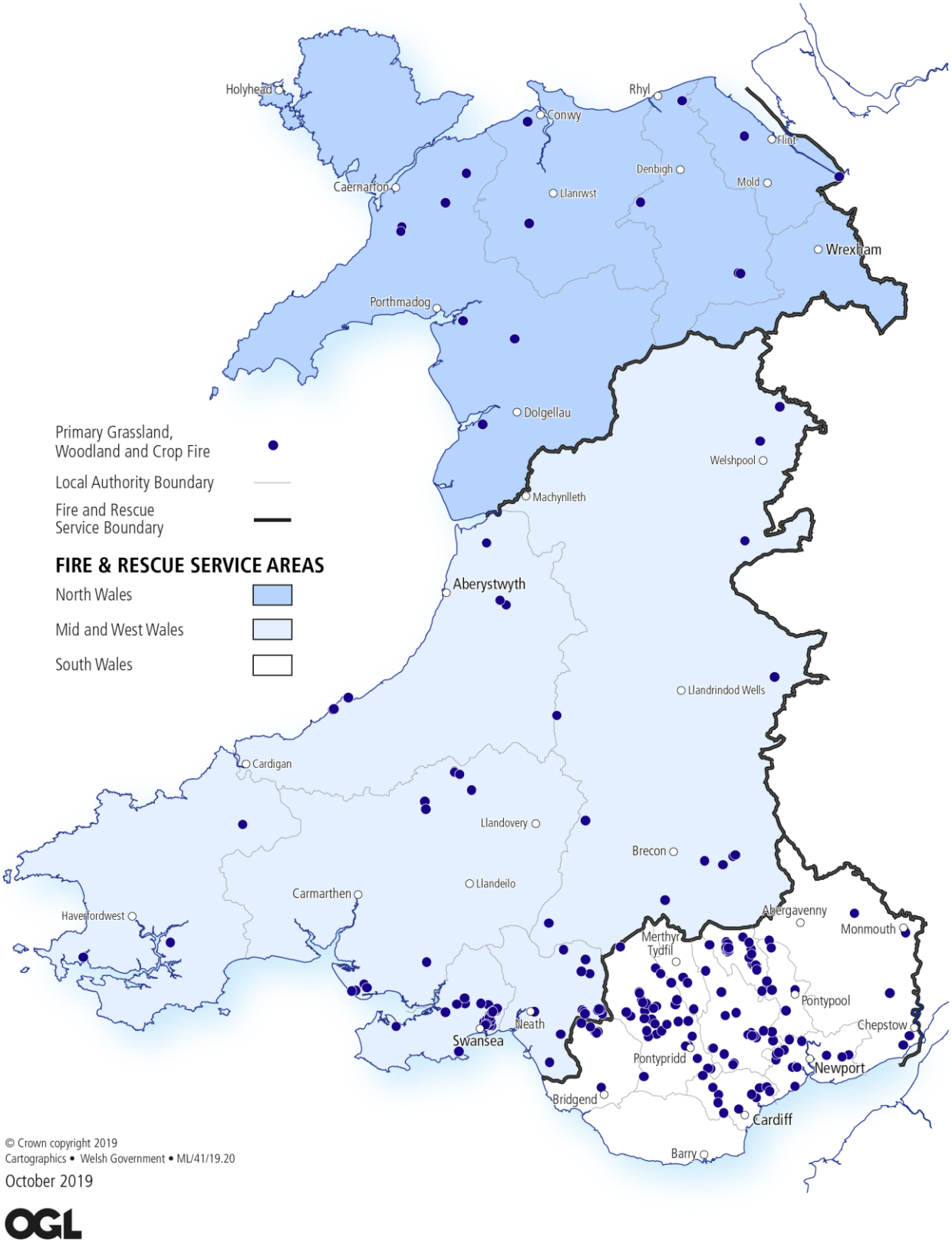


(r) Revised data.
(p) Provisional data.

Primary grassland, woodland and crop fires

In 2018-19, 253 primary grassland, woodland and crop fires were attended in Wales, and their locations are shown on the map on the following page. 55 per cent of the primary grassland fires in 2018-19 occurred in the South Wales FRA Region and 38 per cent were in Mid and West Wales. The remaining 6 per cent were in North Wales.

Grassland, Woodland and Crop Primary Fires across Wales, 2018-19



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

Only 6 per cent of all primary fires occurred on grassland, woodland or crops, although this is 4 percentage points higher than in 2017-18. There were almost 4 times as many primary fires on grassland, woodland and crops in 2018-19 as in the previous year and it is the highest number since 2011-12[1]. All categories of primary grassland fires saw increases except stacked/baled and standing crop.

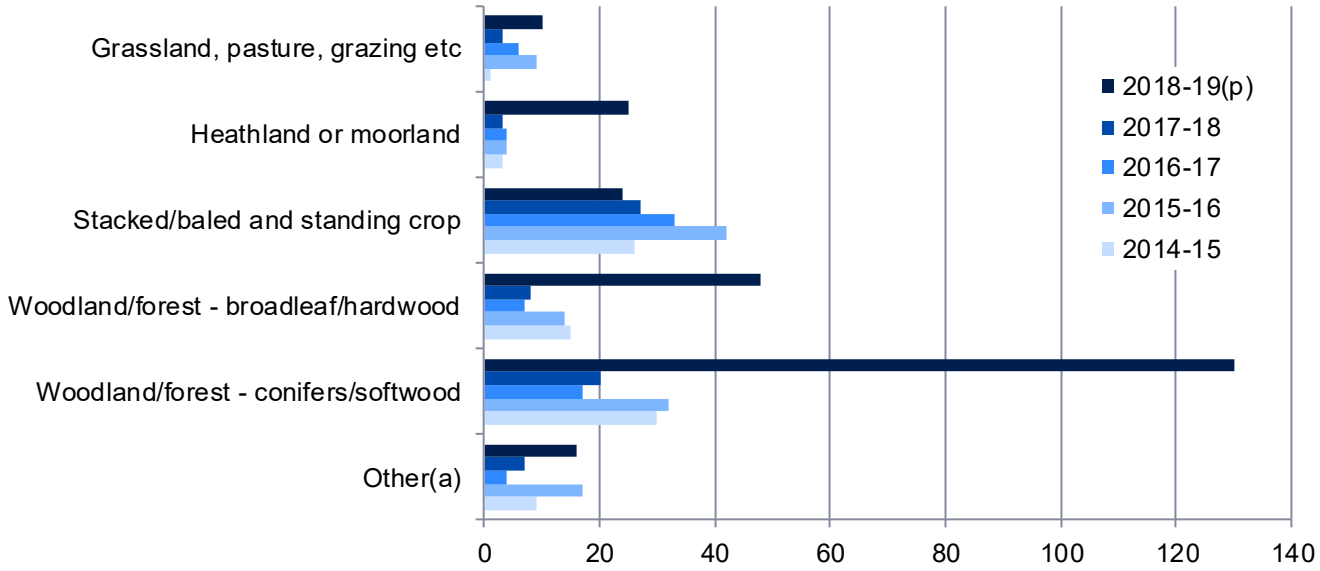
There were 178 primary fires in woodland (70 per cent of primary grassland fires) in 2018-19, more than 6 times as many as in 2017-18.

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

	2014-15	2015-16	2016-17	2017-18	2018-19(p)
Grassland, pasture, grazing etc	1	9	6	3	10
Heathland or moorland	3	4	4	3	25
Stacked/baled and standing crop	26	42	33	27	24
Woodland/forest - broadleaf/hardwood	15	14	7	8	48
Woodland/forest - conifers/softwood	30	32	17	20	130
Other (a)	9	17	4	7	16
All primary grassland, woodland and crop fires	**84**	**118**	**71**	**68**	**253**

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

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



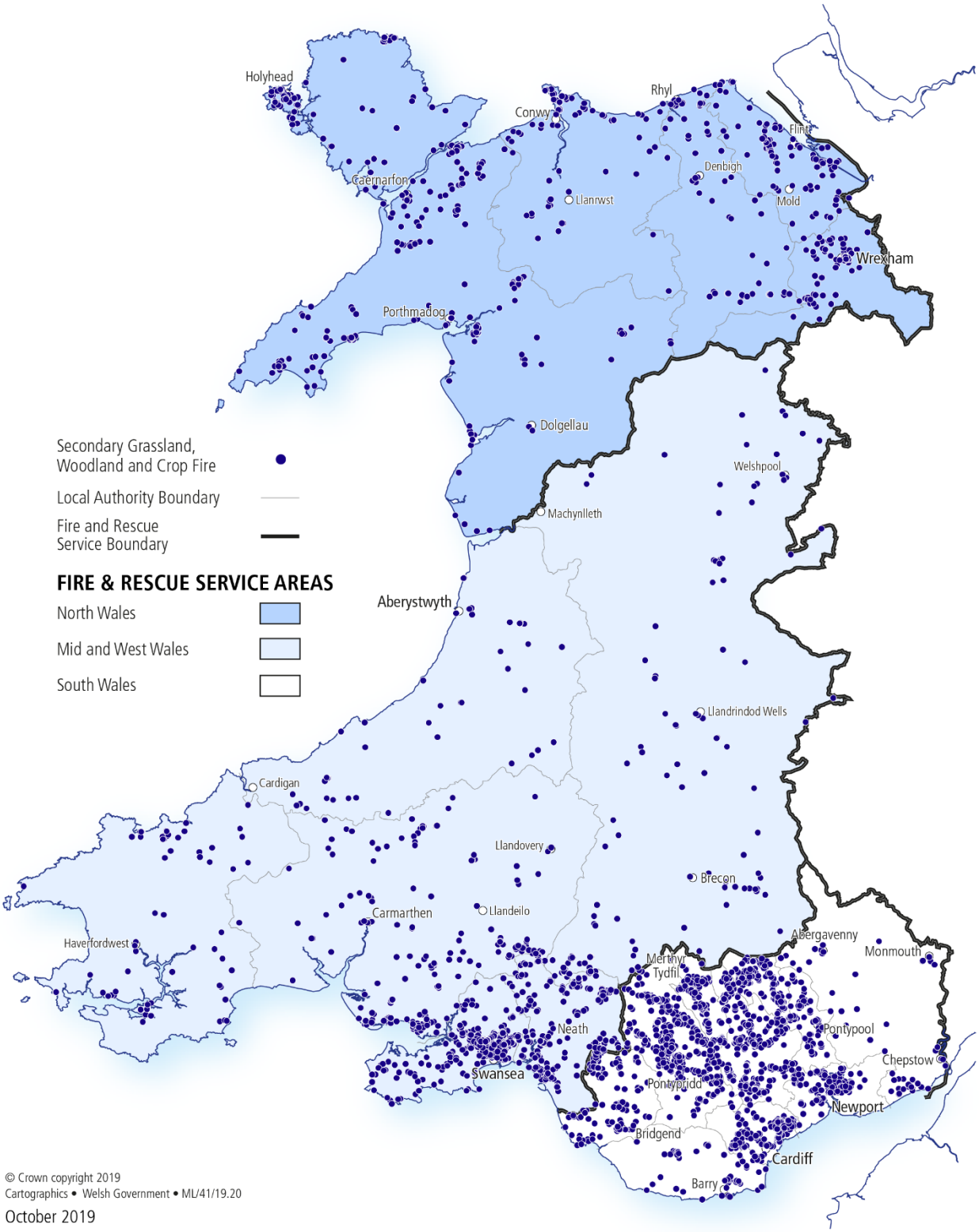
(a) 'Other' shown in the above chart includes domestic gardens, hedge, nurseries and market gardens, roadside vegetation, scrub land and tree scrub.
(p) Provisional data.

Secondary grassland, woodland and crop fires

In 2018-19 there were 3,762 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 2018-19 occurred in the South Wales FRA region, whilst almost a third occurred in Mid and West Wales and 17 per cent in North Wales.

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

Grassland, Woodland and Crop Secondary Fires across Wales, 2018-19



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October 2019

OGL

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 2018-19, grassland, woodland and crop fires accounted for 46 per cent. Overall, in 2018-19, secondary fires on grassland rose by 86 per cent compared with the previous year.

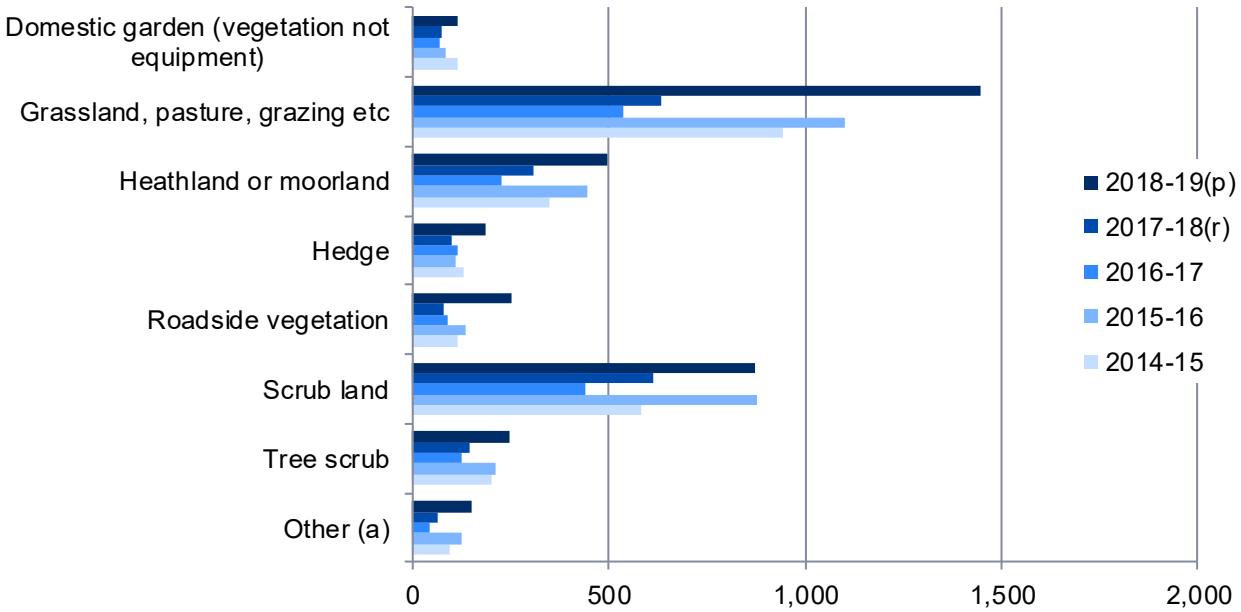
All location types in the table below saw an increase in the number of these fires; the largest percentage increase occurred in roadside vegetation (216 per cent), whilst grassland, pasture, grazing etc. saw the largest increase in numbers (811 more fires than in the previous year) . In 2018-19, 62 per 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 each year since 2009-10.

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

	2014-15	2015-16	2016-17	2017-18(r)	2018-19(p)
Canal/riverbank vegetation	40	40	17	30	74
Domestic garden (vegetation not equipment)	114	83	70	72	113
Grassland, pasture, grazing etc	942	1,103	535	635	1,446
Heathland or moorland	349	446	225	310	495
Hedge	132	112	113	100	185
Roadside vegetation	113	138	91	80	253
Scrub land	581	879	441	615	875
Tree scrub	202	213	124	147	246
Other (a)	56	83	29	35	75
All secondary grassland, woodland and crop fires	**2,529**	**3,097**	**1,645**	**2,024**	**3,762**

(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



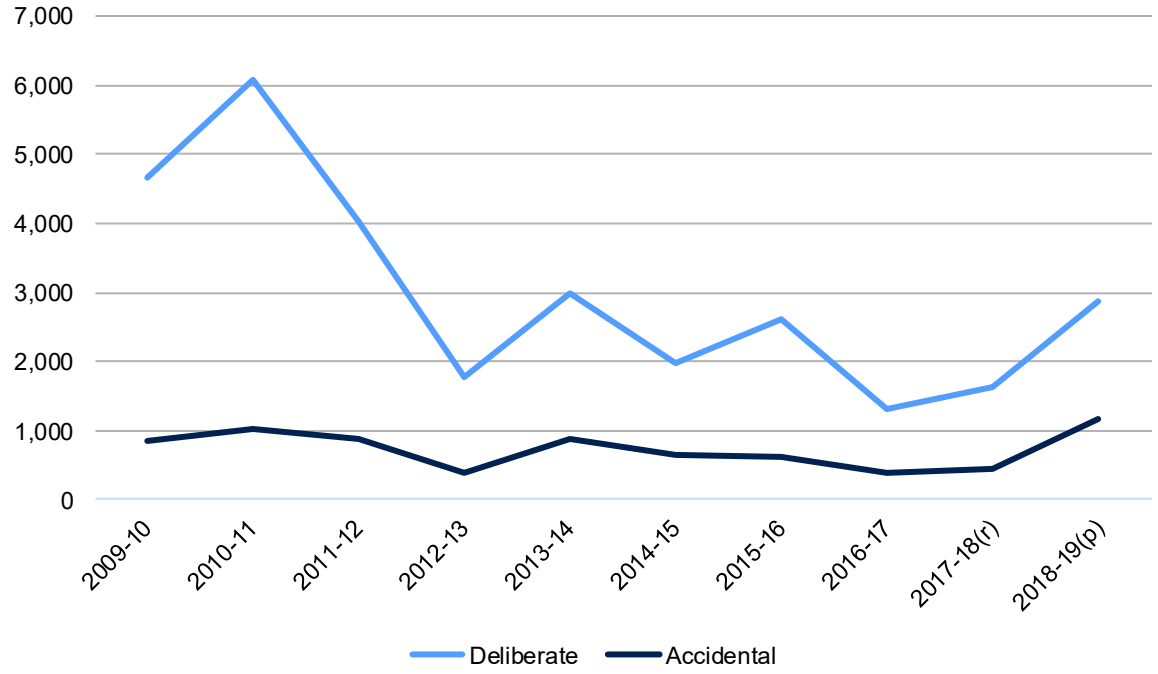
(a) 'Other' as shown in the above chart includes 'woodland/forest - broadleaf/hardwood' and 'woodland/forest - conifers/softwood', 'nurseries and market garden', 'stacked and baled crop', canal/riverbank vegetation, railway trackside vegetation.
(r) Revised data
(p) Provisional data.

Grassland, woodland and crop fires by motive

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 we can also note that 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.

Chart 6: Grassland, woodland and crop fires by motive



Around 7 in 10 grassland, woodland and crop fires were deliberate in 2018-19, a lower proportion than seen in earlier years due to the rise in accidental fires which more than doubled. Deliberate fires also increased, by 75 per cent compared with 2017-18.

In 2018-19 there were 2,862 deliberate grassland, woodland and crop fires in Wales, the highest number since 2013-14. There were 1,153 accidental grassland, woodland and crop fires, a rise of 153 per cent compared with the previous year. The 2018-19 figure is the highest number in the available time series.

For both deliberate and accidental fires occurring on grassland, woodland and crops, the vast majority were secondary fires; 94 per cent of deliberate fires and 93 per cent of accidental fires were secondary.

There were 2,686 deliberate secondary grassland, woodland and crop fires in 2018-19, making up 67 per cent of all grassland woodland and crop fires in the year. This is an increase of 69 per cent on 2017-18.

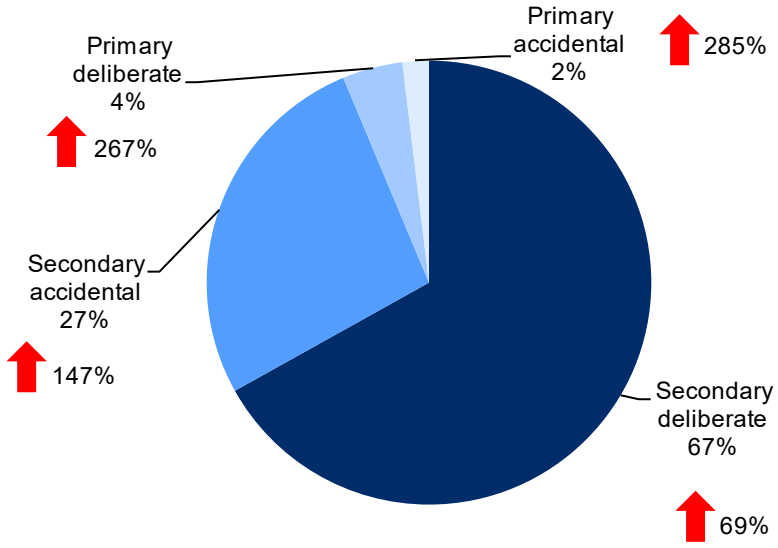
Table 4: Number and percentage of grassland, woodland and crop fires, by motive

	Number			Percentage		
	Deliberate	Accidental	All	Deliberate	Accidental	All
Primary fires						
2014-15	58	26	84	69	31	100
2015-16	85	33	118	72	28	100
2016-17	48	23	71	68	32	100
2017-18(r)	48	20	68	71	29	100
2018-19(p)	176	77	253	70	30	100
Secondary fires						
2014-15	1,910	619	2,529	76	24	100
2015-16	2,518	579	3,097	81	19	100
2016-17	1,270	375	1,645	77	23	100
2017-18(r)	1,588	436	2,024	78	22	100
2018-19(p)	2,686	1,076	3,762	71	29	100
All fires						
2014-15	1,968	645	2,613	75	25	100
2015-16	2,603	612	3,215	81	19	100
2016-17	1,318	398	1,716	77	23	100
2017-18(r)	1,636	456	2,092	78	22	100
2018-19(p)	2,862	1,153	4,015	71	29	100

(r) Revised data
(p) Provisional data.

Accidental secondary grassland fires made up 27 per cent of all grassland, woodland and crop fires in 2018-19 and increased by 147 per cent to 1,076.

Chart 7: Grassland, woodland and crop fires by fire type and motive, 2018-19



Of the 1,153 accidental (primary and secondary) grassland, woodland and crop fires in 2018-19, 35 per cent occurred on grassland, pasture, grazing etc. and 23 per cent on heathland and moorland. There were 2,862 deliberate (primary and secondary) grassland, woodland and crop fires in 2018-19, 37 per cent of which occurred on grassland, pasture, grazing etc. and 27 per cent 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. July 2018 recorded the highest proportion (46 per cent) of grassland fires for the financial year 2018-19 and there were more than 8 times as many compared with July 2017.

Unusually, April 2018 saw only 5 per cent of the grassland, woodland and crop fires in 2018-19 and numbers fell by 75 per cent; in earlier years April accounted for at least one fifth of the grassland, woodland and crop fires each year.

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

	Number					Percentage				
	2014-15	2015-16	2016-17	2017-18(r)	2018-19(p)	2014-15	2015-16	2016-17	2017-18	2018-19
April	561	1,486	400	803	202	21	46	23	38	5
May	185	275	302	482	401	7	9	18	23	10
June	278	284	159	146	537	11	9	9	7	13
July	437	163	109	215	1,863	17	5	6	10	46
August	139	116	148	81	233	5	4	9	4	6
September	286	130	52	36	96	11	4	3	2	2
October	56	105	84	44	103	2	3	5	2	3
November	43	13	81	37	61	2	0	5	2	2
December	30	12	33	18	13	1	0	2	1	0
January	22	13	32	29	26	1	0	2	1	1
February	134	112	45	133	190	5	3	3	6	5
March	442	506	271	68	290	17	16	16	3	7
Total fires	**2,613**	**3,215**	**1,716**	**2,092**	**4,015**	**100**	**100**	**100**	**100**	**100**

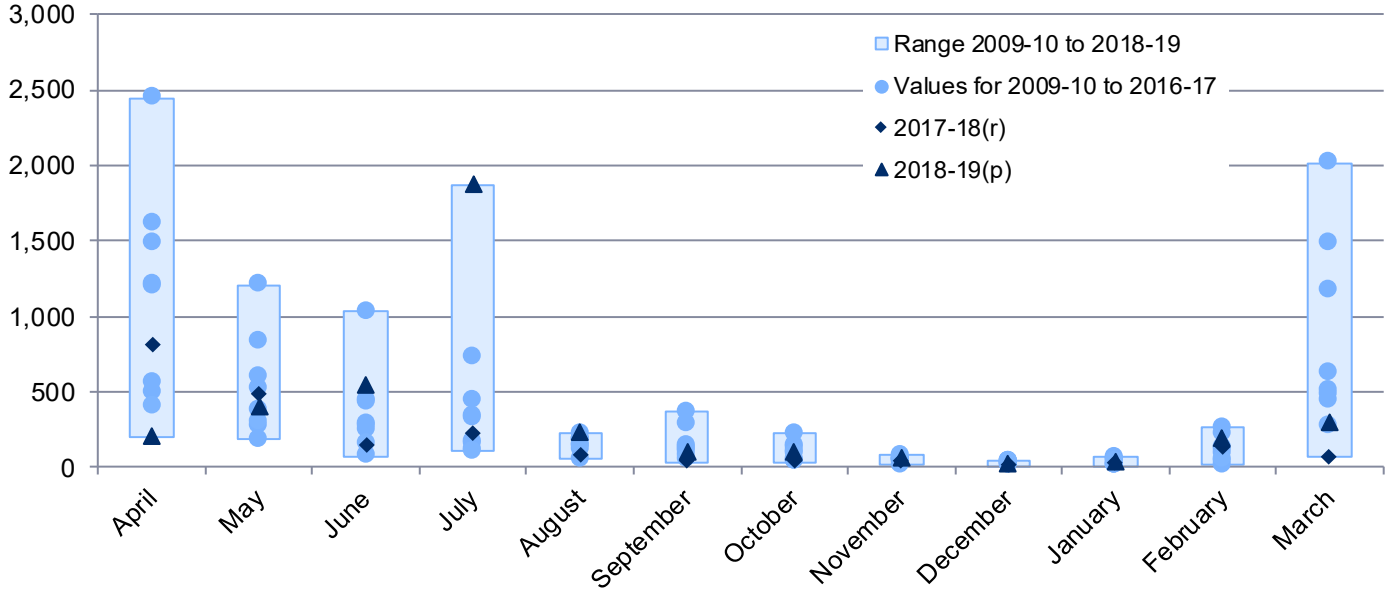
(r) Revised data
(p) Provisional data.

Eight months of 2018-19 saw increases in numbers of grassland, woodland and crop fires compared with the previous year. The largest increases were seen July 2018 (over 8 times the number in July 2017), March 2019 (more than 4 times as many as in March 2018) and June 2018 (almost four times the number in June 2017). The largest decrease was in April 2018 (down 75 per cent on April 2017).

On average there were 60 grassland fires each day in July 2018, compared with 7 each day in July 2017. This is the highest daily rate for any month since April 2010, when there were 81 each day.

Chart 8 identifies the grassland, woodland and crop fire data in 2018-19 and 2017-18, along with showing the years 2009-10 to 2016-17, 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 November to January, but there is a wider spread during the spring to summer months March through to July. Also highlighted is how the number of fires in July 2018 is far higher than in the July of earlier years.

Chart 8: 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 2018-19, July 2018 (the month with the most grassland fires in 2018-19) saw a little over half the rainfall seen in the July 2017, and preceding this, June 2018 had the least rainfall of any June since 1942. Similarly these two months had more hours of sunshine than in the previous year, with June 2018 having more than any other June since 1975. These months also had the most hours of sunshine and the least rainfall in the year. This prolonged dry period may have led to conditions where outdoor fires were more likely. The Met Office have produced a factsheet explaining further the links between weather and the occurrence of grassland fires.

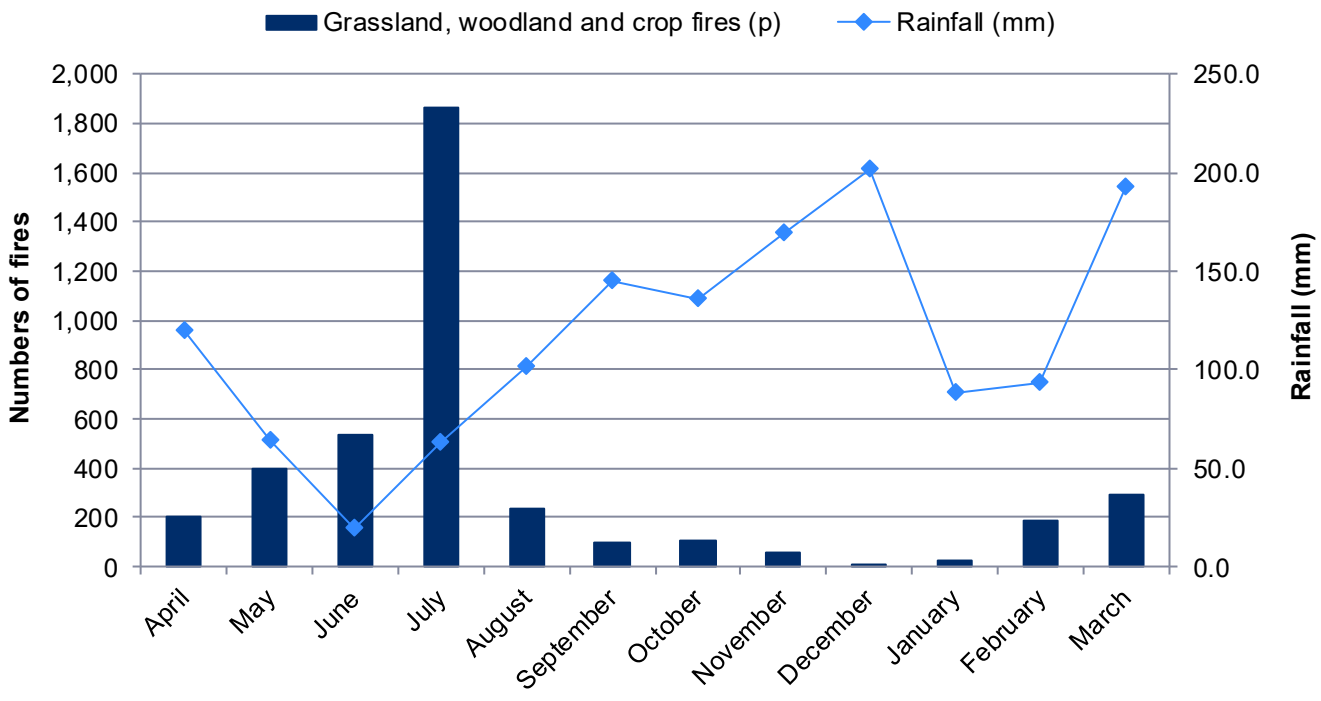
Numbers of grassland fires in April 2018 and in March 2019 were noticeably low, having only 5 per cent and 7 per cent respectively of the grassland fires in 2018-19. Weather data for April 2018 shows 4 times as much rainfall and a fifth fewer hours of sunshine compared with April 2017. However, weather data cannot explain all the fluctuations; for example March 2019 had around 27 per cent more rainfall but also 30 per cent more sunshine than March 2018. 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.

Chart 9 shows the relationship between the number of grassland, woodland and crop fires and the levels of rainfall each month in 2018-19. Broadly speaking, when the levels of rainfall are high (as in November and December) the number of fires are low and those months with low levels of rainfall (June and July) had higher numbers of fires.

Chart 9: Number of grassland, woodland and crop fires and rainfall levels, by month, 2018-19

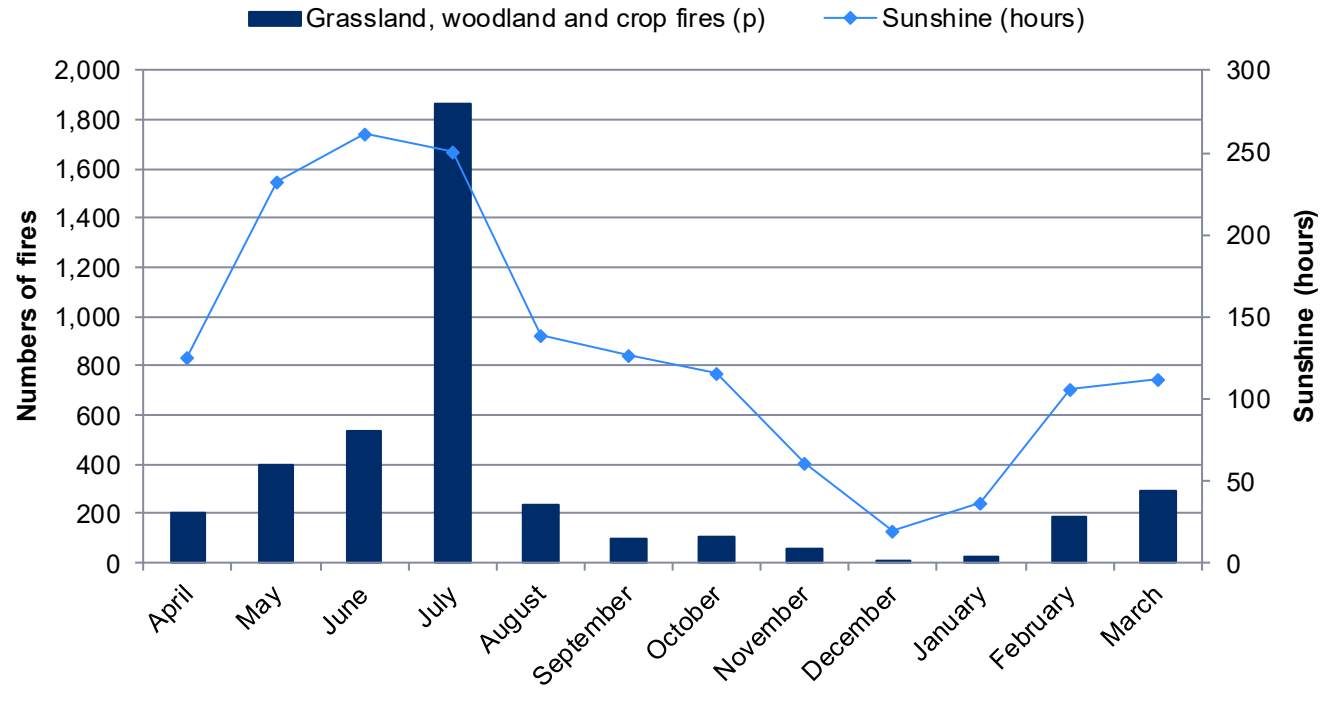


Source: Incident Recording System, Met Office

(p) Provisional data

The correlation with sunshine is seen in chart 10; where there were more hours of sunshine (for instance in May to July) there were with higher numbers of fires, whilst the months November to January have fewer hours of sunshine and fewer fires.

Chart 10: Numbers of grassland, woodland and crop fires and hours of sunshine, by month, 2018-19



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 4,015 grassland fires in 2018-19, 52 per cent were in South Wales, 32 per cent were in Mid and West Wales and 16 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	299	486	931	1,716	17	28	54
2017-18(r)	353	652	1,087	2,092	17	31	52
2018-19(p)	655	1,266	2,094	4,015	16	32	52
Percentage change 2017-18 to 2018-19	86	94	93	92	.	.	.

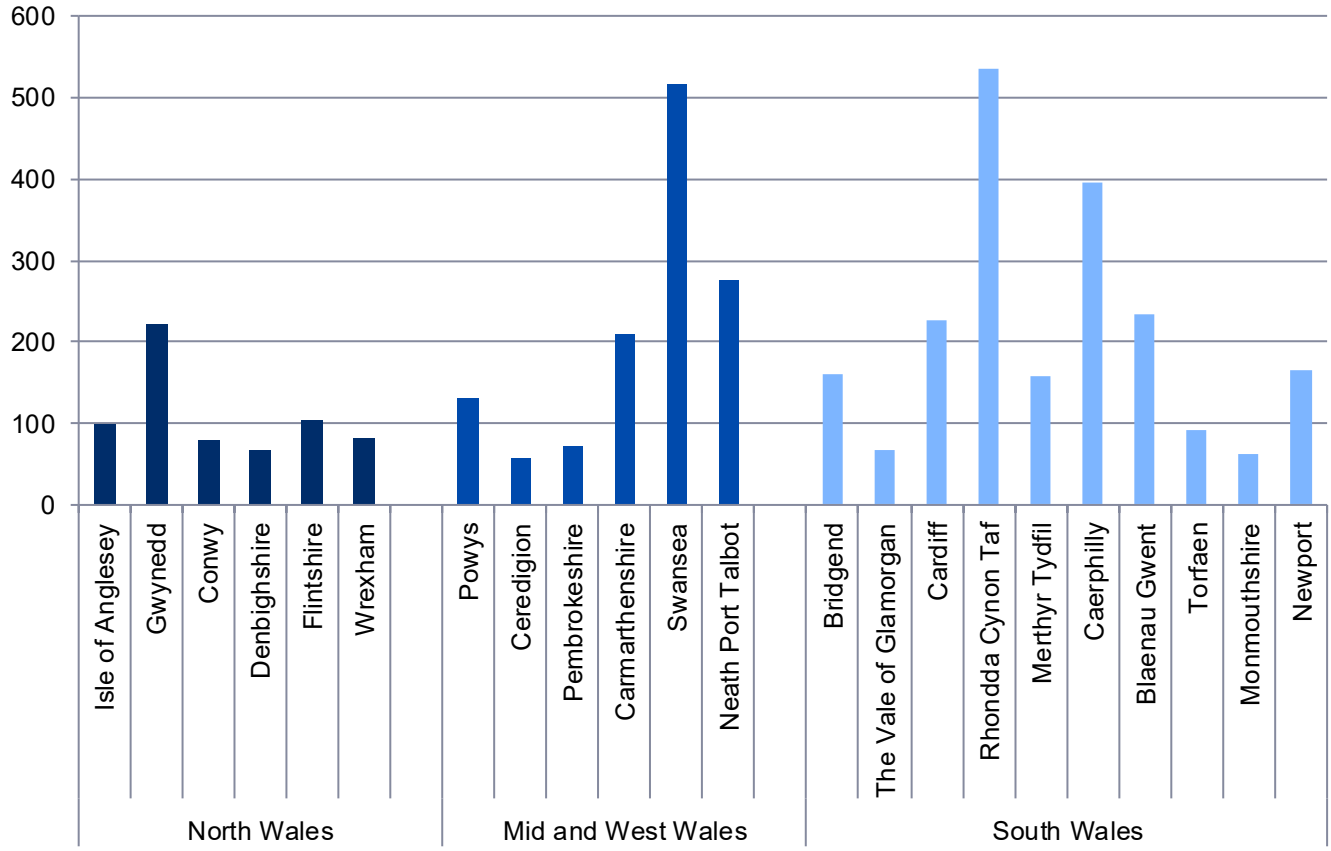
(r) Revised data
(p) Provisional data.
. Not applicable

The number of grassland, woodland and crop fires rose in all three FRAs in 2018-19; in Mid and West Wales by 94 per cent, in South Wales by 93 per cent and in North Wales by 86 per cent. In spite of the rise seen in 2018-19, compared with 2001-02 the number of grassland, woodland and crop fires are lower by 60 per cent in South Wales, 46 per cent in Mid and West Wales and 37 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 2018-19 with over 500 in each authority (each with 13 per cent of grassland fires in Wales); Ceredigion had the smallest number with 57 (1 per cent of those in Wales). Similar proportions were seen in earlier years.

All 22 LAs saw an increase in the number of grassland, woodland and crop fires in 2018-19 (compared with 2017-18); the largest increases were in Ceredigion and the Isle of Anglesey, both of which had almost 4 times as many fires as in the previous year. These two LAs, along with Carmarthenshire, also had their highest number of fires in the available time series (from 2009-10). Since 2009-10 18 LAs have seen overall decreases.

Chart 11: Number of grassland, woodland and crop fires, by Fire and Rescue Authority and Local Authority 2018-19(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 13 LAs, 'grassland and pasture' were the largest category of location of grassland, woodland and crop fires in 2018-19. Of these, in Carmarthenshire 51 per cent of grassland, woodland and crop fires occurred on grassland and pasture; this is the highest proportion of all the LAs.

Fires on heathland and moorland made up the largest category of grassland fires in 5 LAs, all of which occurred in North Wales; the largest percentage being in Gwynedd (50 per cent).

For the remaining 4 LAs, the largest category was scrub land (all of which were in the South Wales FRA region); Rhondda Cynon Taf had the highest percentage at 40 per cent.

In 5 LAs, over 90 per cent of all grassland, woodland and crop fires were started deliberately, all 5 being in the South Wales FRA region. The highest proportion which were started deliberately occurred in Merthyr Tydfil (97 per cent), closely followed by Caerphilly (95 per cent), Blaenau Gwent (94 per cent) and Rhondda Cynon Taf (93 per cent).

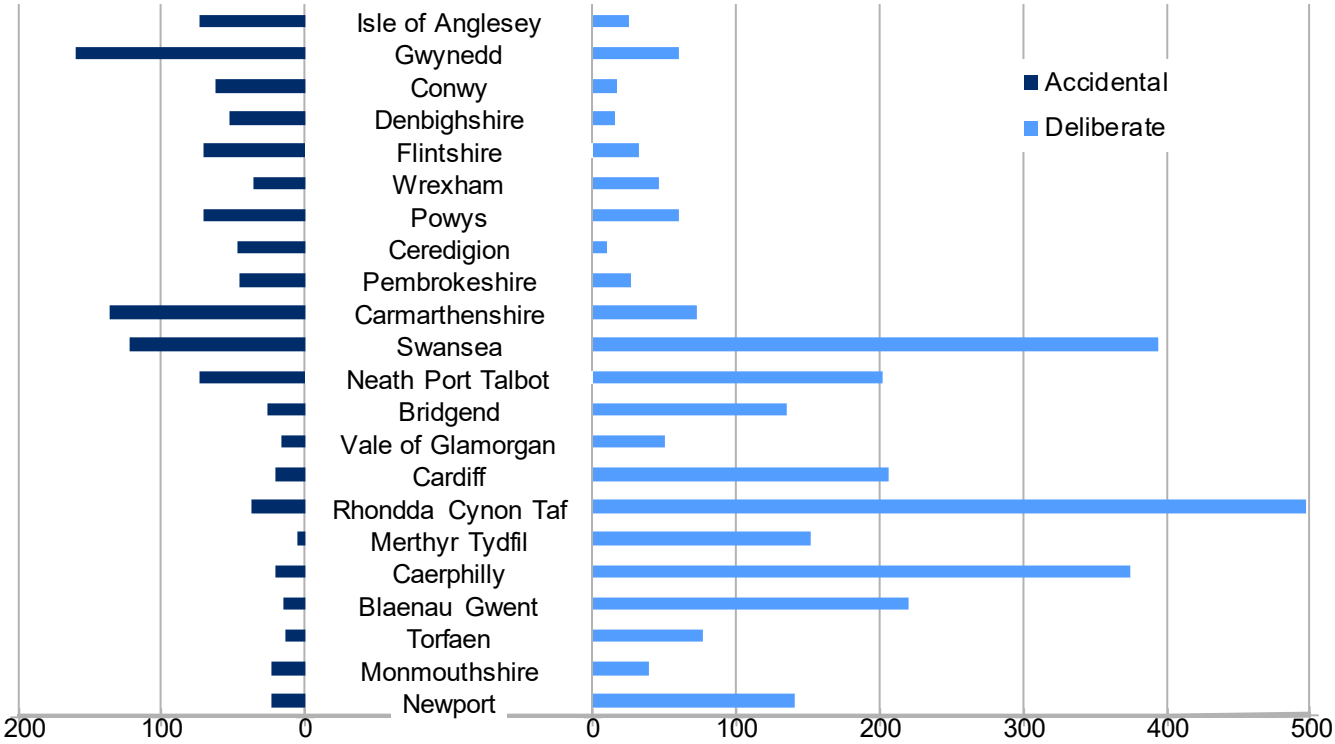
Ceredigion had the smallest percentage of fires started deliberately (18 per cent). As in most other years in the time series, Gwynedd had the highest number of accidental grassland fires in Wales, with half occurring on heathland or moorland.

Flintshire was the only LA to see a decrease (of 18 per cent) in the number of deliberate grassland, woodland and crop fires in 2018-19 (compared with 2017-18). The largest percentage increase was in Ceredigion, but numbers are low so this equates to only 9 more fires.

Rhondda Cynon Taf saw the largest increase in numbers of fires, with 228 more deliberate fires compared with 2017-18. As has already been observed, numbers can be volatile, increasing one year and falling the next. In 2018-19, 6 LAs had more than 200 deliberate grassland, woodland and crop fires (up from 2 LAs in 2017-18) and 3 had more than 300 (there were none in 2017-18).

All LAs except one have seen decreases compared with 2009-10, the largest percentage change being in Conwy (78 per cent). The one LA to see an increase is Ceredigion but, as already discussed, numbers are small for this LA.

Chart 12: Numbers of grassland, woodland and crop fires by local authority and motive, 2018-19(a)(p)

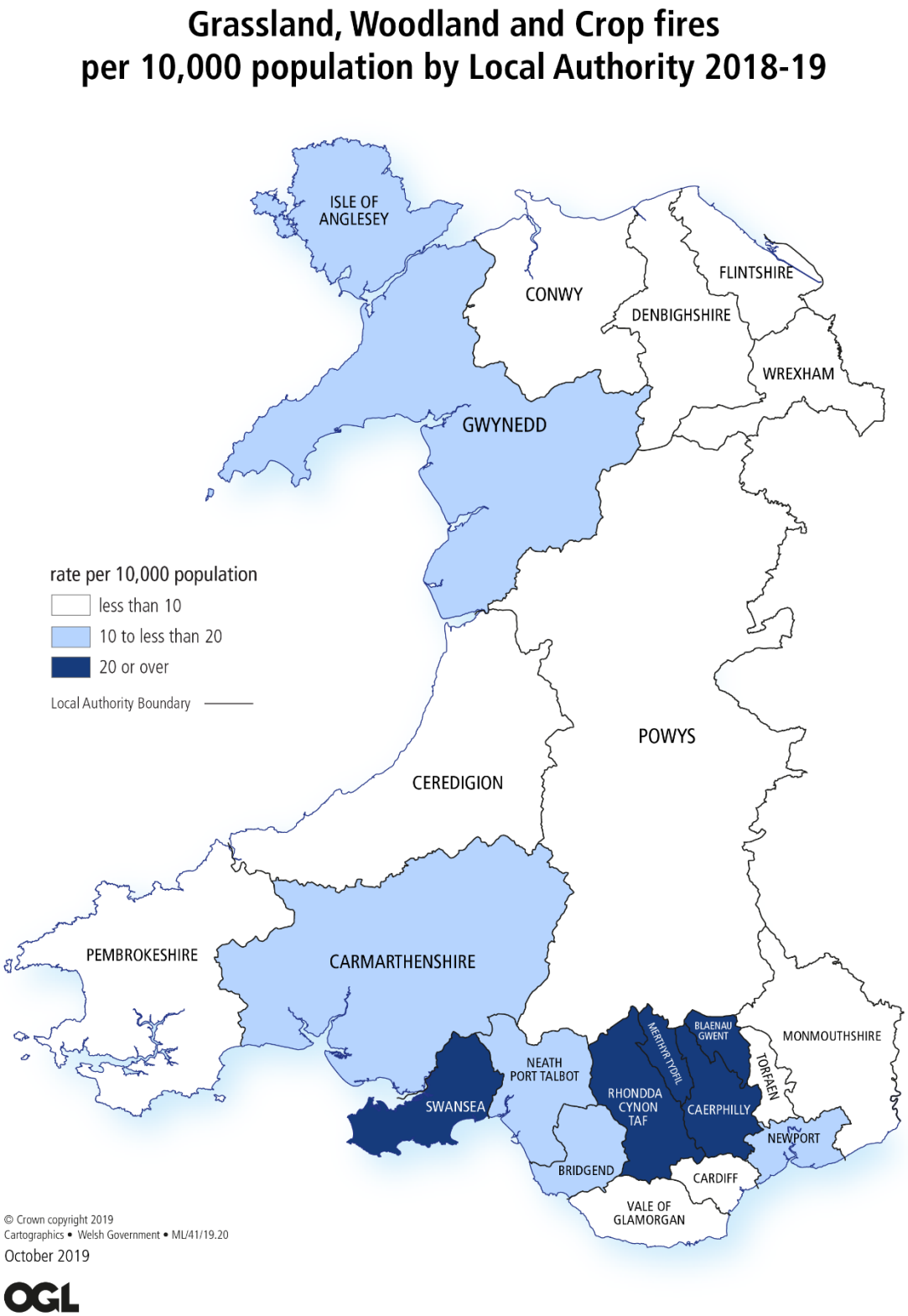


(a) Local authorities have been assigned to incidents based on grid references; see the Key Quality Information for further details.

(p) Provisional data.

The map below shows rates of grassland fires per 10,000 population for each Local Authority in Wales in 2018-19.

Blaenau Gwent has the highest rate in 2018-19 with 34 fires occurring for every 10,000 people (up from 13 in 2017-18); Vale of Glamorgan has the lowest rate of 5, up from 3 in 2017-18.



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 rise of 46 per cent in the number of grassland, woodland and crop related fire false alarms attended by FRAs in 2018-19 (compared with 2017-18); this is the highest number since 2013-14. All 3 FRAs saw increases in numbers; 60 per cent in North Wales, 50 per cent in South Wales and 37 per cent in Mid and West Wales. All 3 FRSs have seen decreases compared with 2009-10; 31 per cent in South Wales, 12 per cent in Mid and West Wales and 6 per cent in North Wales.

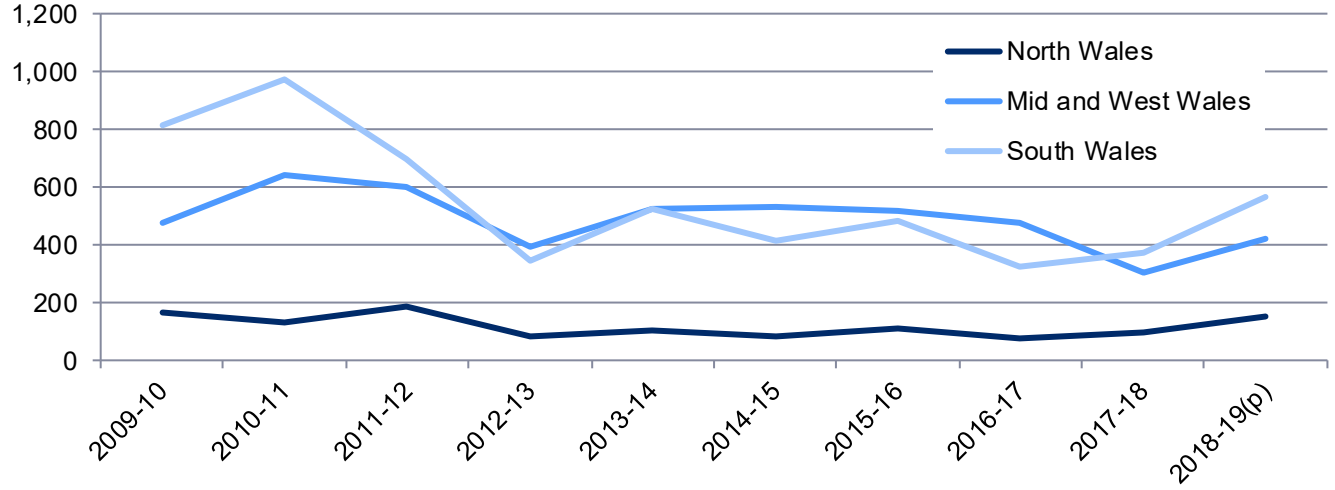
Only 3 per cent of these fire false alarms in 2018-19 were due to malicious calls, with the remaining 97 per cent due to good intent. South Wales had the highest number of malicious calls relating to grassland, woodland and crop fire false alarms, which in turn equated to 3 per cent of the grassland, 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	76	475	321	872
2017-18	96	306	376	778
2018-19(p)	154	419	565	1,138
Percentage change 2017-18 to 2018-19	60	37	50	46

(r) Revised data
(p) Provisional data

Chart 13: 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 a grassland, woodland and crop fire since 2001-02, which occurred in 2007-08. Since 2001-02 there have been 97 non-fatal casualties in these fires; 45 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 3 rescues of an uninjured person from a grassland, woodland or crop fire, 1 in 2010-11, 1 in 2015-16 and most recently, 1 in 2018-19.

There were 2 non-fatal casualties in 2018-19, 3 fewer than in 2017-18. These 2 casualties equate to less than 1 per cent of all non-fatal fire casualties in Wales in 2018-19.

Fires started deliberately have accounted for a third of non-fatal casualties from grassland, woodland and crop fires since 2009-10.

Since 2009-10, 44 per cent of grassland, woodland and crop related casualties occurred in North Wales, 38 per cent in Mid and West Wales and 18 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	0	2	0
2017-18	0	5	0
2018-19(p)	0	2	1

(a) Data not collected prior to 2009-10.
(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 2018-19, 43 per cent of primary grassland, woodland and crop fires in Wales damaged over 200 square metres. A further 37 per cent were 20 square metres or less, equating to 93 fires.

For secondary fires, the majority (56 per cent) damaged 20 square metres or less. The percentage 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 2018-19 in each category of area damaged saw large increases; those which damaged less than 20 square metres rose by 88 per cent whilst the numbers in the other two categories almost doubled.

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

	Number					Percentage				
	2014-15	2015-16	2016-17	2017-18(r)	2018-19(p)	2014-15	2015-16	2016-17	2017-18	2018-19
Primary fires										
0-20 sq m	51	53	40	40	93	61	45	56	59	37
21-200 sq m	12	18	9	9	50	14	15	13	13	20
201+ sq m	21	47	22	19	110	25	40	31	28	43
Total	**84**	**118**	**71**	**68**	**253**	**100**	**100**	**100**	**100**	**100**
Secondary fires										
0-20 sq m	1,518	1,557	1,026	1,139	2,120	60	50	62	56	56
21-200 sq m	635	834	374	532	1,021	25	27	23	26	27
201+ sq m	376	706	245	353	621	15	23	15	17	17
Total	**2,529**	**3,097**	**1,645**	**2,024**	**3,762**	**100**	**100**	**100**	**100**	**100**
All fires										
0-20 sq m	1,569	1,610	1,066	1,179	2,213	60	50	62	56	55
21-200 sq m	647	852	383	541	1,071	25	27	22	26	27
201+ sq m	397	753	267	372	731	15	23	16	18	18
Total	**2,613**	**3,215**	**1,716**	**2,092**	**4,015**	**100**	**100**	**100**	**100**	**100**

(r) Revised data.
(p) Provisional data

In 2018-19, 127 grassland, woodland and crop fires took place on National Park land; 85 per cent of these were secondary fires. Since 2009-10 there have been 972 grassland, woodland and crop fires on National Park land, equating to 3 per cent of all grassland, woodland and crop fires. 94 per cent of these fires (since 2009-10) were secondary fires.

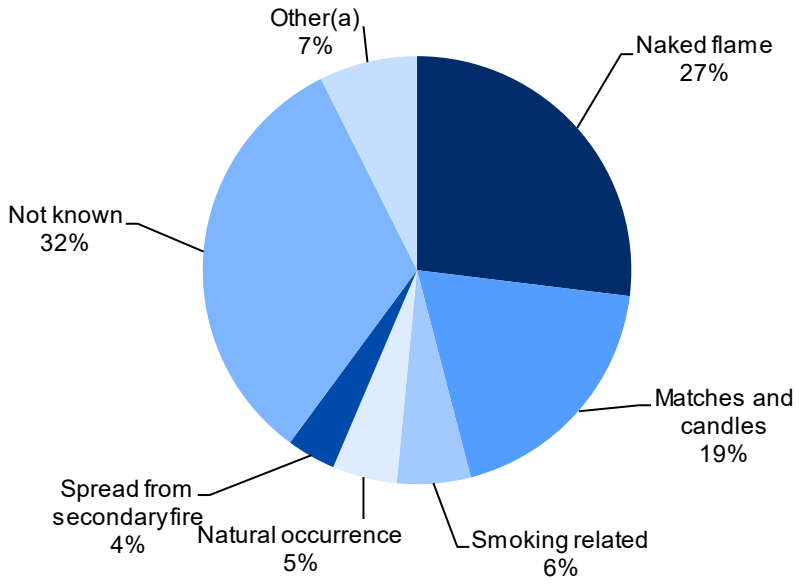
In 20 per cent of primary grassland, woodland and crop fires in 2018-19, strong winds were a rapid growth factor. Comparative data for secondary fires is not available. Since 2009-10, over two fifths of primary fires where strong winds were a factor damaged over 10,000 square metres, two thirds damaged 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 14 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 15), careless handling, overheating or natural causes (which are classed as accidental causes).

In 27 per cent of the primary grassland fires over the last 5 years the source of ignition was a naked flame and a further 19 per cent were due to matches and candles.

Chart 14: Percentage of primary grassland, woodland and crop fires, 2014-15 to 2018-19, by source of ignition



(a) Includes Bombs and explosives, Fireworks, Fuel/Chemical, Other, Wet hay, Cooking appliance, Vehicles and Other domestic style appliance.

Deliberate primary fires: As may be expected, for most deliberate fires over the last 5 years the source of ignition was a naked flame (34 per cent) or matches and candles (24 per cent). A further 6 per cent were started with smokers' materials. In 32 per cent of deliberate fires the source was unknown.

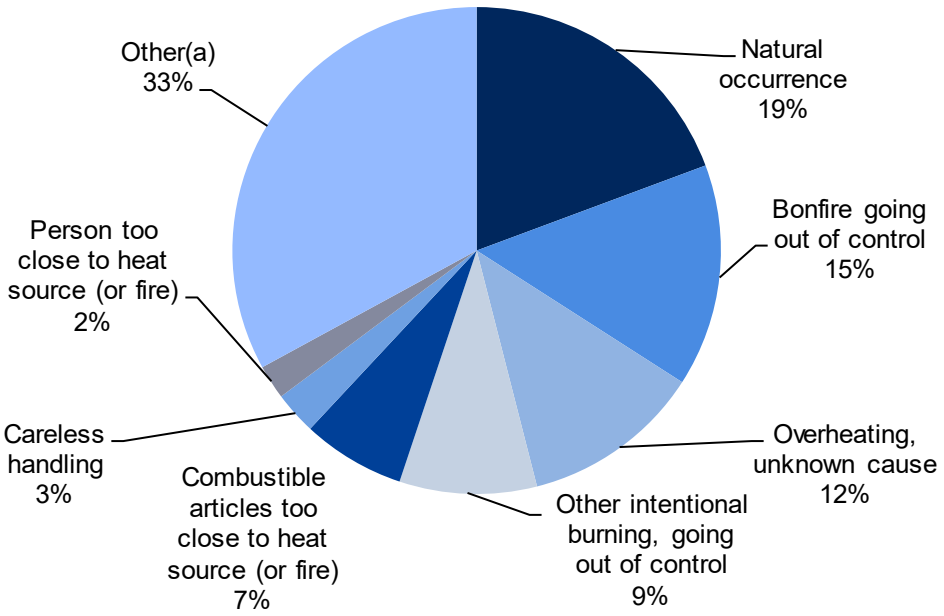
Accidental primary fires: The sources of accidental fires are more varied; 16 per cent occurred naturally, 12 per cent spread from secondary fires and 10 per cent started with a naked flame. In 33 per cent of accidental fires the source was unknown.

In the latest year, 2018-19 for a higher proportion of primary fires the source was unknown; in this year for 43 per cent of fires the source was unknown, and 7 in 10 of these were deliberate fires.

The causes of accidental primary grassland, woodland and crop fires are also varied. In chart 15, 33 per cent of these fires are shown as having 'other' causes. These 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 (17 per cent of these fires have not got a specified cause).

In the last 5 years, 19 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 15: Percentage of accidental primary grassland, woodland and crop fires, 2014-15 to 2018-19, 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.

Numbers of grassland, woodland and crop fires and fire false alarms rose by 57 per cent in 2018 (compared with 2017); fires rose by 69 per cent and fire false alarms rose by 24 per cent.

In 2018 the number of primary grassland fires more than trebled compared with 2017, whilst, over the same period, the number of secondary fires rose by 64 per cent.

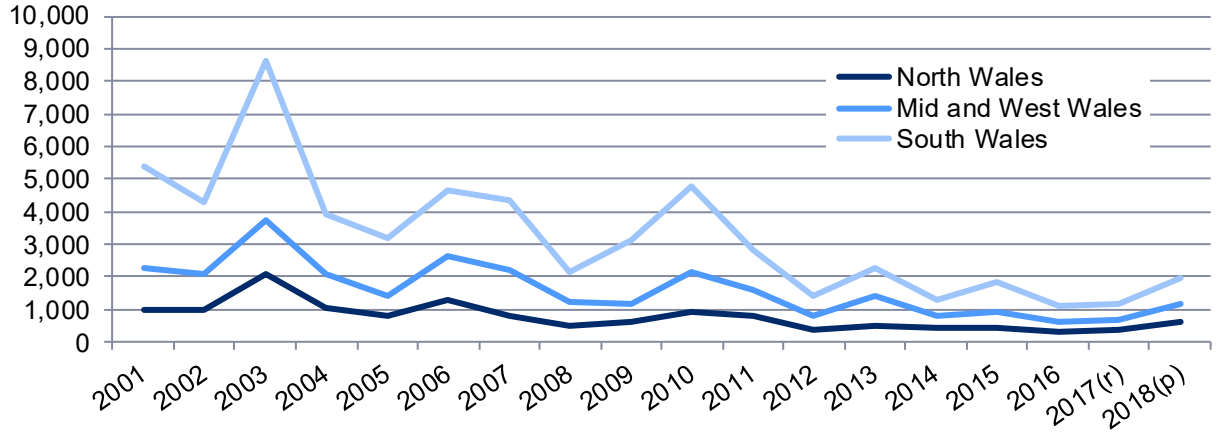
Table 10: Numbers of fires and fire false alarms and numbers which are grassland, woodland and crop related – calendar year

	2010	2011	2012	2013	2014	2015	2016	2017(r)	2018(p)
Primary	6,632	5,756	4,932	4,896	4,538	4,591	4,885	4,356	4,459
of which Grassland(a)	276	243	94	137	76	115	76	77	244
Secondary	14,160	10,549	6,769	8,276	6,344	6,958	5,905	6,467	7,617
of which Grassland(a)	7,557	4,927	2,515	4,081	2,449	3,067	1,923	2,133	3,495
Total fires(b)	21,604	16,941	12,394	13,919	11,408	12,036	11,199	11,235	12,434
of which Grassland(a)	7,833	5,170	2,609	4,218	2,525	3,182	1,999	2,210	3,739
Fire false alarms	17,344	15,435	15,805	15,433	15,392	14,351	15,161	14,077	14,487
of which Grassland(a)	1,784	1,427	1,066	1,152	1,030	1,090	900	851	1,057
All fires and fire false alarms	38,948	32,376	28,199	26,841	29,311	26,387	26,360	25,312	26,921
of which Grassland(a)	9,617	6,597	3,675	5,370	3,555	4,272	2,899	3,061	4,796

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

Chart 16 shows all 3 FRAs have seen a general downward trend since 2001, with numbers of grassland woodland and crop fires falling by 64 per cent in South Wales, 49 per cent in Mid and West Wales and 37 per cent in North Wales. However in 2018 all FRAs saw increases, of 68 per cent in North Wales, 67 per cent in Mid and West Wales and 71 per cent in South Wales.

Chart 16: Numbers of grassland, woodland and crop fires by fire and rescue authority – calendar year

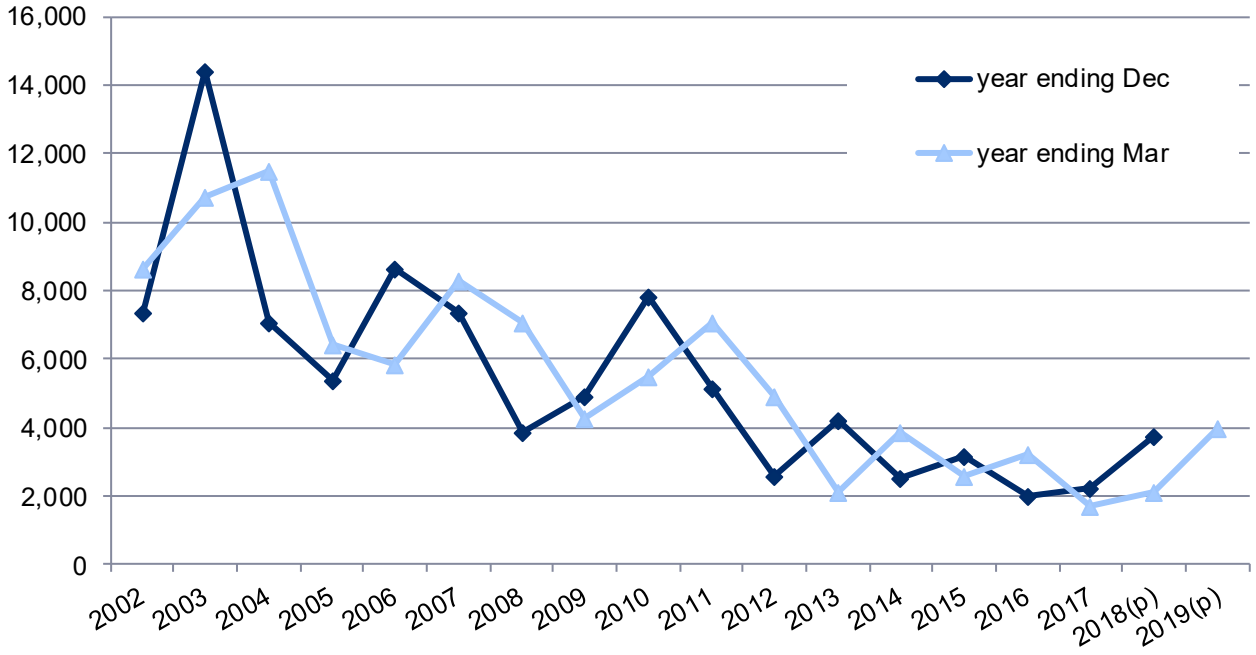


(p) Provisional data
(r) Revised data

Comparisons between calendar year and financial year

A comparison between calendar years and financial years as shown in Chart 17 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 17: Grassland, woodland and crop fires - comparing calendar year data with financial year



(p) Data for financial year 2018-19 and calendar year 2018 are provisional.

Easter holidays

Table 11 shows the numbers, percentages and daily rates of grassland, woodland and crop fires occurring around Easter each year.

The Easter school breaks in 2018 occurred at the end of March and the beginning of April. Due to the late Easter in 2019, the financial year 2018-19 only contained 8 days of Easter (taking the cut-off date to be the Sunday after Easter Monday). Easter 2019 occurred wholly in April and so falls outside the scope of this bulletin.

As we have already seen, April 2018 had far fewer fires than is usual for the month, and unsurprisingly this means only a small number occurred on days of Easter in 2018-19.

For calendar year 2018, there were also far fewer fires than in previous years at Easter (almost half the previous lowest figure in the time series).

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). However, for the first time the daily rates for Easter in both the calendar year 2018 and financial year 2019 are lower than the annual rate and the rate for the months of March and April.

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	10	65	4	7	11	5	16	550	25	34	18	6
2018(p)	24	579	28	24	14	6	16	48	1	3	27	10
2019(p)	8	19	0	2	26	11	~	~	~	~	~	~

(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 2018-19 and calendar year 2018 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 (2017-18)

	Provisional 2017-18 Published in August 2018	Revised 2017-18 Published in August 2019	Percentage change
Primary grassland, woodland and crop fires	68	68	0.0
Secondary grassland, woodland and crop fires	2,022	2,024	0.1

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	2017-18
Grassland, woodland and crop fires								
Primary	1.8	0.4	3.3	0.0	0.0	0.0	0.0	0.0
Secondary	-1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.1

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. In 2016-17 we changed our publication month to 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:

- 2019 – Monday 15th April to Friday 26th April, the whole period falling within the financial year 2019-20 and so outside the scope of this bulletin. Some schools may have scheduled an inset day to occur before or after this holiday period.

  Good Friday 19th April, Easter Monday 22nd April.

- 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)

  Good Friday 30th March, Easter Monday 2nd April.

- 2017 - Monday 10th April to Friday 21st April, the whole period falling within the financial year 2017-18. 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.

The statistics last underwent a full assessment against the Code of Practice in June 2012. Since the review by the UKSA, we have continued to comply with the Code of Practice for Statistics, and have made the following improvements:

- brought forward the publication date improving timeliness
- added Local Authority analysis
- extended the use of weather data
- improved Key Quality information
- publication of excel tables alongside the bulletin

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 on our website: https://gov.wales/grassland-fires

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, 2018-19':

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 2019-20 to be published in October 2020.

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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