

# 2018 Kennel Club Registration Statistics

(Breed Record Supplements AV1 – AV4)



## Griffon Bruxellois

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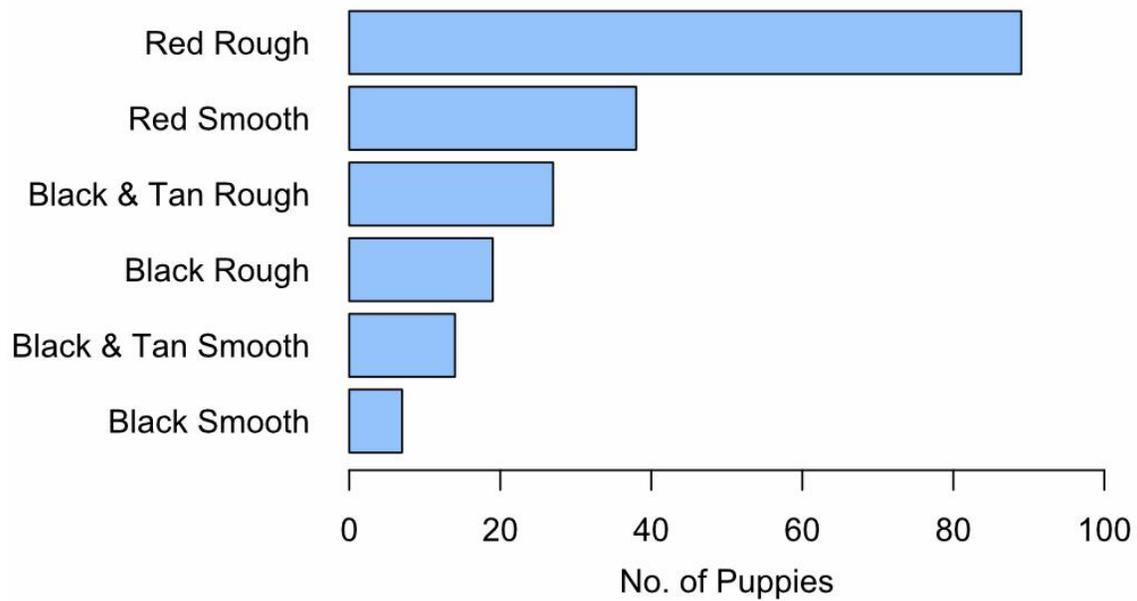
## Summary of Litters

57 Griffon Bruxellois litters were registered with the KC in 2018, consisting of 190 puppies, divided as indicated in *Table 1*.

*Table 1. Griffon Bruxellois litters registered in 2018.*

	Q1	Q2	Q3	Q4	Total
Litters	7	17	22	11	57
Puppies	20	55	73	46	194

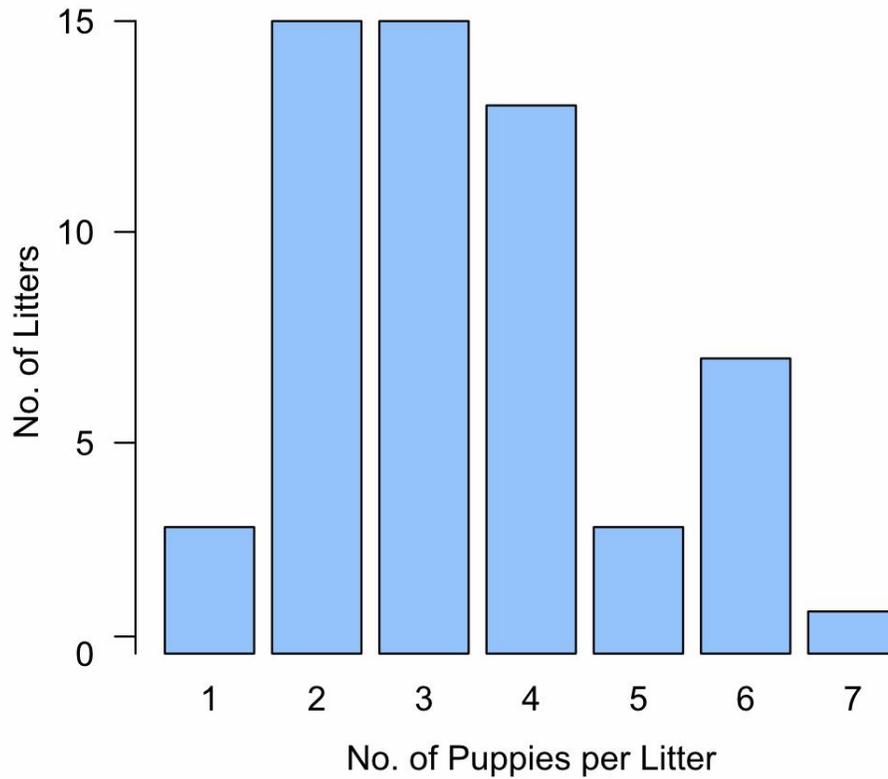
The most popular coat colour for puppies from these litters was 'Red' (65.5%), whilst there were more rough-coated dogs registered than smooth-coated dogs. The puppy coat colour and coat type breakdowns are shown in *Figure 1*.



*Figure 1. Colour and coat type of Griffon Bruxellois puppies for litters registered in 2018.*

## Litter Size

The mean number of puppies per litter was 3.4, whilst the median was 3. The distribution of puppy numbers per litter is shown in *Figure 2*.

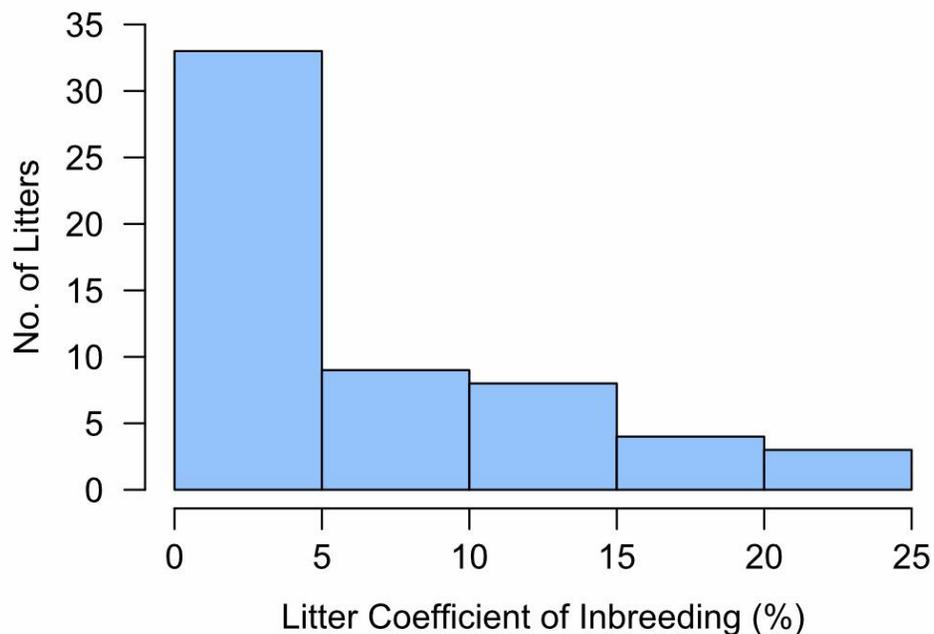


*Figure 2.* Number of registered puppies in Griffon Bruxellois litters.

## Coefficient of Inbreeding (COI)

The litter coefficient of inbreeding (COI) is a measure of inbreeding, expressed as a percentage probability of the same variation being inherited from the sire and the dam. A lower percentage indicates a lower level of inbreeding. myKC calculates the COI for each dog using all available pedigree information. One consideration to be considered is that limited pedigree information affects results, as with imported dogs which only come with a three-generation pedigree, and the lack of pedigree information further in the past. The KC will not register litters produced by a father/daughter, mother/son or brother/sister mating.

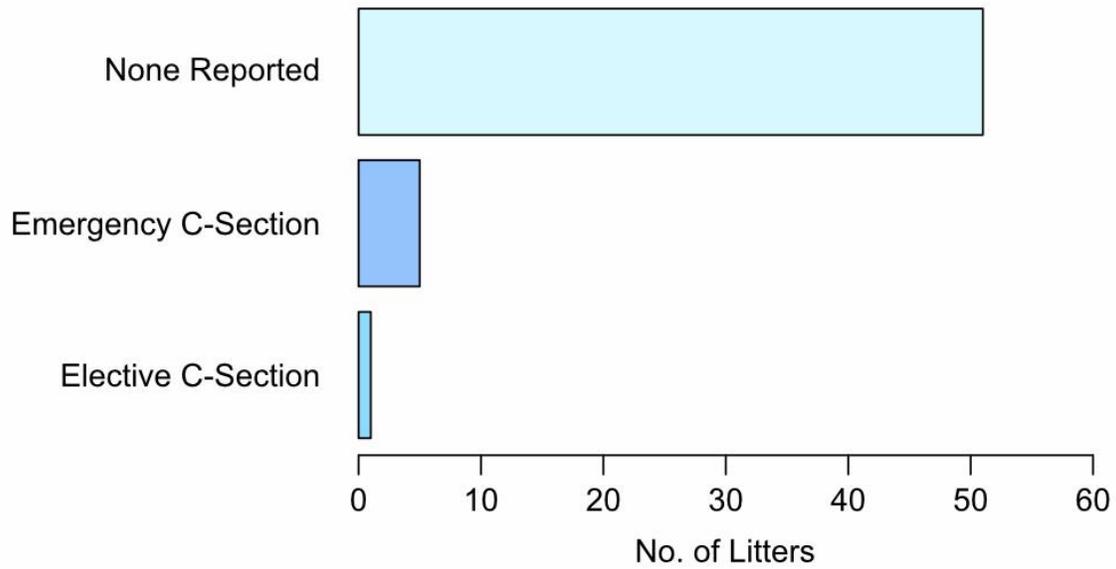
**Figure 3** shows the distribution of COI for the Griffon Bruxellois litters registered in 2018. The mean COI was 6.5% and the median COI was 3.8%. The highest recorded COI was 22.8%.



**Figure 3.** Histogram of the coefficient of inbreeding of Griffon Bruxellois litters registered in 2018.

## Caesarean Sections (C-Sections)

11% of registered Griffon Bruxellois litters were reported to have been delivered by a Caesarean section (**Figure 4**). Of those litters where natural birth is presumed to have been attempted, 9% of litters were reported to be delivered by emergency C-Section.



**Figure 4.** Reported C-section information for Griffon Bruxellois litters.

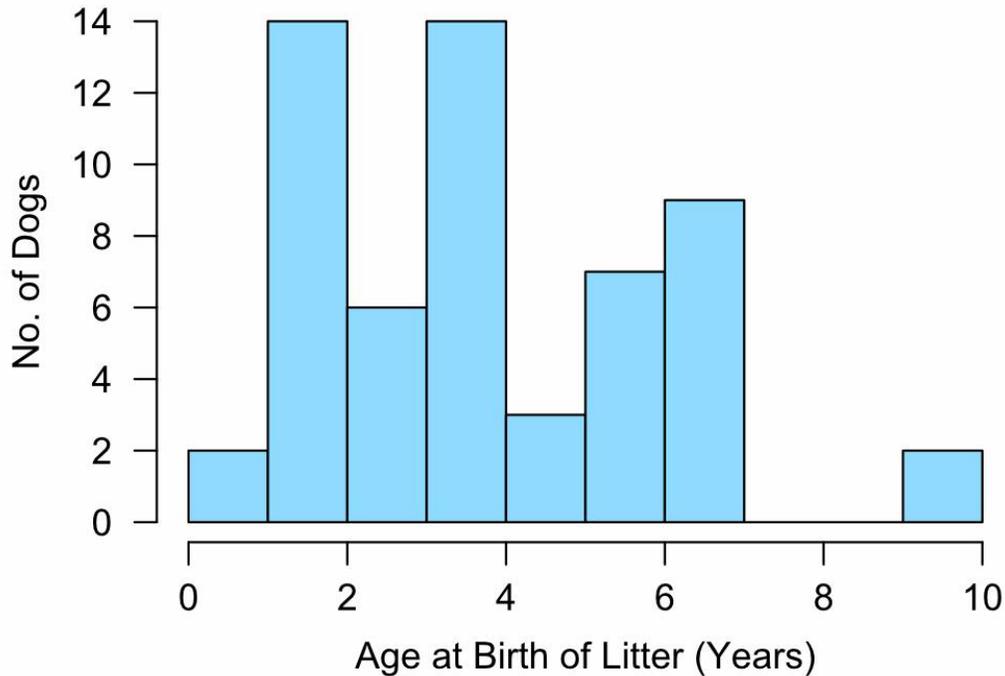
## Parents Summary

The Griffon Bruxellois litters registered in 2018 were produced by 36 different sires and 56 different dams. 10 of the sires are imports from other countries, whilst 16 of the dams are the same. These countries consist of Czechia, Germany, Ireland, Italy, Latvia, Lithuania, Norway, Russia and Ukraine.

## Age of Sires

*Figure 5* shows the distribution of the age of sires at birth of the litters. The mean age of sires at the birth of the litter is 3.74 years, whilst the median age is 3.4 years. The maximum age of sire at birth of a litter is 9.74 years, whilst the minimum is 0.52 years.

Assuming a gestation time of approximately 60 days (or 0.17 years), the predicted mean age of sires at conception of the litter is 3.57 years, whilst the median age is 3.23 years. Under the same assumption, 19 litters (33%) are predicted to have been conceived when the sire was under 2 years of age.

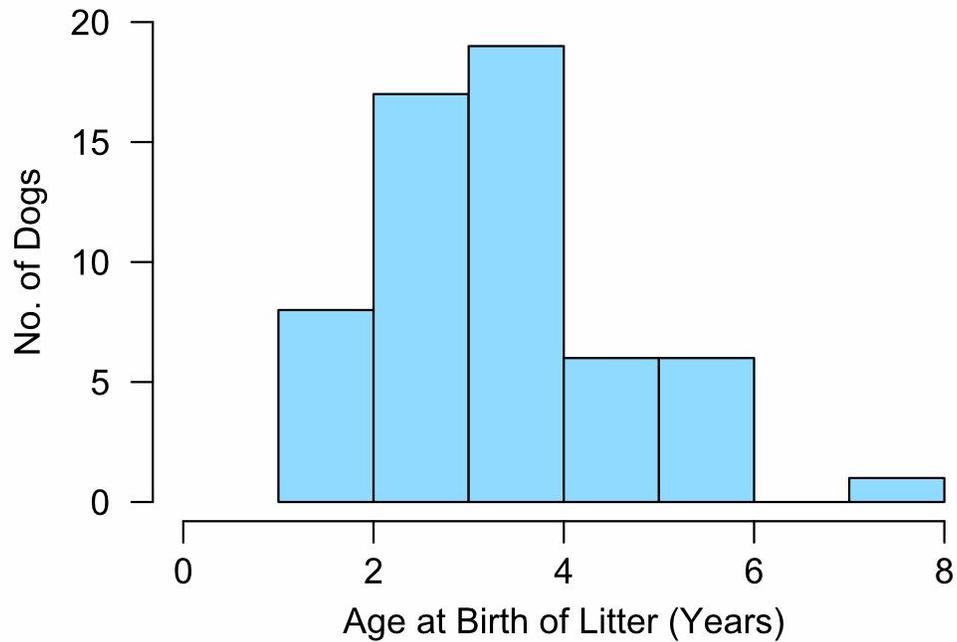


*Figure 5. Age of sires at birth of Griffon Bruxellois litters.*

## Age of Dams

*Figure 6* shows the distribution of the age of dams at birth of the litters. The mean age of dams at the birth of the litter is 3.33 years, whilst the median age is 3.12 years. The maximum age of a dam at birth of a litter is 7.02 years, whilst the minimum is 1.44 years.

Assuming a gestation time of approximately 60 days (or 0.17 years), the predicted mean age of dams at conception of the litter is 3.16 years, whilst the median age is 2.95 years. Under the same assumption, 10 litters (18%) are predicted to have been conceived when the dam was under 2 years of age.



*Figure 6.* Age of dams at birth of Griffon Bruxellois litters.

## Popular Sires

11 dogs sired more than one standard colour litters registered in 2018 (*Table 2*).

*Table 2. Griffon Bruxellois sires with more than one litters registered in 2018.*

Name	Date of Birth	No. Registered Litters 2018	Total Registered Litters
Gainer Starr Dinastija With Delightbull	06/11/2011	8	27
Blushing Groom	01/03/2017	4	6
Jet's D'Artagnan At Donzeata	14/06/2015	3	6
Menwinnion Sunburst	14/01/2012	3	12
Beauborne King Of Hearts	19/11/2014	2	6
Delightbull Lord Louis With Umechi	20/06/2015	2	3
Donzeata Royal Award	13/12/2016	2	3
Millbone Ginger Hobnob	03/02/2013	2	8
Neibade's Baron Cadeau	03/07/2012	2	2
Savenkoff Florizel Prince At Devoue	08/05/2014	2	8
Smokeys Convoy At Merrywives	02/03/2017	2	3

## Health Testing

The Kennel Club does not recommend any testing schemes for Griffon Bruxellois. However, two KC registered health schemes are recommended by at least one of the Griffon Bruxellois breed clubs:

- Chiari Malformation/Syringomyelia (CM/SM) Scheme (Griffon Bruxellois Breeders Association and Griffon Bruxellois Club)
- Eye Testing Scheme (Griffon Bruxellois Breeders Association and Griffon Bruxellois Club)

### Chiari Malformation/Syringomyelia (CM/SM) Scheme

Chiari-like malformation (CM) in dogs is produced by a brain too large for the skull, which can lead to blockage of the opening connecting the spine and the skull, changing the flow of cerebrospinal fluid (CSF). Syringomyelia (SM) develops when this causes syrinxes (fluid-filled cavities) to develop around the spinal cord, which may cause high levels of pain in affected dog. CM/SM has been shown to be inherited in the Griffon Bruxellois.

Dogs assessed under the CM/SM scheme are graded from 0 - 2 for the severity of CM and SM – the higher the grade, the higher the level of abnormality. A letter is then appended to the SM grade, indicating the age of the dog when tested: a = over five years, b = three to five years, c = one to three years. This is included as syringomyelia is a progressive disease and may become more severe as the dog ages.

[Information from <https://www.bva.co.uk/canine-health-schemes/cm-sm-scheme/>]

One Griffon Bruxellois litter out of the 57 registered was produced from parents that have both been tested under the CM/SM scheme. Four other litters were produced from a pairing where one parent was tested. Overall, five dogs who had been tested under the CM/SM scheme were used to produce litters in 2018. **Table 3** shows the results for these five dogs.

**Table 3.** CM/SM scheme testing results for Griffon Bruxellois with registered litters in 2018.

	Sex	CM Grade	SM Grade
1	Dog	0	0c
2	Bitch	1	1b
3	Dog	2	0b
4	Bitch	2	0b
5	Dog	2	1b

## Eye Testing

Under the KC/BVA/ISDS Eye Scheme, Griffon Bruxellois do not have any eye conditions that are schedule A (known to be inherited). Early developing hereditary cataracts is a schedule B (suspected of being inherited) condition in Griffon Bruxellois. EVCO Scheme examinations cover 14 inherited eye conditions as well as a general examination of the eye, potentially revealing other eye diseases.

As there are no schedule A conditions in Griffon Bruxellois, affected/unaffected status is not recorded on the myKC site. Therefore, where eye tests have been carried out, it is unknown from examining the myKC record what eye abnormalities/conditions may have been identified.

Five Griffon Bruxellois litters were produced from two eye tested parents. Another seventeen litters were produced from one eye tested parent. Overall eighteen dogs with eye testing results had registered litters in 2018. The mean age at the time of the eye exam was 2.63 years and the median age at the time of the eye exam was 2.02 years. Each tested dog had been tested once.

## Additional Information

The Griffon Bruxellois Club also recommends testing for patella luxation. This is not a KC registered scheme so results cannot be accessed through myKC.

## Method

Information on Griffon Bruxellois litters registered by the Kennel Club in 2018 was retrieved from the utility group breed record supplements AV1 – AV4. This included information on the sire and dam of the litter, the date of birth of the litter, the number and colour of the registered puppies and any Caesarean section information (elective or emergency).

Further information was gathered from the myKC website, including: the date of birth of the sire and dam, the registered coat colour of the parents, country of origin of the parents, the coefficient of inbreeding for the litter and eye testing & CM/SM testing results for the parents.

Data summarisation was carried out using Microsoft Excel and RStudio.