



THE KENNEL CLUB
DOG HEALTH

Breed Health and Conservation Plan

Picardy Sheepdog Evidence Base

CONTENTS

DEMOGRAPHICS	3
BREED HEALTH CO-ORDINATOR ANNUAL HEALTH REPORT	3
BREED SPECIFIC HEALTH SURVEYS.....	4
BREED CLUB HEALTH ACTIVITES	6
LITERATURE REVIEW	6
BREED WATCH.....	7
PERMISSION TO SHOW	7
ASSURED BREEDERS SCHEME.....	7
BREED CLUB BREEDING RECOMMENDATIONS	7
DNA TEST RESULTS.....	7
CANINE HEALTH SCHEMES	8
GENETIC DIVERSITY MEASURES.....	9
CURRENT RESEARCH	9
PRIORITIES.....	10
ACTION PLAN	10
REFERENCES.....	11

INTRODUCTION

The Kennel Club launched a new resource for breed clubs and individual breeders – the Breed Health and Conservation Plans (BHCP) project – in September 2016. The purpose of the project is to ensure that all health concerns for a breed are identified through evidence-based criteria, and that breeders are provided with useful information and resources to raise awareness of current health and welfare concerns in their breed, and support them in making balanced breeding decisions.

The Breed Health and Conservation Plans take a complete view of breed health with consideration to the following issues: known inherited conditions, complex conditions (i.e. those involving many genes and environmental effects such as nutrition or exercise levels, for example hip dysplasia), conformational concerns and population genetics.

Sources of evidence and data have been collated into an evidence base which gives clear indications of the most significant health conditions in each breed, in terms of prevalence and impact. Once the evidence base document has been produced it is discussed with the relevant Breed Health Co-ordinator and breed health representatives where applicable. Priorities are agreed based on this data and incorporated into a list of actions between the Kennel Club and the breed to tackle these health concerns. These actions are then monitored and reviewed on a regular basis.

DEMOGRAPHICS

The Picardy Sheepdog became formally recognised by The Kennel Club in 2014. To date (October 2021), 60 Picardy Sheepdog have been registered with The Kennel Club, with no more than seven dogs being registered in any one year.

BREED HEALTH CO-ORDINATOR ANNUAL HEALTH REPORT

Breed Health Co-ordinators (BHCs) are volunteers nominated by their breed to act as a vital conduit between the Kennel Club and the breed clubs with all matters relating to health.

The most recent BHC's Annual Health Report (2020) yielded the following response to 'please list and rank the three health and welfare conditions that the breed considers to be currently the most important to deal with in your breed':

1. Progressive retinal atrophy (PRA)
2. Symmetrical lupoid onychodystrophy (SLO)
3. Vulve barrée (inverted vulva)

In terms of what the breed has done in the last year to help tackle these listed health and welfare concerns, the breed has raised funds for further PRA research at the University of Missouri, monitored both the French and Canadian Breed Clubs' health surveys, and avoided breeding dogs affected by vulve barrée.

BREED SPECIFIC HEALTH SURVEYS

Picardy Sheepdog Club Health Survey

The most recent breed health survey was conducted in Autumn 2020. The survey comprised three sections:

- Personal details – including the dog's age, colour, and gender
- Questions about the dog's health
- Questions about the dog's cause of death

Figure 1 and 2 below show a comparison of responses received in the 2017 and 2020 health survey.

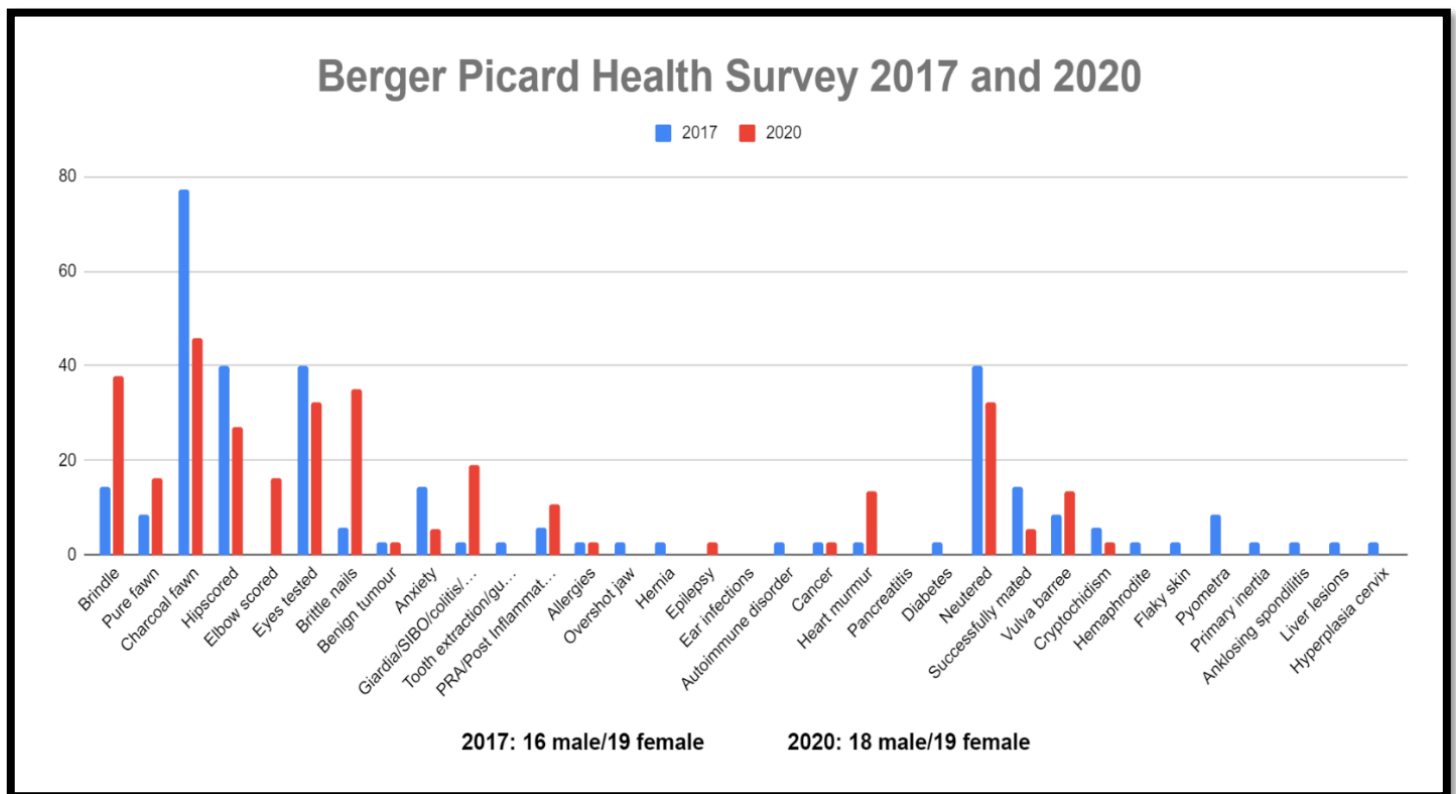


Figure 1: Comparison of responses received in 2017 and 2020

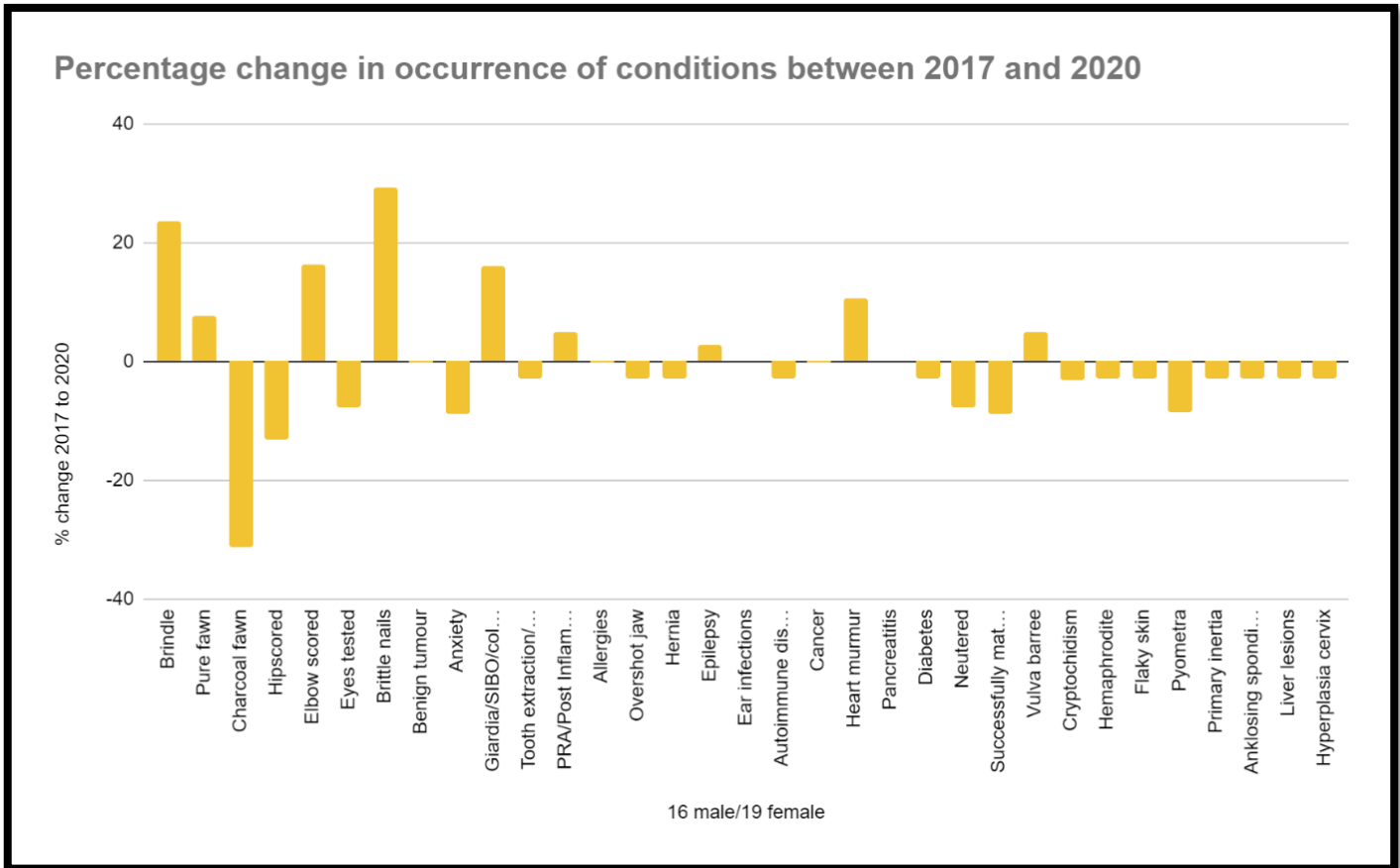


Figure 2: Percentage change in responses between 2017 and 2020

The main findings from this comparison were:

- An increase in the number of brindles in the UK
- A decrease in the number of charcoal fawns in the UK
- More breeding dogs elbow scored in 2020
- A 30% rise in the reporting of brittle nails
- A 17% rise in the reporting of giardia
- A 10% rise in the reporting of heart murmurs

It should be considered though that the number of dogs reported for are low and so percentile changes should be taken with caution. An ongoing Picardy Sheepdog Club Health Survey can be found on the club website here: <https://picardy-sheepdog.com/picardy-sheepdog-health/health-survey>

OFA Health Survey

To date (Oct 2021), 388 Picardy Sheepdog (166 dogs and 201 bitches) have participated in the OFA Health Survey: 311 live dogs and 58 deceased dogs.

The majority of owners described their dog’s overall health as excellent (71.1%, 276 of 388). When asked is their dog has had significant health problems, 70 (18.0%) answered ‘Yes’ and 293 (75.5%) answered ‘No’.

Of the 388 dogs, the top conditions reported are shown in Table 1.

Table 1: Conditions reported by organ system in the OFA Health Survey.

Condition	Count/ %
Cancers/ tumours	36 (9.3%)
Orthopaedic disorders	36 (9.3%)
Skin/ nail/ pad disorders	34 (8.8%)
Reproductive disorders	33 (8.5%)
Eye disorders	31 (8%)
Gastrointestinal disorders	30 (7.7%)
Cardiovascular disorders	27 (7%)
Temperament	24 (6.2%)
Allergies	20 (5.2%)
Neurological and/or muscular disorders	14 (3.6%)
Endocrine/ metabolic disorders	11 (2.8%)
Dental disorders	9 (2.3%)
Immunological disorders	8 (2.1%)
Blood/ lymph disorders	8 (2.1%)
Respiratory disorders	6 (1.5%)
Liver disorders	3 (0.8%)
Kidney disorders	1 (0.3%)

N.B. The OFA numbers should be viewed with some caution, as this survey is ongoing and may include multiple (repeat) entries for individual dogs whose health status has changed over the years

The full report can be found here: https://www.ofa.org/about/educational-resources/health-surveys#api_summary

BREED CLUB HEALTH ACTIVITIES

The Picardy Sheepdog has an active Breed Health Coordinator (BHC), and a webpage dedicated to health on the club website:

- <https://picardy-sheepdog.com/picardy-sheepdog-health>

LITERATURE REVIEW

The literature review lays out the current scientific knowledge relating to the health of the breed. We have attempted to refer primarily to research which has been published in peer-reviewed scientific journals. We have also incorporated literature that was released relatively recently to try to reflect current publications and research relating to the breed. Given that the breed is numerically small there are very few papers available.

Hip dysplasia: Hip dysplasia is a complex inherited disorder, influenced by both genetic and environmental factors. As the hip joint deteriorates it can lead to varying

degrees of pain, discomfort, stiffness and lameness, and can lead on to the development of osteoarthritis. Hip dysplasia affects a range of breeds, however some breeds, primarily medium and large breeds, have a higher risk of developing the condition.

Genevois et al (2020) compared the prevalence of hip dysplasia in 17 affected breeds in France between 1993-2019. The overall prevalence for hip dysplasia in the Picardy Sheepdog was 35.4%, however the authors noted a significant decrease in prevalence for hip dysplasia in this breed over the period analysed (39.9% in 1993, 25.1% in 2019).

BREED WATCH

The Picardy Sheepdog is a category one breed, meaning judges are not required to complete mandatory monitoring forms following an appointment at Championship Certificate level. To date no optional reports have been received for the breed.

PERMISSION TO SHOW

As of the 1st January 2020 exhibits for which permission to show (PTS) following surgical intervention has been requested will no longer be published in the Breed Record Supplement and instead will be detailed in BHCPs, and a yearly report will be collated for the BHC. In the past five years, no reports have been received for the Picardy Sheepdog (excluding neutering or caesarean sections).

ASSURED BREEDERS SCHEME

There are currently no recommendations or requirements within the Kennel Club (KC)'s Assured Breeders Scheme (ABS).

BREED CLUB BREEDING RECOMMENDATIONS

There are not currently any Breed Club breeding recommendations listed on the Kennel Club's website for the breed.

DNA TEST RESULTS

There are currently no recognised DNA tests for the Picardy Sheepdog.

Whilst DNA tests may be available for the breed, results from these will not be accepted by the Kennel Club until the test has been formally recognised, the process

of which involves collaboration between the breed clubs and the Kennel Club in order to validate the test's accuracy.

CANINE HEALTH SCHEMES

All of the British Veterinary Association (BVA)/Kennel Club (KC) Canine Health Schemes are open to dogs of any breed with a summary given of dogs tested to date below.

HIPS

To date (20/10/2021), eight Picardy Sheepdogs have been hip scored under the BVA/KC Hip Dysplasia Scheme, with a median hip score of 12 (range 7-19).

ELBOWS

To date (20/10/2021), six Picardy Sheepdogs have been elbow graded under the BVA/KC Elbow Dysplasia Scheme, one being grade 1 and five being grade 0.

EYES

The breed is not currently on the BVA/KC/ISDS Known Inherited Ocular Disease (KIOD) list (formally Schedule A) for any condition under the BVA/KC/International Sheep Dog Society (ISDS) Eye Scheme.

KIOD lists the known inherited eye conditions in the breeds where there is enough scientific information to show that the condition is inherited in the breed, often including the actual mode of inheritance and in some cases even a DNA test.

As well as the KIOD list, the BVA record any other conditions affecting a dog at the time of examination, which is incorporated into an annual sightings report. Between 2012 and 2018, four Picardy Sheepdogs participated in the BVA/KC/ISDS Eye Scheme but no comments were made. The reports for 2019 onwards are still pending.

REPORTED CAESAREAN SECTIONS

When breeders register a litter of puppies, they are asked to indicate whether the litter was delivered (in whole or in part) by caesarean section. In addition, veterinary surgeons are asked to report caesarean sections they perform on Kennel Club registered bitches. The consent of the Kennel Club registered dog owner releases the veterinary surgeon from the professional obligation to maintain confidentiality (vide the Kennel Club General Code of Ethics (2)). No c-sections have been reported in the Picardy Sheepdog to date (2020).

GENETIC DIVERSITY MEASURES

As the numbers of dogs of this breed registered with the Kennel Club are very low, no meaningful conclusions can yet be drawn about rate of loss of genetic diversity. It is likely that a larger population of this breed exists (often overseas), and that Kennel Club registered dogs are a sub-group of this. It should be noted that, while animals imported from overseas may appear completely unrelated, this is not always the case. Often the pedigree available to the Kennel Club is limited in the number of generations, hampering the ability to detect true, albeit distant, relationships.

The current annual breed average inbreeding coefficient is **5.1%**.

CURRENT RESEARCH

The Picardy Sheepdog Club undertake regular breed health surveys and have engaged in PRA research at the University of Missouri.

PRIORITIES

Correspondence between the breed representatives and the Kennel Club was undertaken in November 2021 to discuss the evidence base of the BHCP and agree the priority issues for the health of the breed. The group agreed from the evidence base that the priorities for the Picardy Sheepdog were:

- Monitoring health issues in dogs from both the UK and abroad
- Progressive retinal atrophy
- Brittle nails
- Reproductive issues including recessed vulva

ACTION PLAN

Following the correspondence between the Kennel Club and the breed regarding the evidence base of the Breed Health & Conservation Plans, the following actions were agreed to improve the health of the Picardy Sheepdog. Both partners are expected to begin to action these points prior to the next review.

Breed Club actions include:

- The Breed Club to continue spreading awareness of available health tests prior to breeding
- The Breed Club to consider making a proposal to the Assured Breeders Scheme for the inclusion of hip scoring and eye testing as a recommendation prior to breeding
- The Breed Club to continue monitoring the breed's health via health surveys/ breeder reports, with the Kennel Club to assist where needed
- The Breed Club to continue monitoring the use of popular sires and raise awareness of the importance of considering genetic diversity when breeding

Kennel Club actions include:

- The Kennel Club to produce a piece on the importance of considering genetic diversity and popular sires when breeding, specifically for numerically small breeds
- The Kennel Club to include a population analysis when possible for the breed

REFERENCES

Genevois, J.P., Baldinger, A., Moissonnier, P., Barthélemy, A., Carozzo, C., Viguiet, E., Cachon, T. (2020) Prevalence of canine hip dysplasia in 17 breeds in France, a retrospective study of the 1993–2019 radiographic screening period. *Revue Vétérinaire Clinique*. **55(4)**: 123-146