



THE KENNEL CLUB
DOG HEALTH

Breed Health and Conservation Plan

Slovakian Rough Haired Pointer Evidence Base

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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 Slovakian Rough Haired Pointer is registered as an import breed, with the first dogs of the breed formally registered in 1999. The numbers of new registrations of the breed have been consistently low, with no more than 70 having been registered in a year.

The trend of registrations over year of birth (1999-2019) was +1.38 per year (with a 95% confidence interval of -0.05 to +2.80), reflecting a fluctuation in the breed's numbers during this time.

[Put simply, 95% confidence intervals (C.I.s) indicate that we are 95% confident that the true estimate of a parameter lies between the lower and upper number stated.]

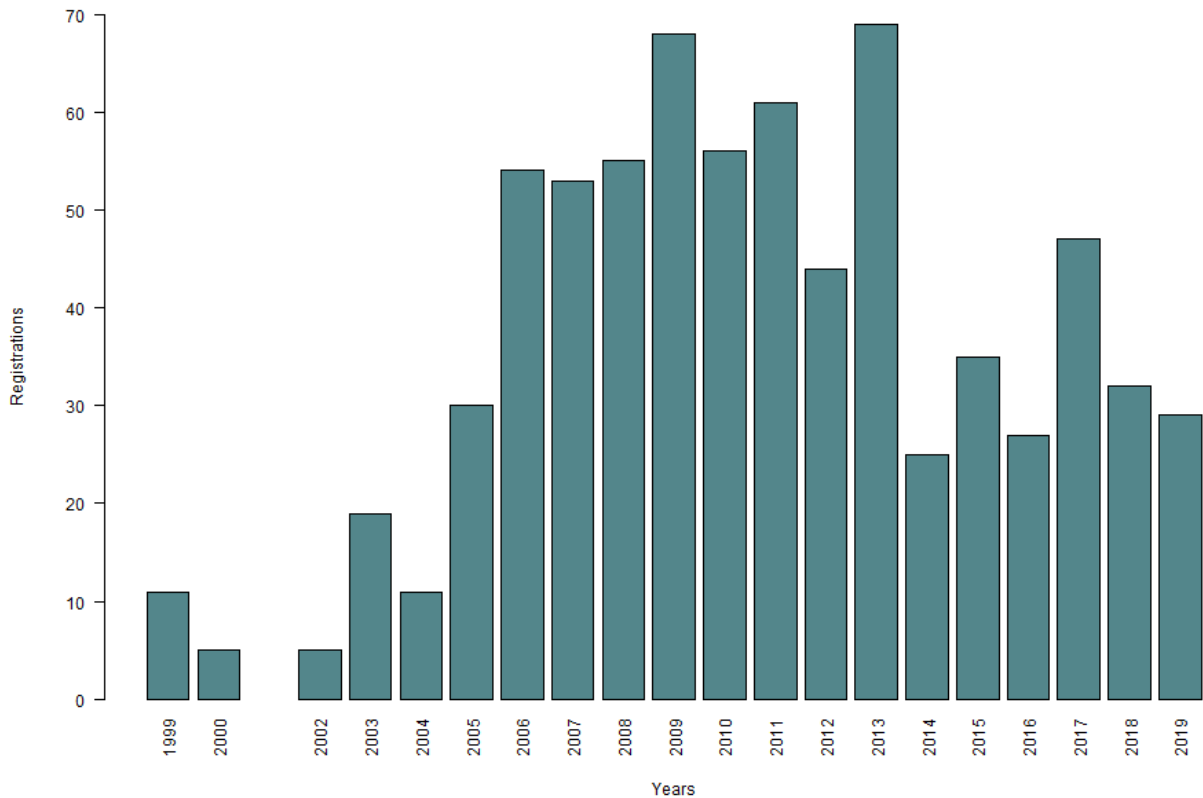


Figure 1: Number of registrations of Slovakian Rough Haired Pointers per year of birth, 1980 – 2019.

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 BHC's Annual Health Report 2019, 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. Skin allergies
2. Seasonal alopecia

In terms of what the breed has done in the last year to help tackle these listed health and welfare concerns, the breed conducted a skin survey.

The BHC's Annual Health Report 2018, 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. Seizures
2. Skin issues

In terms of what the breed has done in the last year to help tackle these listed health and welfare concerns, the breed monitored incoming health reports.

BREED CLUB HEALTH ACTIVITIES

The Slovakian Rough Haired Pointer Club does not have a health council, but have an active Breed Health Coordinator (BHC) and a dedicated health website which can be found at: <http://slovakianroughhairedpointerclub.org.uk/index.html>

BREED SPECIFIC HEALTH SURVEYS

Kennel Club Pedigree Dog Health Survey Results

The Kennel Club Pedigree Dog Health Survey was launched in 2014 for all of the recognised breeds at the time, to establish common breed-specific and breed-wide conditions.

2014 Morbidity results: Health information was collected for no live Slovakian Rough Haired Pointers.

2014 Mortality results: A total of three deaths were reported for the breed. The range of age at death for Slovakian Rough Haired Pointers was 7 years to 11 years. The causes of death for these dogs were each of the following: cardiomyopathy, sudden death, and unknown.

Breed-Specific Health Survey

The Breed Club have an open health survey for owners to report through, with a total of 14 reports having been received to date. Of these dogs, 11 have been affected by a health condition with these conditions shown in Table 1 below.

Table 1: Health conditions reported for Slovakian Rough Haired Pointers in the open health survey.

Condition	Number Affected
Epilepsy/ seizures	4
Atopy/ skin allergies	3
Degenerative myelopathy	1
Dry eye/ keratoconjunctivitis sicca	1
Wobbler syndrome	1
Lower canine teeth disorder	1
Incontinence	1
Pneumonia	1

Owners are able to report new conditions, both general and specific to skin, on the Slovakian Rough Haired Pointer Club website.

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 incorporated literature that was released relatively recently to try to reflect current publications and research relating to the breed.

Colour dilution alopecia (CDA): Whilst the genetic aetiology behind CDA is not fully understood, there are papers to suggest that dilution can be associated with alopecia, and/ or follicular dysplasia in several breeds. The gene *MLPH* has been identified as a causative mutation for dilute phenotype, and established as required, but not sufficient, to develop clinical disease (Welle et al, 2009). The authors who identified this mutation noted that the risk of skin abnormalities due to dilute coat is breed specific. Two dogs of the breed were analysed for the frequency of the gene, with both dogs found to be homozygous. However, further analysis on a larger number of dogs of the breed are needed to determine the true frequency and association with CDA.

Genetic diversity: A Slovakian research group analysed two polymorphisms (variants) of the *MLPH* gene in 49 samples of dogs of the breed, to determine parameters of the breed's genetic structure (Moravčíková et al, 2016). The authors determined a high degree of genetic similarity between the samples analysed, which is to be expected due to the numerically small numbers of dogs of the breed. However, it was noted that the breed had fairly high heterozygosity (dogs with two different alleles which can be used to introduce or maintain variability in the population) between samples, and a sufficient proportion of heterozygotes (carriers) to allow for sustainable breeding and maintenance of diversity. Whilst the genetic basis for CDA is not yet fully understood, the authors noted that the presence of *MLPH* could be contributing to the level of level of alopecia and coat dilution seen in the breed.

BREED WATCH

The Slovakian Rough Haired Pointer is a category 1 breed meaning judges are not required to complete a mandatory monitoring form upon judging at championship certificate level. To date no optional reports have been received.

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 four PTS have been sought (excluding neutering) for the breed, for legal docking of a working dog's tail.

ASSURED BREEDER SCHEME

Currently within the Kennel Club (KC)'s Assured Breeder Scheme there are no requirements for the Slovakian Rough Haired Pointer. However, it is recommended that all breeding stock are tested for the following prior to breeding:

- Hip scored under the British Veterinary Association (BVA)/ KC Hip Dysplasia Scheme
- Bitches under two years old not to produce a litter

BREED CLUB BREEDING RECOMMENDATIONS

It is currently recommended that bitches under two years of age are not to produce a litter.

DNA TEST RESULTS

There are no DNA tests currently recognised by the Kennel Club. Whilst some laboratories may supply tests for the breed, recognition and publication on the Kennel Club's Health Test Results Finder is only implemented following collaboration with the breed clubs and Breed Health Co-ordinator.

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

A total of 80 Slovakian Rough Haired Pointers have been hip scored under the scheme to date (July 2020) with a 15-year median score of 10 (range 2 – 29) and 5-year median score of also 10 (range 2 – 14).

ELBOWS

Two Slovakian Rough Haired Pointers have been elbow graded to date, with both scoring as 0.

EYES

The Slovakian Rough Haired Pointer is currently not on the BVA/KC/ISDS Known Inherited Ocular Disease (KIOD) list (formally Schedule A) for any condition.

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.

Schedule B has been incorporated into an annual sightings reports, which records the results of conditions not listed on KIOD for dogs which have participated in the scheme. Three dogs of the breed have been eye tested since 2012, with no comments observed for any of these dogs.

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)).

There are some caveats to the associated data;

- It is doubtful that all caesarean sections are reported, so the number reported each year may not represent the true proportion of caesarean sections undertaken in each breed.
- These data do not indicate whether the caesarean sections were emergency or elective.
- In all breeds, there was an increase in the number of caesarean sections reported from 2012 onwards, as the Kennel Club publicised the procedure to vets.
- In numerically small breeds like this, there will be a degree of fluctuation between the years.

The number of litters registered per year for the breed and the number and percentage of reported caesarean sections in the breed for the past 10 years are shown in Table 2.

Table 2: Number and percentage of litters of Slovakian Rough Haired Pointer registered per year and number of caesarean sections reported per year, 2009 to 2019.

Year	Number of Litters Registered	Number of C-sections	Percentage of C-sections	<i>Percentage of C-sections out of all KC registered litters (all breeds)</i>
2009	10	0	0.00%	0.15%
2010	8	0	0.00%	0.35%
2011	10	0	0.00%	1.64%
2012	6	1	16.67%	8.69%
2013	6	1	16.67%	9.96%
2014	4	0	0.00%	10.63%
2015	3	0	0.00%	11.68%
2016	3	1	33.33%	13.89%
2017	6	0	0.00%	15.00%
2018	4	0	0.00%	17.21%
2019	4	0	0.00%	15.70%

GENETIC DIVERSITY MEASURES

Due to the small numbers of the breed and relatively recent introduction to registration under the Kennel Club, population analysis is not yet available for the Slovakian Rough Haired Pointer. This should be made available at a later date.

CURRENT RESEARCH

The breed have submitted samples of genomic analysis as part of the Animal Health Trust's Give a Dog a Genome.

PRIORITIES

Correspondence was held with the Slovakian Rough Haired Pointer breed club representatives in July 2020 to discuss the evidence plan and agree on priorities, and an action plan, for the breed. It was agreed that at this time the key priorities are:

- Skin and coat problems
- Epilepsy
- Breeders DNA testing for furnishings/ coat length

The following condition is to be kept at watch:

- Cases of suspected degenerative myelopathy

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 Slovakian Rough Haired Pointer. Both partners are expected to begin to action these points prior to the next review.

Breed Club actions include:

- The Breed Club to monitor the incidence of suspected degenerative myelopathy in the breed.
- The Breed Club to continue to encourage reporting to the ongoing health and skin surveys, with the addition of asking for age of onset of disease, and area of body affected by skin issues.

Kennel Club actions include:

- The Kennel Club to share the ongoing reporting surveys on the Breed Information Centre.
- The Kennel Club to repeat population analysis for the breed.
- The Kennel Club to investigate opportunities to research CDA and skin allergies in the breed.

REFERENCES

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