



THE KENNEL CLUB
DOG HEALTH

Breed Health and Conservation Plan

Soft Coated Wheaten Terrier 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 number of Soft Coated Wheaten Terriers registered by year of birth between 1980 and 2019 are shown in Figure 1. The trend of registrations over year of birth (1980-2019) was +9.12 per year (with a 95% confidence interval of +7.71 to +10.53) reflecting the overall increase in the breed's numbers over 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.]

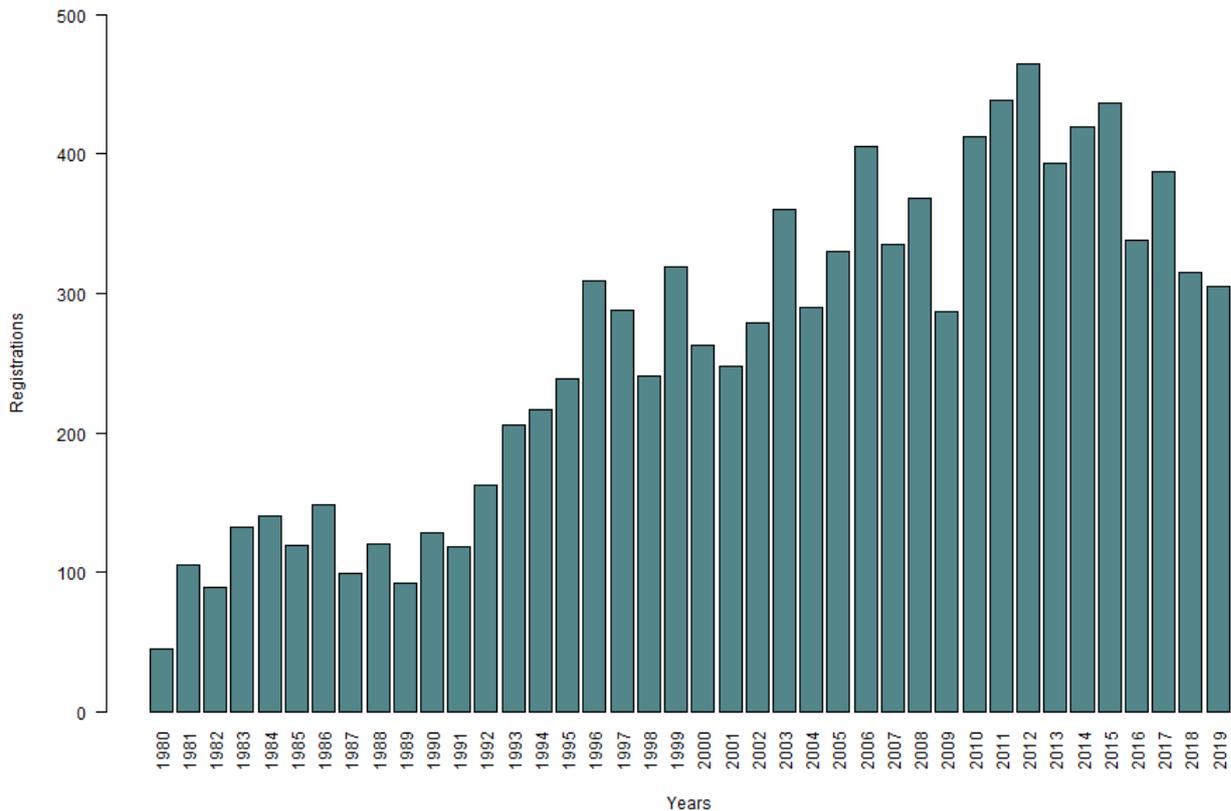


Figure 1: Number of registrations of Soft Coated Wheaten Terriers per year of birth, 1980 – 2019

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 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. Protein losing diseases - (Protein losing enteropathy (PLE) & protein losing nephropathy (PLN))
2. Renal dysplasia (RD)
3. Degenerative myelopathy (CDM)

To help tackle these listed health and welfare concerns, the breed continues to raise awareness of these conditions as follows:

1. Protein losing diseases: Annual published list of confirmed cases of both PLN & PLE. Production of a series of reference papers on PLN plus arranging a discount at Laboklin for genetic testing for PLN. We continue to

keep a prevalence table of test results for PLN & CDM and have published a relevant health booklet to provide easily accessible information.

2. Renal dysplasia: regular updates in the health booklet and publication of any confirmed cases. A list of parents of Wheatens proven by post mortem to have renal dysplasia is published annually in the Club's bulletin and yearbook and is always available on the website.
3. Degenerative myelopathy: Arranged Laboklin discount for DNA tests, started to record results on a prevalence table and published articles about the condition in the health booklet and the SCWT Club of GB's thrice yearly bulletins.

The BHC's Annual Health Report 2017, 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. Protein Losing diseases (PLE & PLN)
2. Renal Dysplasia (RD)
3. Canine Degenerative Myelopathy (CDM)

To help tackle these listed health and welfare concerns, the breed did the following:

1. Protein losing diseases: Continued annual reporting of confirmed cases of both. Arranged discount at Laboklin for PLN testing, began a prevalence table of test results, reference papers available. Produced Health booklet on both conditions. PLE is the SCWT Give a Dog a Genome project.
2. Renal dysplasia: Information on RD provided in a health booklet written by Dr. Bruce Cattenach. A list of parents of Wheatens proven by post mortem to have renal dysplasia published annually in the Club's Bulletin and yearbook
3. Degenerative Myelopathy: Planned study of this condition with Animal Health Trust (AHT).

BREED CLUB HEALTH ACTIVITIES

The Soft Coated Wheaten Terrier has a Health Team, an active Breed Health Coordinator (BHC) and a dedicated health website which can be found at: <https://wheaten.org.uk/health/>

The Health Team maintains a database of pedigrees where they record confirmed cases and producers of the three health issues listed above. They also record any other health issues/ causes of death when notified by owners/ breeders.

Three bulletins each year are sent to all members. These have a dedicated health and welfare section. The website is regularly updated with news about current

health testing and UK and international research projects. The Health Team also aims to hold seminars on an annual basis.

The Wheaten Health Initiative (WHI): The breed also has an independent health group, the WHI, which was set up to 'provide a platform for transmission and reception about the health and well-being of the Soft-Coated Wheaten Terrier'. The group has a website which provides information about health and welfare issues and is regularly updated with news and information including any developments in UK and international research. The WHI have also produced a number of videos showing correct grooming techniques, a vitally important aspect of ownership of a SCWT. These are all available on the group's website.

<http://www.wheatenhealthinitiative.com/>

In 2017 the Wheaten Health Endowment database was launched by the SCWT Club in the USA. Owners and breeders worldwide are encouraged to submit continuing health data for their Soft-Coated Wheaten Terriers. To ensure the integrity of the database, all submissions are verified before publication. It is accessible to anyone and can be found on the link below. The breed believes the detailed collection of health and pedigree information in the database will help to identify, track, and reduce the incidence of health problems in the SCWT. Wheaten owners, breeders, and researchers can use it to assist with decisions about the care and welfare of their dogs and to help when making breeding decisions

<http://www.wheatenhealthendowment.org/database.htm>

BREED SPECIFIC HEALTH SURVEYS

Kennel Club Purebred and Pedigree Dog Health Surveys Results

The Kennel Club Purebred and Pedigree Dog Health Surveys were launched in 2004 and 2014 respectively for all of the recognised breeds at the time, to establish common breed-specific and breed-wide conditions.

2004 Morbidity results: Health information was collected for 505 live Soft-Coated Wheaten Terriers of which 330 (65%) were healthy and 175 (35%) had at least one reported health condition. The top categories of diagnosis were Dermatological (14.9%), 39 of 262 reported conditions, Aural (13.0%), 34 of 262 reported conditions, Gastrointestinal (11.5%), 30 of 262 reported conditions, Musculoskeletal (8%), 21 of 262 reported conditions, and Cancer (6.9%), 18 of 262 reported conditions. The most frequently reported specific conditions were Dermatitis, Otitis Extrema, Colitis, Arthritis and unspecified Cancers, (6.9%) 18 cases.

2004 Mortality results: A total of 111 deaths were reported for the Soft Coated Wheaten Terrier. The median age at death was 12 years and 6 months (min = 6 months, max = 17 years). The most frequently reported causes of death by organ system or category were Cancer (26.1%, 29 of 111 deaths, Old Age (20.7%, 23 of

111 deaths), Other (un-codeable) (9%, 10 of 111 deaths), Urologic (8.1%, 9 of 111 deaths), and combinations (7.2%, 8 of 111 deaths).

2014 Morbidity results: Health information was collected for 147 live Soft-Coated Wheaten Terriers of which 83 (56.46%) had no reported conditions and 64 (43.5%) were reported to be affected by at least one condition. The most frequently reported conditions were Skin (cutaneous) cyst (10.88% prevalence, 16 cases), Lipoma (7.48% prevalence, 11, Hypersensitivity (allergic) skin disorder (3.40% prevalence, 5 cases), Otitis Externa (3.40% prevalence, 5 cases), and Urinary incontinence (3.40% prevalence, 5 cases).

2014 Mortality results: A total of 12 deaths were reported for the breed. The range of age at death for Soft-Coated Wheaten Terriers was 1 year to 16 years. The most frequently reported causes of death by organ system or category were Old Age, Splenic tumour, Aggression, Anaphylactic shock and unspecified cancers.

From the dogs surveyed, most Soft-Coated Wheaten Terriers were not affected by a disease condition (56.46%). The most commonly reported disease condition in live dogs was skin (cutaneous) cyst. The most commonly reported cause of death was old age. The full report can be found here:

Breed-Specific Health Survey Report(s)

The SCWT Club of GB has an on-going survey entitled 'Middle to Old Age' which it hopes will help identify any emerging trends in health conditions or causes of death.

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.

Behavioural conditions

Noise reactivity: A new Norwegian study looked at the frequency of noise reactivity (fireworks) in the breed compared to Standard Poodles, as well as the influence of multi-dog households and age (Handegard et al, 2020). The Soft Coated Wheaten Terrier was found to have a higher frequency of vocalisation during noise stimulus than Poodles (37% of 99 dogs of the breed), with this being 2.9 times higher. As well as this, 42% exhibited pacing, and 33% shivering during fireworks. Dogs that were more fearful in general were more likely to exhibit more severe fear behaviours during noise stimulus, with an odds ratio of 7.8 (95% CI 2.85 – 21.77). Older dogs were more likely to be afraid of loud noises, with 25.3% reporting that their dogs had become more fearful overtime. Similarly, single dogs were more likely to be fearful, as compared to multi-dog households (odds ratio 2.1 (95% CI 1.27-3.50)).

Endocrine (hormone) conditions

Hypoadrenocorticism/ Addison's disease: This syndrome originates from glucocorticoid (hormone involved in glucose regulation) and/ or mineralocorticoid deficiency, and causes dysregulation of specific metabolic processes, causing clinical signs such as lethargy, vomiting, diarrhoea and anorexia (Haviland et al, 2016). A retrospective study of 82 American Soft Coated Wheaten Terriers was undertaken to establish clinical features of this condition in the breed. The median age of onset for affected dogs was 3.5 years, which was not found to be impacted by sex, or concurrent conditions such as PLN or renal disease. Overall, 26% of affected dogs were also diagnosed with PLN, or presumed PLN induced renal failure, which could reflect a link between genetic traits for these conditions. The authors noted that the presentation for disease was similar to those seen in other affected breeds, and that further research is needed to determine any associated genes and mode of inheritance.

Movement disorders

Paroxysmal dyskinesia: This disorder is characterised by abnormal episodes of involuntary movement, often triggered by a specific stimulus such as excitement (Kolicheski et al, 2017). Twenty-five affected dogs of the breed were reviewed, with episodes lasting from several minutes up to more than four hours, with some bouts occurring more than 10 times a day. The median age of onset was 2.25 years with clinical signs worsening over age. Subsequently to this, two affected dogs were genome sequenced and compared to 1,053 control dogs, with a mutation in *PIGN* identified as associated. The authors proposed an autosomal recessive mode of inheritance, but noted that further confirmation of the identified mutation is needed to rule out the possibility of other associated variants.

Renal conditions

Renal dysplasia/ familial renal disease: Progressive renal disease with a familial component has been acknowledged in the breed since the 1980s (Nash et al, 1984; Erikson & Grondalen, 1984). Renal dysplasia is due to abnormal development of kidney tissues resulting in a deformed structure, and consequentially reduced kidney function. Unlike a later age of onset of PLN (see below), dogs affected by renal dysplasia are generally affected and die at a younger age, between 1 and 30 months of age (Nash et al, 1984; Erikson & Grondalen, 1984). Clinical signs include excessive drinking and urination (polydipsia/ polyuria), reduced appetite, lethargy, and vomiting.

Glomerulopathy/ protein losing enteropathy (PLE)/ protein losing nephropathy (PLN): Protein losing disorders are associated with the inappropriate loss of proteins from the gastrointestinal tract (PLE) and kidney (PLN), with clinical signs such as diarrhoea, weight loss, oedema, vomiting, food allergies, inflammatory bowel disease and ascites (swelling of the abdomen). Prognosis is poor, with affected dogs only surviving for several months after diagnosis (Littman et al, 2000; Vaden et al, 2000).

A total of 222 samples of affected dogs were analysed by the University of Pennsylvania School of Veterinary Medicine to determine clinical information for the

disease. Affected dogs were found to exhibit low levels of globulin and albumin (serum proteins), potassium and sodium, and also high levels of phosphate and urea/ creatinine, with variable levels in cholesterol. Intestinal lesions characterised by inflammatory bowel disease were seen in 56% of PLE dogs and 78% of PLE/ PLN dogs, and glomerular disease lesions in 80% of PLE and 87% of PLE/ PLN respectively. Females were found to be affected more frequently than males (ratio 1:1.6). The median age of onset for PLE was 4.7 ± 2.6 years and PLN 6.3 ± 2.0 years. Following pedigree analysis the authors identified a common male ancestor.

Subsequently to this, a genome-wide association study (GWAS) was undertaken on 62 dogs of the breed, with candidate variant alleles of single nucleotide polymorphisms (SNPs) found in two closely linked genes: *NPHS1* and *KIRREL2* (Littman et al, 2013). Dogs homozygous for both mutations were found to be at a significantly higher risk of developing PLN, although a specific amino acid based substitution has not yet been identified. The authors noted that due to the potentially complex nature of inheritance for the condition, there may be a combination of genetic and environmental factors leading to disease. A DNA test is available for these SNPs.

Perinuclear anti-neutrophilic cytoplasmic autoantibodies (pANCA) have been found to be associated with PLN/ PLE, with 20 (out of 21) affected colony dogs in an American study testing positively for pANCA (Allenspach et al, 2008). Following this, a sample of 188 UK dogs were analysed to determine any heritability patterns between pANCA levels and pathology (Wieland et al, 2012). The authors found that 20.7% of dogs had positive results for pANCA, with dogs that had at least one affected sibling having a higher odds ratio of positive levels (odds ratio 12.1 (95% CI 1.2 – 120.4)). It is worth noting however that there has been some fluctuation seen in pANCA status, as part of a follow up study (not yet published), with 5.8% of 103 dogs reverting from positive to negative status, and 5.8% also changing status more than once. The UK study group have also estimated the prevalence of PLE/ PLN to be much lower than US estimates, with these being 2.0% (95% CI 0.002 – 0.068) as opposed to ~10%.

Whilst these findings cannot be determined as pANCA having a causative role in PLE/ PLN, levels can be used as a potential candidate for early detection, as part of an ongoing screening initiative. A study is underway in the UK to follow up on tested dogs.

A further review of current research to date undertaken on the condition in the breed has confirmed a complex mode of inheritance, with homozygous dogs at the highest risk of disease (carrying two copies of mutated alleles), followed by heterozygotes (carriers) and homozygous wild-type (Vaden et al, 2013). The authors noted, based on a colony of dogs, that is not yet known whether food allergies play a primary or secondary role in the development of PLE. Further, it is possible that PLE/ PLN occurs secondary to a structural deformity and that allergies and immune dysfunction could be coincidental or confounding, or that the most severely affected dogs are affected by several factors to result in pathology. The authors suggested an additional unknown abnormality may be manifesting as a dysregulation of the

immune system, and could be a potential predisposing factor for food sensitivities in affected dogs.

BREED WATCH

The Soft Coated Wheaten Terrier is a category 1 breed on Breed Watch, meaning judges are not required to complete a mandatory monitoring form following a judging 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 four PTS has been granted for Soft Coated Wheaten Terriers (not including neutering), with these being for removal of teeth/ tooth (two dogs), repair of a fracture, and tail docked overseas.

ASSURED BREEDER SCHEME

Currently within the Kennel Club (KC)'s Assured Breeders Scheme there are no requirements for the Soft-Coated Wheaten Terrier.

It is recommended that all breeding stock are tested for the following prior to breeding:

- Hip scoring under the British Veterinary Association (BVA)/ KC Hip Dysplasia Scheme
- Kidney function test
- Eye testing under the BVA/KC/ International Sheepdog Society (ISDS) Eye Scheme

BREED CLUB BREEDING RECOMMENDATIONS

The Breed Clubs currently recommend breeders abide by the following:

- A bitch not to have more than 4 litters in her lifetime
- Bitches not to be mated if the whelping will occur after her 8th birthday (unless prior permission has been obtained from the KC and a certificate of her health and fitness obtained from a veterinary surgeon).
- Bitches under two years not to be mated.

- A bitch is not to have a first litter after the age of 5 without prior veterinary consultation.
- A bitch not to be bred from on consecutive seasons without a certificate from a veterinary surgeon regarding her health and fitness.
- It is recommended that both the dog and the bitch have the Genetic PLN-Associated Variant Gene Test (this need only be done once in a dog's lifetime).

SCWT Club of GB eye testing recommendations

The breed club recommend eye testing particularly for breeding stock and their litters. There are no significant eye problems in Soft-Coated Wheaten Terriers and testing is aimed at maintaining this situation and identifying any emerging problems.

DNA TEST RESULTS

Currently there are no recognised DNA tests for the breed.

Whilst other DNA tests may be available for the breed, results from these will not be published 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

As of August 2020, 570 dogs of the breed have been hip scored in the past 20 years with a 15-year and 5-year median hip score of 11 (range 0-48 and 5-30 respectively). The mean hip score for dogs tested between 2000 and 2019 are shown in Figure 8 below. The mean score has remained relatively steady overtime.

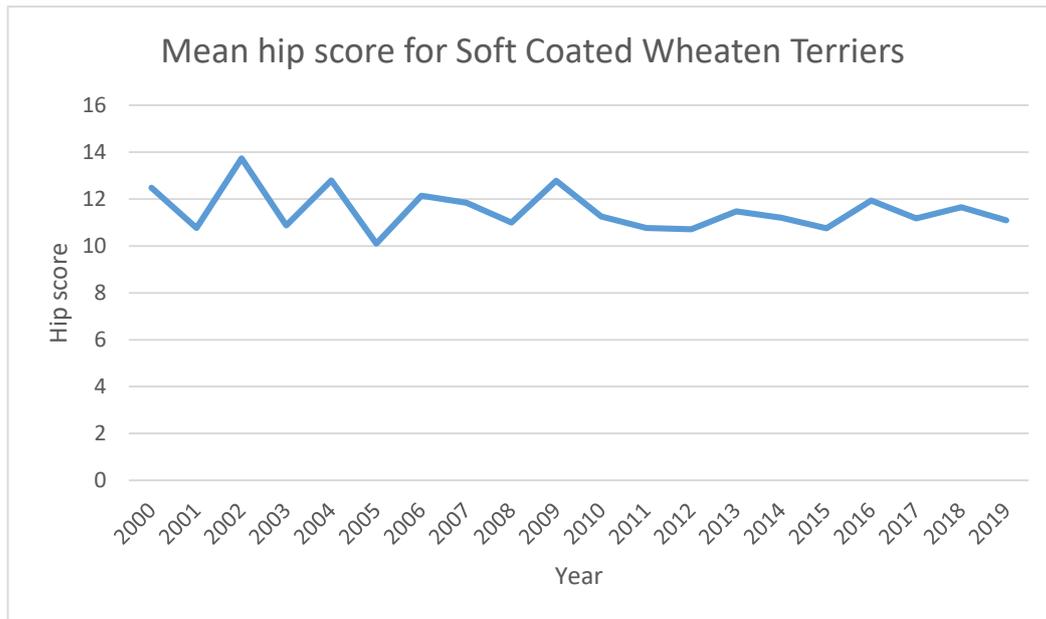


Figure 8: Mean hip scores for Soft Coated Wheaten Terriers hip scored between 2000 – 2019.

ELBOWS

Just three dogs of the breed have been elbow scored to date, with each doing scoring as 0, 1 and 2, respectively.

EYES

The Soft-Coated Wheaten Terrier is not currently on the BVA/KC/ISDS Known Inherited Ocular Disease (KIOD) list (formally Schedule A) for any specific 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 (Table 1).

Table 1: Soft Coated Wheaten Terriers (adults and litters) recorded as part of the BVA/KC/ISDS Eye Scheme since 2012.

Year	Number Tested	Comments
2012	34 adults and 30 litters	1 – corneal lipid deposition 4 – persistent pupillary membranes (PPM) 9 – other cataract 1 – iris hypoplasia
2013	52 adults	2 – persistent hyperplastic primary vitreous (PHPV) 2 – nuclear cataract 2 – other cataract
	29 litters	1 – PPM 2 – PHPV 5 – multifocal retinal dysplasia (MRD)
2014	32 adults	1 – PPM 2 – PHPV 1 – chorioretinitis (inactive) 1 – iris hypoplasia
	27 litters	1 – PPM 1 – other cataract 2 – choroidal hypoplasia
2015	36 adults	1 – PPM 3 – other cataract
	33 litters	2 – other cataract 3 – MRD
2016	62 adults	4 – anterior pigment deposition (APD) 2 – Other cataract
	27 litters	No comments
2017	55 adults	1 – distichiasis 1 – post cataract
	33 litters	No comments
2018	47 adults	No comments
	34 litters	No comments
2019	<i>Awaiting report</i>	

AMERICAN COLLEGE OF VETERINARY OPHTHALMOLOGISTS (ACVO)

Results of examinations through ACVO are shown in Table 2 below for conditions affecting over 1% of the examined population. Between 2015 and 2019, 1,256 Soft-Coated Wheaten Terriers were examined, of which 965 (76.8%) were found to be unaffected by any eye condition.

Whilst it is important to note that these data represent dogs in America, the organisation tend to examine a higher number of dogs than that in the UK, and therefore are a valuable source of information.

Table 2: ACVO examination results for Soft-Coated Wheaten Terriers 1991 - 2019

Disease Category/Name	Percentage of Dogs Affected	
	1991-2014 (n=7,086)	2015-2019 (n=1,256)
EYELIDS		
Distichiasis	1.7%	3.1%
UVEA		
Persistent pupillary membranes (iris to iris)	3.3%	4.3%
Persistent pupillary membranes (lens pigment foci/ no strands)	0.5%	4.5%
LENS		
Significant cataract (summary)	3.5%	4.1%
RETINA		
Retinal dysplasia, folds	1.0%	0.4%

Adapted from: <https://www.ofa.org/diseases/eye-certification/blue-book>

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.

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 3.

Table 3: Number and percentage of litters of Soft-Coated Wheaten Terriers 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	Percentage of C-sections out of all KC registered litters (all breeds)
2009	54	0	0.00%	0.15%
2010	67	0	0.00%	0.35%
2011	55	0	0.00%	1.64%
2012	72	5	6.94%	8.69%
2013	60	4	6.67%	9.96%
2014	55	2	3.64%	10.63%
2015	59	3	5.08%	11.68%
2016	49	3	6.12%	13.89%
2017	62	2	3.23%	15.00%
2018	43	2	4.65%	17.21%
2019	39	2	5.13%	15.70%

GENETIC DIVERSITY MEASURES

The effective population size is the number of breeding animals in an idealised, hypothetical population that would be expected to show the same rate of loss of genetic diversity (rate of inbreeding) as the population in question; it can be thought of as the size of the ‘gene pool’ of the breed. In the population analysis undertaken by the Kennel Club in 2020, an estimated effective population size of **419.3** was reported (estimated using the rate of inbreeding over the period 1980-2019).

An effective population size of less than 100 (inbreeding rate of 0.50% per generation) leads to a dramatic increase in the rate of loss of genetic diversity in a breed/population (Food & Agriculture Organisation of the United Nations, “Monitoring animal genetic resources and criteria for prioritization of breeds”, 1992).

Annual mean observed inbreeding coefficient (showing loss of genetic diversity) and mean expected inbreeding coefficient (from simulated ‘random mating’) over the period 1980-2020 are shown in Figure 9. The observed inbreeding coefficient appears to have reached a peak in 2001 and has gradually reduced since, implying breeders are taking genetic diversity into account when selecting a mate for their dog.

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. For full interpretation see Lewis et al, 2015 <https://cgjournal.biomedcentral.com/articles/10.1186/s40575-015-0027-4>.

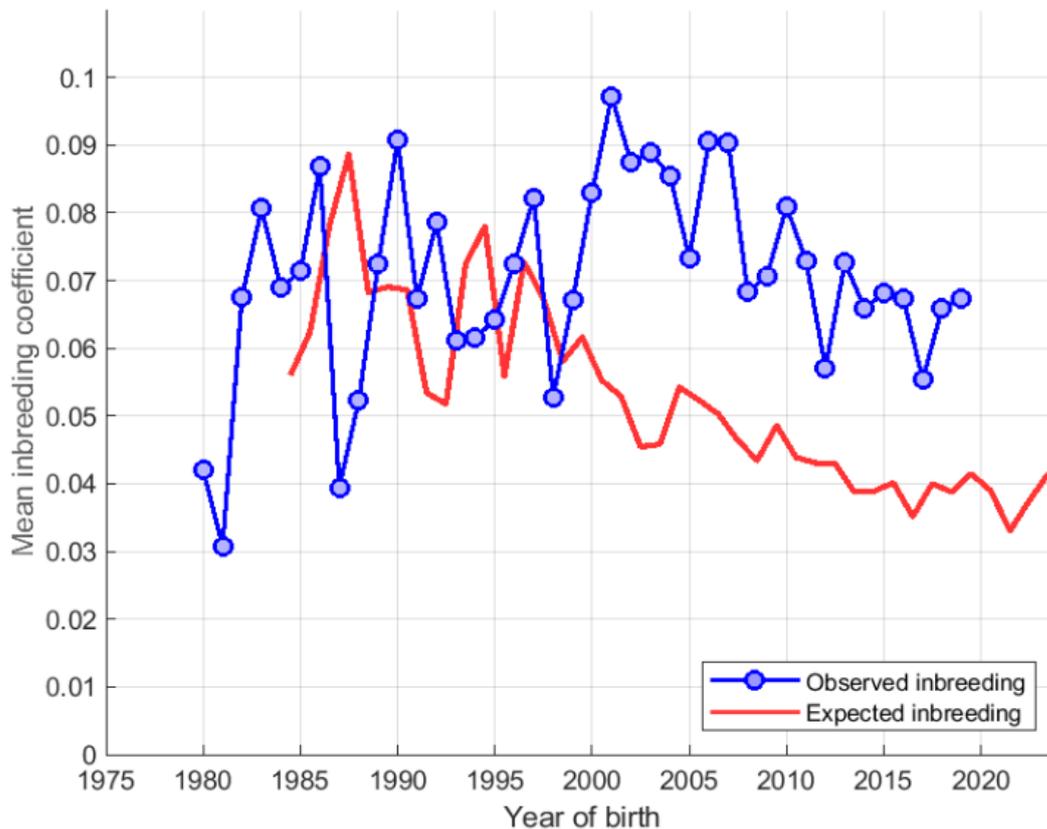


Figure 9: Annual mean observed and expected inbreeding coefficients

Below is a histogram ('tally' distribution) of the proportion of progeny per sire and dam over each of eight 5-year blocks (Figure 10). A longer 'tail' on the distribution of progeny per sire is indicative of 'popular sires' (few sires with a very large number of offspring, known to be a major contributor to a high rate of inbreeding). It appears there is only mild use of popular sires in the breed at this time, with this having decreased markedly since the early 2000s. Regarding the numerically small population of this breed it is important that the use of sires is continued to be considered as part of individual breeding strategies, to prevent rapid loss of genetic diversity.

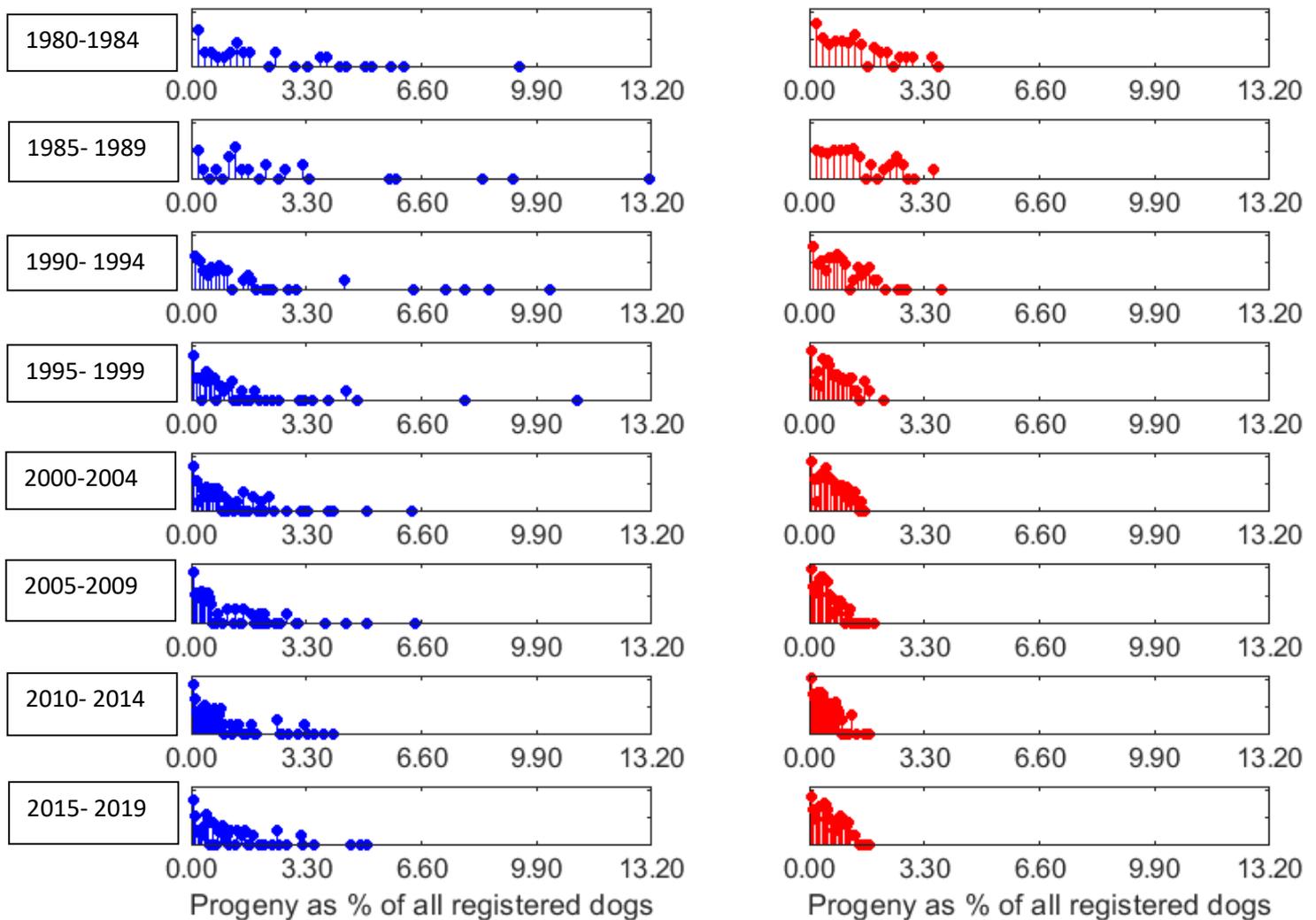


Figure 10: Distribution of the proportion of progeny per sire (blue) and per dam (red) over 5-year blocks (1980-4 top, 2014-19 bottom). Vertical axis is a logarithmic scale

CURRENT RESEARCH

The Soft-Coated Wheaten Terrier was one of the breeds taking part in the Give A Dog A Genome Project with the Animal Health Trust (AHT), it is hoped this project will continue at the University of Cambridge following the AHT's closure.

The breed club is currently engaged in a research project with the AHT into Canine Degenerative Myelopathy.

PRIORITIES

Correspondence between the breed representatives and the Kennel Club was undertaken in July 2020 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 Soft Coated Wheaten Terrier were:

- Protein Losing Nephropathy
- Renal Dysplasia
- Address lack of engagement with breeders who are not members of the SCWT Club of GB

At watch:

- Protein Losing Enteropathy
- Canine 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 Soft Coated Wheaten Terrier. Both partners are expected to begin to action these points prior to the next review.

Breed Club actions include:

- The Breed Club to continue to monitor and record breed health through its recommended health testing of all dogs, in particular breeding animals and their progeny.
- The Breed Club will continue to engage in any research opportunities for the SCWT.
- The Breed Club to continue to try and reach the wider SCWT community, in particular those outside of the show/ Breed Club community.
- To Breed Club to provide more detailed information, via publications and website, on general health issues such as weight management, ear and teeth care.

Kennel Club actions include:

- The Kennel Club to investigate the feasibility of publishing DNA test results for PLN, and whether this could be a recommendation under the Assured Breeder Scheme.
- The Kennel Club to include links to the SCWT Club of GB and the Wheaten Health Initiative websites on the Breed Information Centre.
- The Kennel Club to assist in dissemination of health surveys developed by the Breed Club.

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