



THE KENNEL CLUB
DOG HEALTH

Breed Health and Conservation Plan



American Cocker Spaniel
2019

INTRODUCTION

The Kennel Club launched a dynamic 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 support them in making balanced breeding decisions that make health a priority.

The Breed Health and Conservation Plans take a holistic 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 (Section 1 of the BHCP) 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 Coordinator and breed health committee or representatives if applicable. Priorities are agreed and laid out in Section 2. A collaborative action plan for the health of the breed is then agreed and incorporated as Section 3 of the BHCP. This will be monitored and reviewed.

SECTION 1: EVIDENCE BASE

The number of new registrations of the American Cocker Spaniels per year are shown in Table 1.

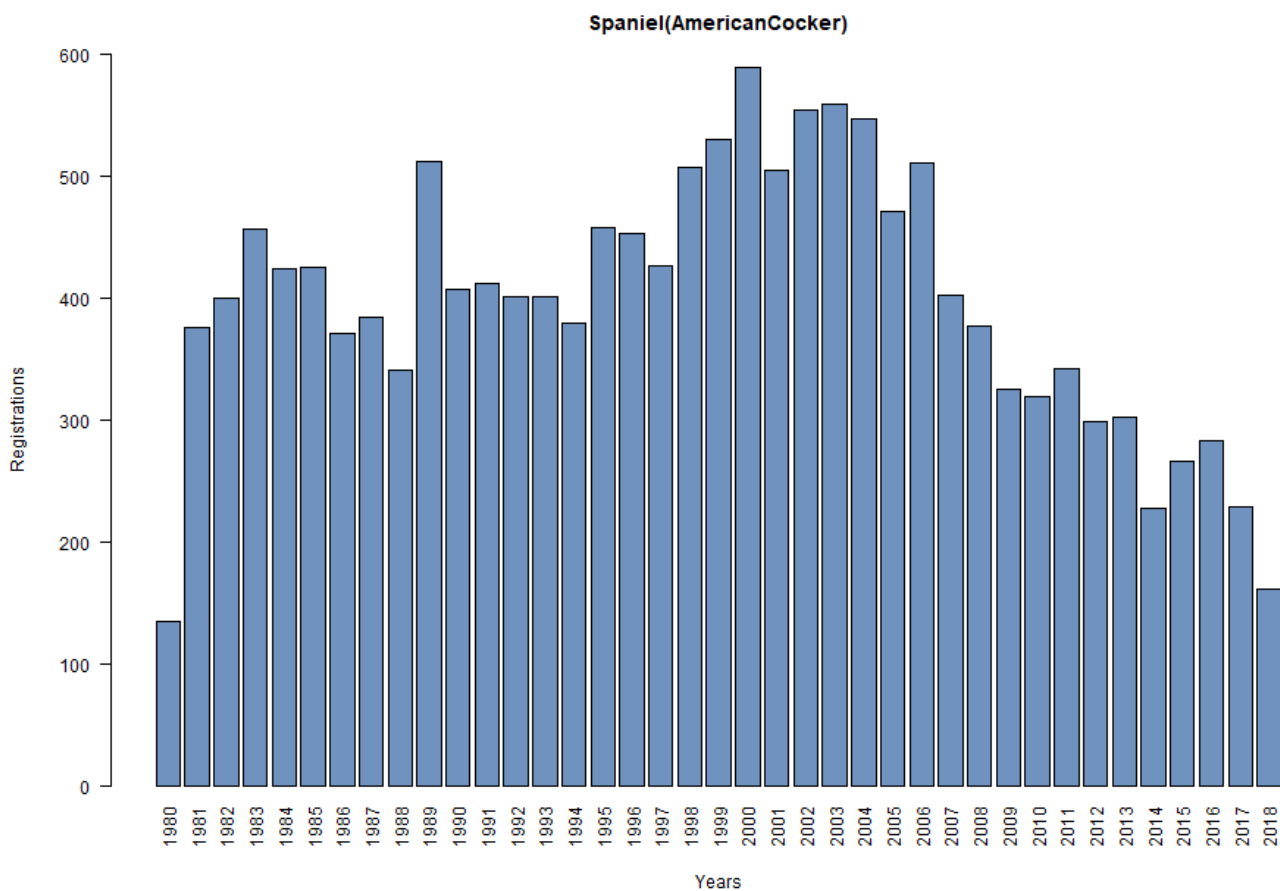
Demographics

Table 1: Number of American Cocker Spaniels registered per year between 2007 and 2018.

Year	Number of new registrations	Percentage of breed out of total annual registrations
2007	443	0.16%
2008	376	0.14%
2009	351	0.14%
2010	331	0.13%
2011	330	0.14%
2012	332	0.14%
2013	297	0.13%
2014	248	0.11%
2015	243	0.11%
2016	285	0.13%
2017	278	0.11%
2018	219	0.08%

The number of American Cocker Spaniels registered per year of birth between 1980 and 2018 are shown in Figure 1. The trend of registrations over year of birth (1980-2014) was -0.33 per year (with a 95% confidence interval of -3.80 to 3.14); as the confidence intervals cross zero, the trend is not significant, reflecting the up and down nature of the registration figures over this time period. [A '95% confidence interval' is a tool used in statistics which shows that we are 95% certain that an estimated number is between the lowest number and the highest number provided.]

Figure 1: Number of registrations of American Cocker Spaniels per year of birth, 1980 – 2018



BHC annual report

The health concerns noted in the Breed Health Coordinators Annual Health Report 2017 for the question '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. Hereditary cataracts
2. Liver problems
3. Autoimmune haemolytic anaemia.

With regard to these concerns the breed have continued to encourage eye testing, and informing and updating the health officer on problems affecting the breed.

In the 2018 Annual Health Report the BHC the three health and welfare conditions were 1. Hereditary cataracts

2. Liver problems

3. Thyroid problems

4. Temperaments in some lines.

With regard to these concerns the breed have continued to encourage eye testing and raise awareness, advising the health officer and breeders on problems affecting the breed.

Pedigree Breed health survey results

2004 Morbidity results: Health information was collected for 132 live American Cocker Spaniels. The most frequently reported specific conditions were cataracts (8.99%, 8 of 89 reported conditions), chronic colitis or diarrhoea (6.74%, 6 of 89 reported conditions), cherry eye (6.74%, 6 cases), hypothyroidism (5.62%, 5 cases) and cheyletiella/ cheyletiellosis (3.94%, 12 cases).

2004 Mortality results: A total of 60 deaths were reported for the breed. The median age at death for American Cocker Spaniels was 10 years and 4 months (min = 2 months, max = 17 years and 4 months). The most frequently reported causes of death by category were cancer (unspecified) (23.3%, 14 of 60 deaths), old age (unspecified) (20.0%, 12 of 60 deaths), cardiac (8.3%, 5 deaths), immune mediated (8.3%, 5 deaths), and hepatic (6.7%, 4 deaths).

2014 Morbidity results: Health information was collected for 40 live American Cocker Spaniels of which 21 (52.5%) had no reported conditions and 19 (48.5%) were reported to be affected by at least one condition. The reported specific conditions were chronic itching (proportion of 7.14%, 3 cases), cruciate disease (proportion of 7.14%, 3 cases), keratoconjunctivitis sicca (7.14%, 3 cases), ear mite infestation (4.76%, 2 cases), and lipoma (4.76%, 2 cases).

2014 Mortality results: Seven deaths were reported in the breed, with a range of longevity of 7 years to 16 years. The causes of death were kidney failure (two cases), and one case of each of the following: liver disorder, mammary tumour, old age, stroke, and unknown.

Insurance data

There are some important limitations to consider for insurance data:

- Accuracy of diagnosis varies between disorders depending on the ease of clinical diagnosis, clinical acumen of the veterinarian and facilities available at the veterinary practice.
- Younger animals tend to be overrepresented in the UK insured population.

- Only clinical events that are not excluded and where the cost exceeds the deductible excess are included (O'Neill et al, 2014)

However, insurance databases are too useful a resource to ignore as they fill certain gaps left by other types of research; in particular they can highlight common, expensive and severe conditions, especially in breeds of small population sizes, that may not be evident from teaching hospital caseloads (Egenvall et al, 2009).

UK Agria data

Insurance data were available for American Cocker Spaniels insured with Agria UK. 'Exposures' are equivalent to one full policy year; in 2017 there were 98 free exposures, 151 full exposures and 210 claims, in 2018 these figures were 80, 127 and 212 respectively. Full policies are available to dogs of any age. Free policies are available to breeders of Kennel Club registered puppies and cover starts from the time the puppy is collected by the new owner; cover under free policies lasts for five weeks from this time.

It is possible that one dog could have more than one settlement for a condition within the 12-month period shown. Conditions by number of settlements, for authorised claims where treatments started between July 2017 and June 2018, are shown in Table 2 below. 'Benefit other than vet fees' refers most commonly to a claim for death of the dog but can also cover travel costs, boarding fees and advertising for lost dogs. There were a low number of claims for any specific disorder.

Table 2: Conditions and number of settlements for each condition between July 2017 and June 2018 for American Cocker Spaniels insured with Agria UK shown.

Condition	Number of settlements
Skin (cutaneous) disorder (unspecified)	14
Epilepsy	12
Keratoconjunctivitis sicca (KCS Dry Eye)	11
Hypothyroidism	10
Hypersensitivity (allergic) skin disorder (unspecified)	9
Otitis externa	8
Otitis externa chronic	8
Squamous cell carcinoma - oral (mouth)(site unspecified)	6
Dental (tooth) tartar/calculus	6
Lymphoma finding	6

Swedish Agria insurance morbidity data

Swedish morbidity and mortality insurance data were also available from Agria for the. Reported rates are based on dog-years-at-risk (DYAR) which take into account the actual time each dog was insured during the period (2006-2011). The number of DYAR for the American Cocker Spaniels in Sweden during this period was 500<1000. The full Swedish insurance results are available through <https://dogwellnet.com/>, but key findings are reported below.

The most common specific causes of veterinary care episodes (VCEs) for Agra-insured American Cocker Spaniels in Sweden between 2006 and 2011 are shown in Figure 2. The top specific causes of VCEs were otitis, vomiting / diarrhoea/ gastroenteritis, skin tumour, dermatitis / pyoderma / folliculitis and mammary tumour.

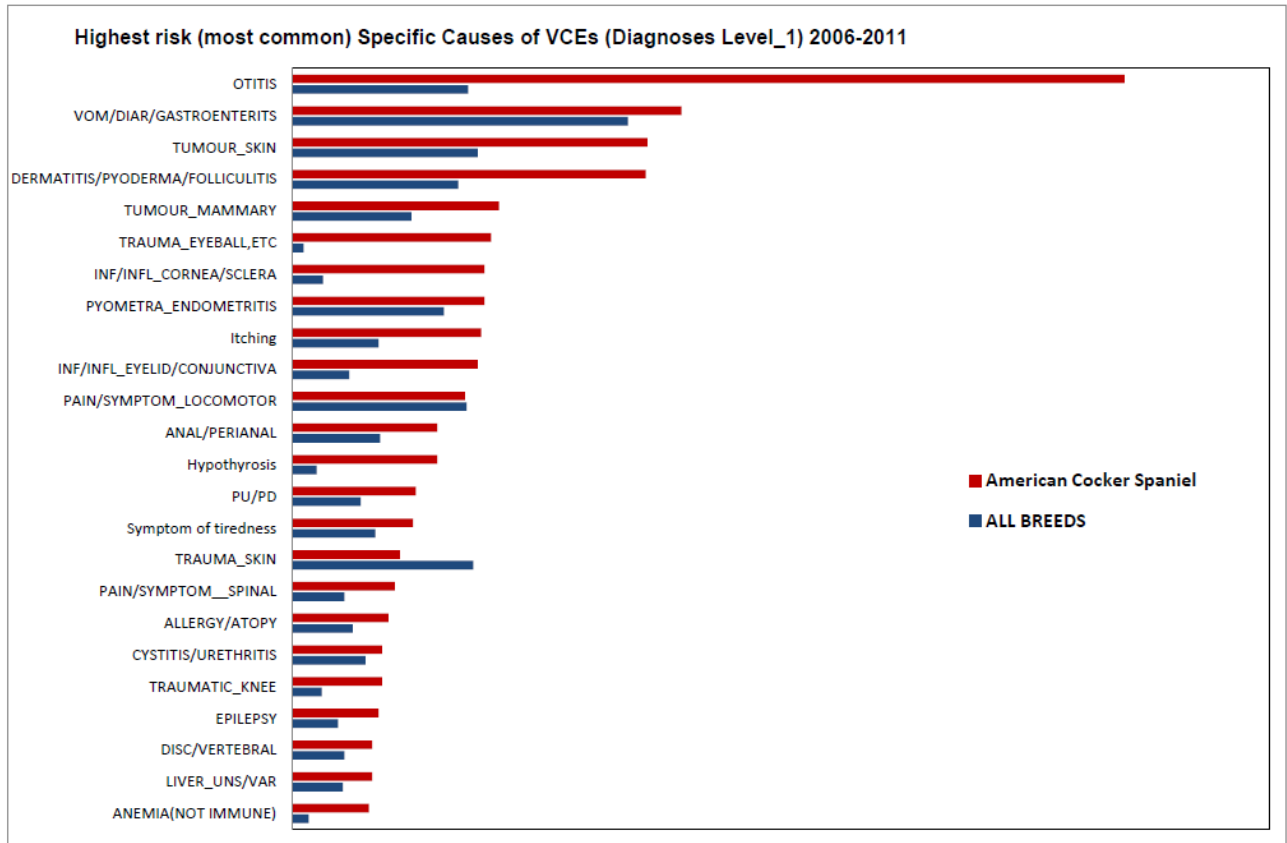


Figure 2: The most common specific causes of VCEs for the American Cocker Spaniel compared to all breeds in Sweden between 2006 and 2011, from Swedish Agra insurance data.

The specific causes of VCEs ordered by relative risk for the American Cocker Spaniel are shown in Figure 3. In this analysis, the top specific causes of VCEs ordered by relative risk were eyeball trauma, ear tumour, glaucoma, seborrhea and cataracts (degenerative/dystrophy).

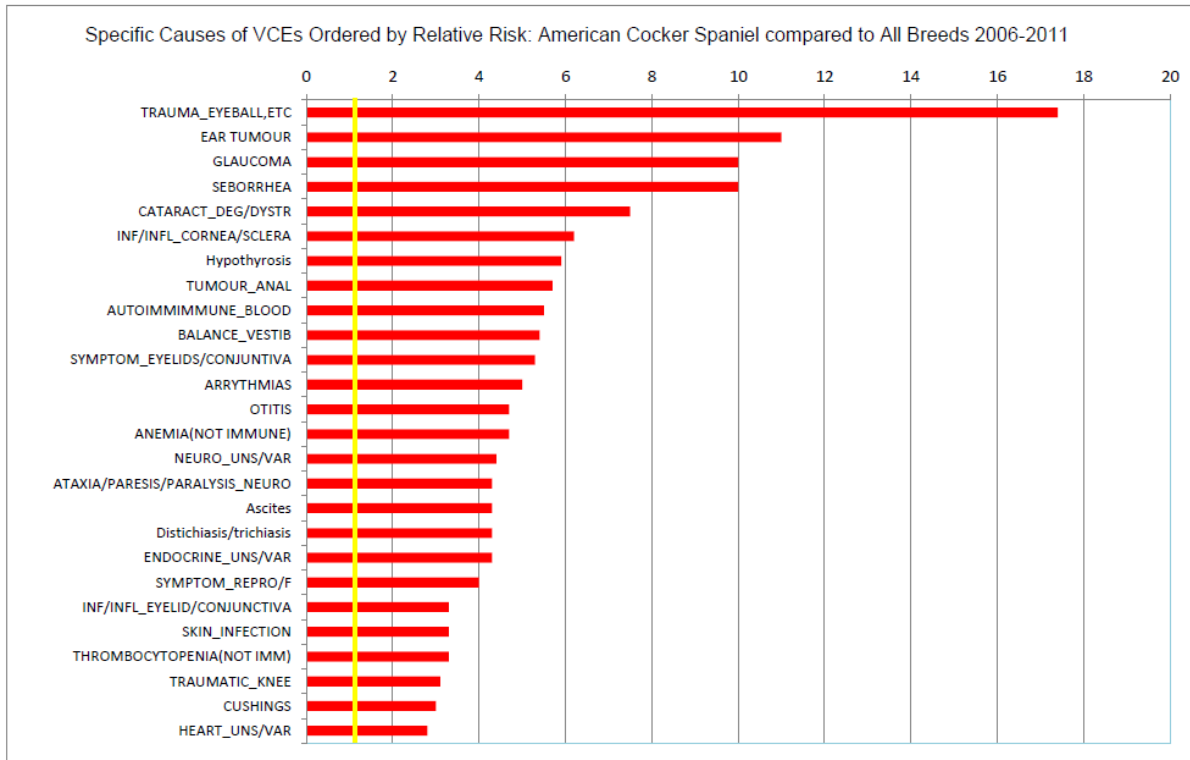


Figure 3: The specific causes of VCEs for the American Cocker Spaniel ordered by relative risk compared to all breeds in Sweden between 2006 and 2011, from Swedish Agria insurance data. The yellow line indicates the baseline risk for all breeds.

Swedish Agria insurance mortality data

Median age at death for the American Cocker Spaniel from Swedish Agria insurance data was 6.3 years for males and 6.95 years for females. Agria has a maximum age to which a dog can be life insured, which varies somewhat across breeds and years. Many owners also choose not to insure their dogs after a certain age, as the cost of the premiums become more expensive. For these reasons the median age at death from the Swedish Agria insurance data is artificially depressed for all breeds compared to that reported from surveys or other sources.

The most common specific causes of death or euthanasia for Agria-insured American Cocker Spaniels in Sweden between 2006 and 2011 are shown in Figure 4. The most common specific causes of death were otitis, ascites (abdominal swelling), dead/euthanised, epilepsy and vomiting/diarrhoea/gastroenteritis.

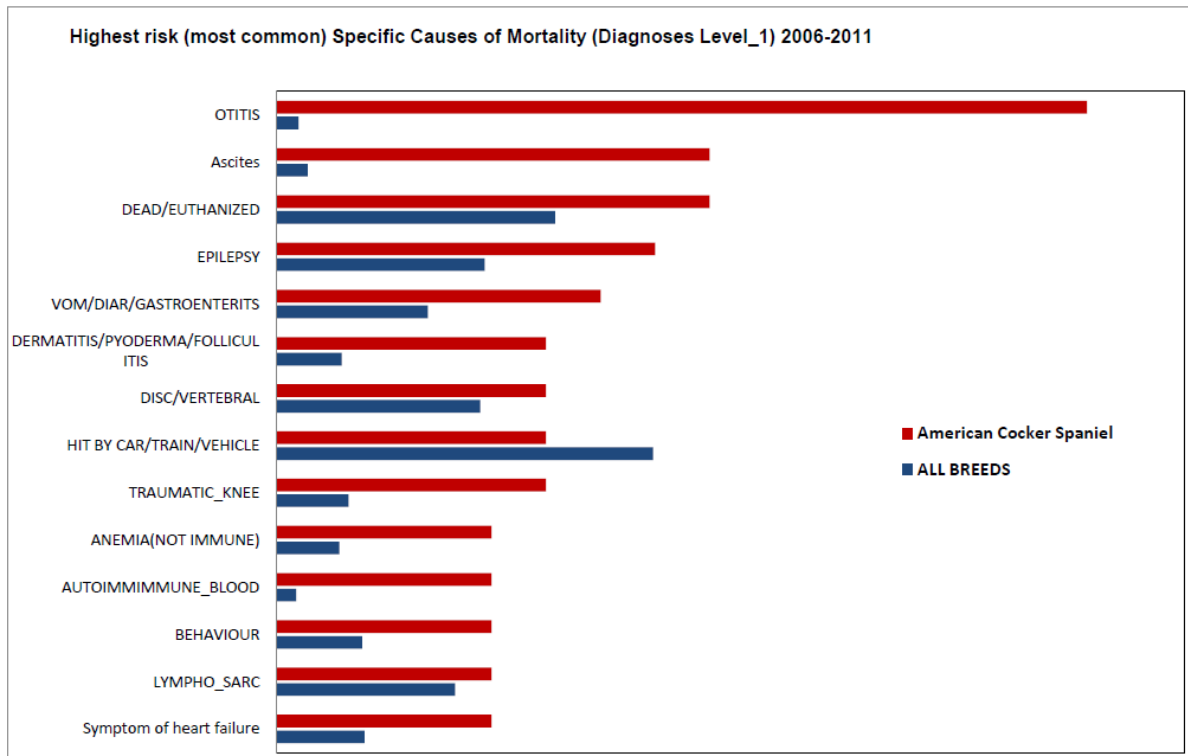


Figure 4: The most common specific causes of death for the American Cocker Spaniel compared to all breeds in Sweden between 2006 and 2011, from Swedish Agria insurance data.

Breed-specific health surveys

A 2019 breed health survey has been conducted by the Breed Health Co-ordinator and Kennel Club Health Team with a report to be produced.

A previous survey was disseminated in 1994 for the breed with results totalling 424 dogs. Results from this indicated back problems in the breed, which could be due to trauma, and cancer, being the most common cause of death in dogs over 12 years of age.

Visual health check reports/clinical reports/judges' health monitoring

The American Cocker Spaniel is currently a category 2 breed, meaning that judges are required to complete mandatory breed health monitoring forms following judging this breed.

Table 3: Percentage of American Cocker Spaniels exhibited at dog shows with points of concern for 2016 - 2018. The points with an asterisk next to them indicate concerns reported by judges which are not listed for the breed.

Point of concern	2016	2017	2018
* Sore eyes	0.0%	0.15%	0.00%
Excessively prominent eyes	0.3%	0.00%	0.19%
* Unsound movement	0.0%	0.77%	0.00%
* Poor muscle tone	2.2%	0.00%	0.00%
Incorrect bite	2.8%	5.69%	1.14%
Incorrect dentition	2.4%	2.46%	1.71%
* Nervous temperament	0.0%	0.15%	0.19%
Total shown	671	650	525

VetCompass

There are no VetCompass papers currently relating to the American Cocker Spaniel.

Assured Breeders Scheme

Currently within the Kennel Club (KC)'s Assured Breeders Scheme it is required that Assured Breeders:

- Eye tested under the British Veterinary Association (BVA)/KC/International Sheepdog Society (ISDS) scheme on an annual basis
- Gonioscopy tested

It is also recommended that breeding stock are DNA tested for prcd-PRA

DNA test results

DNA tests are currently available for prcd-PRA, with this condition listed as an ABS recommendation, but not as yet is not Kennel Club recognised.

DNA tests are also available for exercise induced collapse, phosphofructokinase deficiency, familial nephropathy and iron refractory iron deficiency anaemia. However, results for these tests are not currently recorded by the Kennel Club. DNA test results are only recorded for Official Kennel Club DNA Testing Schemes which involve collaboration between the Kennel Club, the breed clubs and the DNA testing facilities.

Canine Health Scheme results and EBVs

Currently within the Kennel Club (KC)'s Assured Breeders Scheme it is required that breeding stock are eye tested through an annual examination and by gonioscopy, and recommended that the DNA test for prcd-PRA is undertaken for the American Cocker Spaniel. All the British Veterinary Association (BVA)/KC Health Schemes are open to dogs of any breed, and the results for American Cocker Spaniel which have been presented for assessment under the BVA/KC Elbow Dysplasia Scheme and BVA/KC/International Sheep Dog Society (ISDS) Eye Scheme are also shown below.

HIPS

Up to the 1st January 2019 30 American Cocker Spaniels have been hip tested under the BVA/KC Hip Dysplasia Scheme, with the scores ranging from 0 to 90, and a five year median of 11 for the breed.

ELBOWS

To date one American Cocker Spaniel has been scored under the BVA/KC Elbow Dysplasia scheme, with a score of one.

EYES

The breed is currently on Schedule A for multifocal retinal dysplasia, glaucoma, generalised progressive retinal atrophy and hereditary cataracts under the BVA/KC/International Sheep Dog Society (ISDS) Eye Scheme. Schedule A 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 lists those breeds in which the conditions are, at this stage, only suspected of being inherited. However, the BVA still records the results of dogs of other breeds which have participated in the scheme.

The results of Eye Scheme examinations of the breed which have taken place since 2012 are shown in Table 4. To date 3951 American Cocker Spaniels have been tested under the scheme, with 1863 tested within the past 10 years.

Table 4: Reports on dogs of the breed which have participated in the BVA/KC/ISDS Eye Scheme since 2009 to date (12/06/2019).

Condition	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
AFFECTED Glaucoma	2	1	3	1	1	0	0	0	0	0	0
AFFECTED GPRA	0	0	0	0	0	0	1	0	0	0	0
AFFECTED Hereditarily Cataract	8	6	7	4	6	3	1	0	2	1	1
UNAFFECTED	177	186	165	173	172	147	115	113	118	101	16
UNAFFECTED Glaucoma	39	70	36	40	41	36	23	20	27	0	0
Total Tested	226	263	211	218	220	186	140	133	147	102	17

Sightings reports are also provided by ophthalmologists for any additional conditions noted during assessment. Reports provided by the BVA to date are shown in Table 5 below.

Table 5: Sighting reports on dogs of the breed which have participated in the BVA/KC/ISDS Eye Scheme since 2012-2017

Year	Number Seen	Comments
2012	191 adults 0 litters	60 x Distichiasis 2 x Entropion 2 x Ectropion 4 x Corneal Lipid Deposition 3 x PPM 1 x Nuclear Cataract 10 x Other Cataract 1 x GPRA-like appearance 1 x Hyaloid Remnant
2013	191 adults 0 litters	53 x Distichiasis 2 x Entropion 2 x Ectropion 1 x Multi-Ocular Defects 6 x Corneal Lipid Deposition 1 x PPM 1 x Nuclear Cataract 10 x Other Cataract 2 x Pigmentary keratitis 5 x Pigmentary keratitis
2014	151 adults 0 litters	51 x Distichiasis 1 x Ectropion 3 x Other Cataract 5 x Chorioretinopathy (inactive) 4 x Pigmentary keratitis 2 x Trichiasis 1 x Asteroid hyalosis
2015	120 adults 0 litters	30 x Distichiasis 2 x Entropion 1 x Ectropion 1 x Corneal Lipid Deposition 2 x Imperforate Puncta
2016	121 adults	13 x Distichiasis 5 x Corneal Lipid Deposition 1 x PHPV 1 x Post Capsular Cataract 1 x PPSC Cataract 5 x Post Cataract 7 x Chorioretonopathy
2017	127 adults	13 x Distichiasis 5 x Corneal Lipid Deposition 1 x PHPV 1 x Post Capsular Cataract 1 x PPSC Cataract 5 x Post Cataract 7 x Chorioretonopathy

Other ocular conditions: The American College of Veterinary Ophthalmologists (ACVO) consider the American Cocker Spaniel to be at risk of keratoconjunctivitis sicca, glaucoma, entropion, ectropion, distichiasis, eury/macrobblepharon, imperforate lacrimal punctum, prolapsed gland of the third eyelid, corneal dystrophy (epithelial/stromal), corneal dystrophy (posterior polymorphous), persistent pupillary membranes (iris to iris), retinal atrophy – generalised, retinal dysplasia – folds, retinal dysplasia (geographic/detached), secondary keratitis (chronic), in addition to cataracts (Genetics Committee of the ACVO, 2018). Between 2010 and 2017, 10605 dogs of the breed were examined by the ACVO and prevalence data are shown in Table 5 alongside data from previous years.

Overall, 39.4% (4183 of 10605) of dogs of the breed examined between 2010 and 2017 had healthy eyes unaffected by any disease conditions. However, it is important to consider that the dogs were from America.

Table 5: ACVO examination results for American Cocker Spaniels, 1991 - 2018

Disease Category/Name	Percentage of Dogs Affected			
	1991-1999 (n=27349)	2000-2009 (n=21729)	2010-2017 (n=10605)	2018 (n=530)
Eyelids				
Distichiasis	54.2%	45.7%	49.5%	47.4%
Nasolacrimal				
Imperforate lower nasolacrimal punctum	1.3%	0.0%	1.7%	3.4%
Keratoconjunctivitis sicca	0.5%	0.3%	1.6%	1.3%
Cornea				
Pigmentary keratitis	0.4%	1.0%	1.9%	1.9%
Corneal dystrophy	2.8%	2.8%	2.6%	1.7%
Uvea				
Persistent pupillary membranes (lens pigment foci/no strands)	0.0%	0.0%	0.4%	1.3%
Lens				
Cataracts (significant)	14.6%	11.4%	12.2%	13.8%
Retina				
Retinal dysplasia (folds)	13.6%	11.3%	7.2%	5.7%

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

Breed Club Recommendations

There are no breed club recommendations currently included under the Assured Breeders Scheme.

Reported caesarean sections

When breeders register a litter of puppies, they are required 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. In addition, these data do not indicate whether the caesarean sections were emergency or elective. 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 6.

Table 6: Number and percentage of litters of American Cocker Spaniels registered per year and number of caesarean sections reported per year, 2008 to 2018.

Year	Number of Litters Registered	Number of C-Sections Reported	Percentage of C-sections	Percentage of C-sections out of all KC registered litters (all breeds)
2008	97	0	0.0%	0.05%
2009	81	0	0.0%	0.15%
2010	79	0	0.0%	0.35%
2011	81	2	2.5%	1.64%
2012	62	1	1.6%	8.69%
2013	58	0	0.0%	9.96%
2014	52	0	0.0%	10.63%
2015	56	2	3.6%	11.68%
2016	57	5	8.8%	13.89%
2017	43	0	0.0%	15.00%
2018	39	2	2.6%	17.21%

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 2015, an estimated effective population size of 300.2 was reported (estimated using the rate of inbreeding over the period 1980-2014).

Annual mean observed inbreeding coefficient (showing loss of genetic diversity) and mean expected inbreeding coefficient (from simulated 'random mating') over the period 1980-2014 are shown in Figure 4. As with most breeds, the rate of inbreeding was at its highest in this breed in the 1980s and 1990s. This represents a 'genetic bottleneck', with genetic variation lost from the population. However, since the early 2000s the rate of inbreeding has slowed and even declined slightly, implying maintenance and even some replenishment of genetic diversity (possibly through the use of imported animals). 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://cgejournal.biomedcentral.com/articles/10.1186/s40575-015-0027-4>.

The current breed average inbreeding coefficient is 3.9.

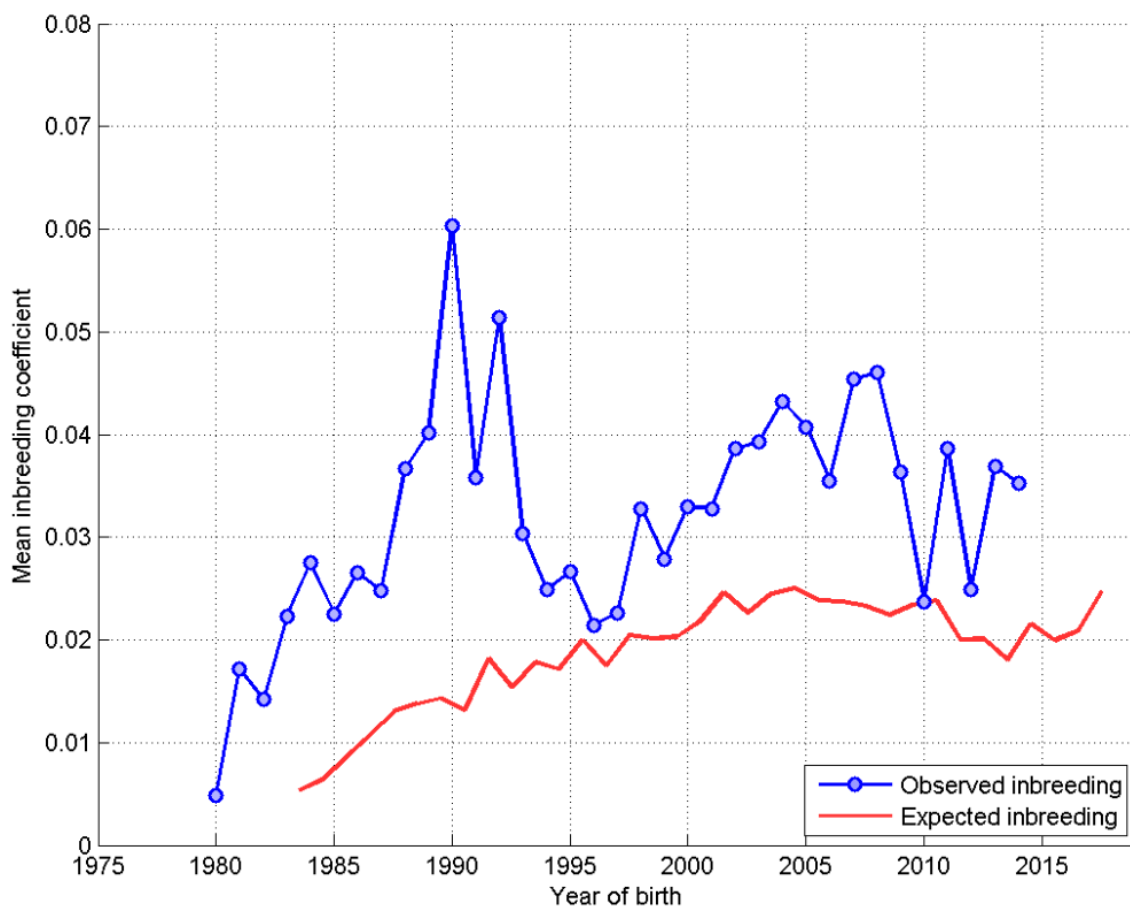


Figure 5: Annual mean observed and expected inbreeding coefficients.

Below is a histogram ('tally' distribution) of number of progeny per sire and dam over each of seven five-year blocks (Figure 5). 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). There appears to be extensive use of popular dogs as sires in this breed (the 'tail' of the blue distribution in figure 5).

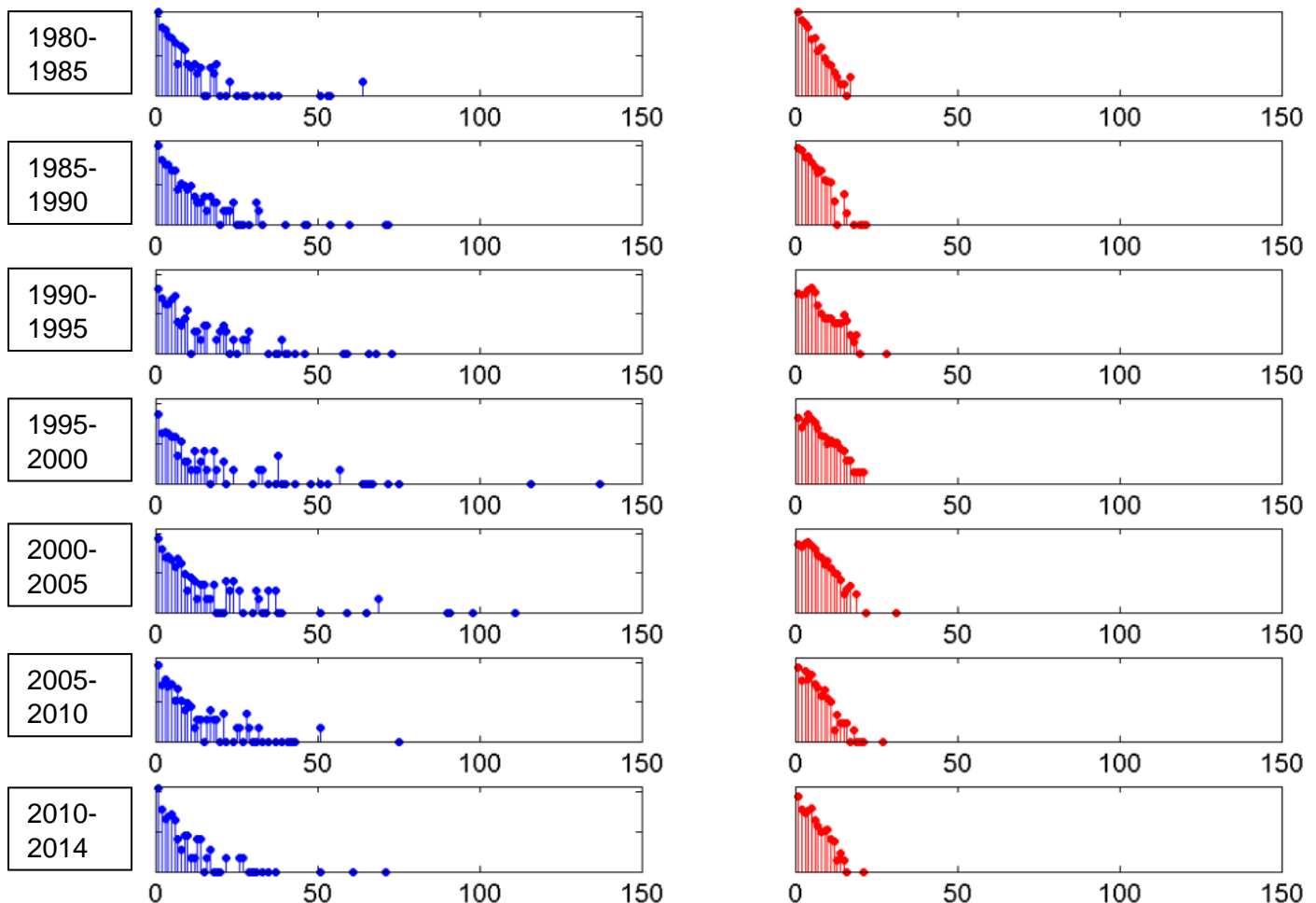


Figure 6: Distribution of progeny per sire (blue) and per dam (red) over 5-year blocks (1980-4 top, 2010-14 bottom). Vertical axis is a logarithmic scale.

An American pedigree database is available for the breed and can be viewed online at: <http://www.cockers-worldwide.com/search.html> giving breeders pedigree information and the possibility to investigate potential pedigrees.

Current research projects

There is no current breed research that the Kennel Club are aware of.

SECTION 2: PRIORITIES

A meeting was held with the American Cocker Spaniel breed representatives on 7th June 2019 to discuss Section 1 of the BHCP and to agree on the priority issues for the health of the breed.

The group discussed the Agria Insurance data, highlighting that although the data is not a complete representation of the UK population, due to many owners choosing not to insure their dogs, the data continues to be insightful for the population it represents. The group raised the number of settlements for epilepsy, and the breed representatives informed the group of the frequent anecdotal reports of the condition in the breed. It was agreed that epilepsy should be closely monitored within the breed and the breed noted their desire to be involved in epilepsy research. The KC raised the ongoing development of a disease priority index for all registered breeds and mentioned that it is hoped the KC will be directing further research into epilepsy in the future for all affected breeds, and updates on progression will be provided.

With regard to the Swedish insurance data, the group discussed the most common causes of death for the breed and noted that ascites is commonly associated with advanced stage liver disease. The breed pointed out that liver problems are a primary concern for the breed and noted that the associated conditions need to be closely monitored. Additionally, the KC raised that the data for the median age at death is artificially depressed across all breeds due to many owners choosing not to insure their dogs in their veteran years.

With regard to Breed Watch, the group highlighted the marked reduction in reports of visible points of concern for the breed. However, the breed representatives raised their concerns relating to the current increase of imported dogs and noted their apprehension with regard to these dogs being presented in the show ring, due to their seeming absence of health test results and limited pedigree information.

With regard to the DNA tests currently available for the breed, but unrecognised by the KC, it was noted that many of the associated conditions are not yet known to be inheritable concerns for the American Cocker Spaniel. However, the group agreed that these conditions would be monitored and if required, the uptake of the appropriate DNA tests would be considered. Concerning the current requirements and recommendations for the breed under the Assured Breeder Scheme (ABS), the breed representatives raised their desire for the KC to enforce health testing for all KC registration. The KC explained that control schemes are rarely applied to breed registration, due to the evidenced detrimental effect these can have on genetic diversity and registration numbers, with the vital importance of maintaining an accessible population.

Canine Health Schemes data were discussed, and it was noted that to date, only 30 American Cocker Spaniels have been hip scored and one elbow scored, with the breed representatives noting that neither hip or elbow dysplasia are considered concerns for the breed. Regarding the sighting reports from dogs which have participated in the BVA/KC/ISDS Eye Scheme, the group noted the reduction of

reports for many of the conditions, including distichiasis and entropion. The breed representatives raised the importance of considering the eye test results when planning matings, however, noted concerns regarding pet owners who are not participating in the scheme, preventing the ability to make informed mating decisions. The group discussed the need for further education to new owners, particularly regarding the importance of eye testing, and for the breed clubs to encourage the uptake of litter screening.

The group discussed the breed clubs' current code of ethics, with the breed representatives pointing out that only one club currently states a minimum breeding age of 24 months. The KC noted that any breed club recommendations can be added to the ABS if requested and approved, and highlighted that as a minimum, these recommendations make breeders mindful. The breed agreed that further discussion would be held with all of the breed clubs regarding breeding recommendations and synchronising their code of ethics.

Genetic diversity measures were discussed with the breed having an estimated effective population size of 300.2, which means the breed is within the parameters where there is no concern. The group noted the decrease in the use of popular sires, with the breed highlighting that there has been an increased awareness of the popular sire syndrome and a noticeable shift in culture, resulting in breeders no longer only using the "top dog" in the ring. The group acknowledged this positive change but agreed that this should continue to be closely monitored, due to the risk of a detrimental effect on genetic diversity.

With regard to current research projects, it was noted that the breed clubs are currently not involved in any research projects, but the breed expressed their desire to be involved in cataract research, in the hope for the development of a DNA test, as well as epilepsy research. Additionally, the breed representatives raised the current use of a thyroid test in America and noted the increase of anecdotal reports of potential thyroid associated conditions in the UK population. The KC noted Dr O'Neill's intent to undertake a hypo and hyperthyroid study with VetCompass shortly, and agreed to notify Dr O'Neill of the concern amongst the breed and to keep the breed updated to its progression.

The group agreed from the data provided in the evidence base and their own experience that the priorities for the American Cocker are; thyroid conditions, epilepsy, patella's, liver-associated conditions and eye conditions, particularly cataracts and glaucoma.

SECTION 3: ACTION PLAN

- The Kennel Club to keep the breed clubs updated with any progress made with the epilepsy research undergoing at Royal Veterinary College
- The Kennel Club to investigate whether the breed can be included in the hypothyroidism VetCompass study
- The breed clubs to discuss breed club breeding recommendations and consider making a proposal for these to be included under the Assured Breeder Scheme
- The Kennel Club to assist with the dissemination of a breed health survey and formulation of the report
- The breed clubs to encourage litter screening under the BVA/KC/ISDS scheme
- The breed clubs to investigate the possibility of developing a thyroid testing scheme
- The breed clubs to consider adding wording to the breed club code of ethics with regard to testing of imported dogs
- The breed clubs to establish an acceptable colour list and send to Bill Lambert for processing
- The Breed Health Co-ordinator to continue to monitor liver problems occurring in the breed
- A review to take place with the breed in June 2021