AMERICAN BORDER COLLIE ASSOCIATION INCORPORATED

American Border Collie Association
Annual Meeting and Dinner
October 27, 2000
El Reno, Oklahoma

The Annual Membership meeting of the American Border Collie Association will be held at approximately 7:00 p.m. at the VFW Hall on 1515 S. Rock Island Ave., El Reno, Oklahoma, following the day's running of the USBCHA/ABCA National Finals at Fort Reno.

The meeting will include the 2000 Hall of Fame inductees, an update on the new computer system and other activities of the Association. The votes for the four (4) 2000-2003 Directors' positions will also be tallied during the meeting.

All members and friends are welcome and encouraged to attend. The cost of the meal will be $10.00 each. Reservations are required and can be made through the ABCA office by October 15. Payment can be mailed to the ABCA office anytime prior to the meeting.

IMPORTANT REMINDER!

All annual memberships are due on January 1st of each year — amount, $10
Lifetime memberships — $100

Your mailing label will show the latest year that we have on record for your annual membership being paid. If your label shows the year 1900, our records indicate that you are a Lifetime Member. Please notify the office if there is an error.

Remember, memberships must be paid by January 1st to be eligible to vote in the 2001 business of ABCA.

COLLIE EYE ANOMALY IN BORDER COLLIES - YEAR 2000

Border Collies see the world somewhat differently from humans. Not only does the position of their eyes give them much greater peripheral vision, but a higher proportion of rods over cones than in humans makes their vision palette like that of a red/green color-blind person. A reflective area in their retina enables dogs to see in much lower light levels than humans. At a distance their eyes are suited to seeing moving objects much better than stationary ones. Useful traits in herding dogs.

However, things can go wrong. Environmental damage and genetic mutations are always dangers. The major heritable eye disease in Border Collies came from a common ancestor in which the mutation occurred many years ago, first appearing as a problem in the show collie.

This disease, Collie Eye Anomaly, is caused by a single recessive gene, so that a puppy which receives one copy of the bad gene from its mother and another bad copy from its father will have symptoms of the disease from birth. If it receives one bad copy and one good copy, it will not exhibit symptoms but will be a carrier of the disease. If a carrier is mated to a dog with two good copies, every puppy will have a 50% chance of inheriting one bad copy from the carrier parent, but it can receive only a good copy from the mate. Therefore, no puppy from this breeding will be CEA-affected.

How bad is this disease? It is not fatal, and only a small percentage will have detached retinas and be blind. The rest may have some loss of vision, but can still function quite well. Why, then, are we concerned about this genetic disease? The breed could survive as a working sheep dog at the current frequency of affected births; but, without a cooperative containment effort on the part of breeders and owners, the carrier and affected rate will creep upwards and upwards until there are no more genetically clear dogs at all. What happens then is that the genes which express the severity of the disease come into play. There will be more and more retinal failures resulting in blindness. At some point, the central breeding emphasis will shift from good working ability to good eyes.

Detection is important. The American Border Collie Association, Inc., has offered or subsidized eye examination clinics at sheepdog trials since 1996. It is also the principle donor to a CEA genetic research project of Dr. Gregory Acland at the James A. Baker Institute for Animal Health, Cornell University. Required eye examinations of all dogs entered in the National Finals has also raised awareness of the disease. To register dogs with the ABCA, a member must attest that neither parent nor the dog(s) being registered is known to be affected with CEA.

You can see the weaknesses in this program. While most dogs participating in North American sheep dog trials are examined for CEA and for other eye problems, there are many breeding dogs which are never taken to a canine ophthalmologist. It is in everyone's interest to expand the eye examination coverage to all breeding pairs.

Until the DNA test is developed, there will be some carrier-to-carrier breeding that produces affected puppies. However, if buyers and breeders learn to include ophthalmic examinations by a DACVO as a part of routine health care, those CEA-affected puppies will be identified and not given a chance to breed. The ones with mild symptoms can still see well enough to participate in all activities and be useful farm, ranch or companion dogs, but progeny will not be eligible for registration.

Because some of the breed's most notable herding dogs carried one copy of the CEA gene, the disease began to crop up when that notable dog appeared in both the dam's and sire's lineage. Currently, some of the best herding dogs are carriers and the ABCA has recommendations for:

1) owners of known carriers, i.e., those dogs which are the parent of a CEA-affected puppy. ABCA recommends that anyone who inquires about the dog's progeny or as a mate be told that it is a carrier. It also recommends that people who have any of this dog's progeny be informed that all its offspring have a 50% chance of also being a carrier even if the other parent is neither a carrier or affected.
2) breeders of a litter in which *one parent is a known carrier.* The ABCA recommends that all puppies in the litter be given an ophthalmic examination by a DACVO before they are 12 weeks old, if possible.
   If this cannot be done, it is recommended that the puppy buyers be informed that they must determine from an ophthalmic examination that the dog is not affected with CEA before it is considered for breeding, as the progeny of affected dogs are not eligible for registration.

We are hopeful that Dr. Acland will develop a DNA test in the next few years which can identify dogs that are genetically clear of the disease. That is, the test will identify with 100% accuracy dogs that have no bad copies and so do not have the disease nor do they carry a recessive copy of the CEA gene. A puppy with even one parent that is a genetically clear dog will not have the disease. If the other parent is a carrier, each puppy has a 50/50 chance of being a carrier, but it will not have the disease.

Autosomal recessive diseases like CEA show up because people have line bred to top herding dogs which happen to carry one bad copy of that gene, eventually doubling up on it and causing affected progeny. It is not a disgrace. It is something to be bred away from by using knowledge that the current and future tests provide. Remember, every dog carries mutations which range from very good to very bad. By working cautiously but conscientiously, we can rid the breed of Collie Eye Anomaly without increasing the chances of some other potentially dangerous mutation gaining strength.

La Plata County 4-H Stock Dog Project Funded for 2000

The La Plata County 4-H stock dog project was awarded $3000.00 from the ABCA.

This is the 5th year of the project and it has 12 members between ages 10 and 17. These participants meet year around and twice a week April through August to train their stock dogs. The project emphasizes not only stock dog training, but proper handling of stock, proper care of the dogs and how to have a life long companion.

The project is a county project in which each member is not only required to train their dogs but to be interviewed by a judge on what they have learned and accomplished. They keep record books that are also judged. The judging is done at the county fair in which a Grand Champion and Reserve Grand Champion are chosen. Finally each participant must be involved in a demonstration at the dog trial during the fair.

The funding was divided into 2 parts. The first, to fund clinics with top stock dog trainers in the country. This year Bill Berhow gave clinics in April and in August. ABCA required that the clinics be given to the participants in the 4-H stock dog program who have registered Border Collies. Each member currently has a registered Border Collie.

However, for those families who did not have registered dogs the second part of the program was designed. It was a puppy placement program in which the funds purchased registered Border Collies for qualified 4-H participants. All, of those kids receiving puppies were required to have strict attendance, stay with the program for 2 years of training, participate in the recording keeping and fulfill the 4-H requirements of their project as well. The scholarship program placed the puppies in a working environment. Two of the 4-H members received dogs through the puppy program.

Currently 5 member of the 12 have successfully competed in dog trials winning novice, pro novice and open classes. We believe we are one of the few stock dog projects in the country of this kind.

United States Border Collie Handlers' Association

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* Looking for parties interested in hosting the Cattle Dog Finals Spring 2001.
* The new rules for Cattle Dog trials will be posted on the Cattle Dog website.
* National Sheepdog & National Cattle "Bid Packets" ready to send out.
* The 2002 Proposal Bids for National Finals must be received by January 1, 2001

Visit our upcoming new website (will be in service mid October) www.Cattledog.org

National Finals Website
http://www.surfedmond.com/2000_Finals.htm
http://www.bordercollie.org/usbcha.html

Year 2000 Officers:
President:
Mike Canaday (254)722-8776
Vice-President:
Pat Collins
Secretary/Treasurer:
Francis Raley

Application Information - Membership Year: 11/1 - 11/1

I would like to become a member of the USBCHA (check one category):

❍ GENERAL MEMBERS ($25.00 annual dues) are those who have run a dog at any level (Novice, Pro-Novice or Open) in any trial sanctioned by the USBCHA within two years. General Members have the right to vote at membership meetings, in person or by proxy, and are eligible to qualify for the National Finals and Nursery Finals. Annual dues for General Members is $25.00.

❍ LIFE MEMBERS ($250.00 lifetime dues) are those who are eligible for General Membership, and have paid a one-time fee of $250.00. Life Members have the right to vote at membership meetings, in person or by proxy, and are eligible to qualify for the National Finals and Nursery Finals.

❍ ASSOCIATE MEMBERS ($25.00 annual dues) are those who, though not meeting the eligibility requirements for General Membership, are interested in being members of the Association and receiving information disseminated by it. Associate Members have no voting rights. The annual fee for

Name: _____

Address: _____

City/State: _____ Zip: _____

Phone: _____

Mail form and dues to: USBCHA, Francis Raley - Secretary
2915 Anderson Lane, Crawford, TX 76638

Summary of ABCA Member Survey 2000

351 Surveys were returned.
51 of the 351 had written comments.

1) My primary purpose for owning a Border collie(s) is:

	*1 Choice		Numbers of times marked	
	Number	%	Number	%
Farm or Ranch	196	49.4%	267	32.3
Herding	57	14.4	146	17.7
Breeding	30	7.6	151	18.3
Obedience	2	0.5	30	3.6
Pet	99	24.9	203	24.6
Other:	13	3.3	29	3.5
Agility	6	<1%	15	<1%
Drug detection	2		2	<1%
Search & Rescue	1		2	<1%
Therapy	1		2	<1%
Goose Control	1		2	<1%
Guard Dog	1		2	<1%
Frisbee	1		3	<1%
Total Responses:	**397**		**826**	

2) If you use your dog(s) in farm or ranch work or herding activities, what specie of livestock do you have? (If more than one, please rank)

	*1 Choice		Numbers of times marked	
	Number	%	Number	%
Sheep	133	39.0	161	36.7
Beef cattle	150	44.0	184	41.9
Dairy Cattle	17	5.0	26	5.9
Swine	5	1.5	14	3.2
Other:	36	10.5	54	12.3
Goats	22	6.5	30	6.8
Horses	8	2.3	10	2.3
Poultry	11	3.2	20	4.6

3) At the present time, do you have access to Internet?

YES 233 No 117

If No, do you anticipate having Internet access in the future?

YES 59 NO 59 UNDECIDED 2

4) For a small per transaction fee, would you be interested in being able to do an online pedigree search?

YES 173 NO 81 UNDECIDED 92

5) Would you be willing to sacrifice the 5th generation on the registration papers, in exchange for a picture, drawing, or more information about the dog?

YES 120 NO 117 UNDECIDED 106

ABCA Office and Staff

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The ABCA office staff includes: Patty Rogers, Leona Dedeaux, Karen Dedeaux, David Rogers, and Beth or Daniel Rogers. Applications are only accepted by mail. All necessary signatures are required. Requests for information and forms can be sent by fax or e-mail.

Hip Dysplasia in Border Collies

Everyone wishes that there were no genetic problems lurking in the dogs we breed, sell and buy. However, the reality is that, whether we know it or not, there are genetic flaws in every dog. One of the hardest genetic problems for everyone to deal with is Canine Hip Dysplasia (CHD). The Orthopedic Foundation of America (OFA) data on Border Collies from the 24-year period from 1974-1998 shows a CHD incidence of 12.1% in the films submitted to them for evaluation. Given that many, if not most, hip x-rays are screened for favorable OFA ratings by the dog owners' veterinarians before submission to OFA, a reasonable person might conclude that the actual prevalence of CHD in Border Collies is twice that figure. At this rate one out of every four or five Border Collie puppies will develop CHD; and some of them will need medical attention which can range from dietary supplements to total hip replacement.

Why do dogs have hip dysplasia? Is it a disease? Is it inherited? Is it environmental? Are the human breeders of a dog with hip dysplasia to blame? Can breeders do anything to reduce the number of dysplastic dogs? Is the way a dog is brought up important in developing normal hips? How much can the ABCA do to curb Canine Hip Dysplasia?

Many of the brightest and the best minds have been trying to crack this intractable puzzle for more than 30 years. There are no guarantees and no quick fixes. Foundation breeders of working Border Collies generally agree that excellence in herding ability is far and away the most important and difficult goal of breeding Border Collies. Factoring in what makes a dog stay sound for its lifetime of hard work is one element in reaching that goal.

The condition's name has two parts: dys and plasia. "Dys" (bad) is not the same thing as "dis" (not). The prefix "dys" means bad or abnormal. "Plasia" refers to forming, changing, growing, molding, developing. Think of the condition as an abnormal or bad development of the hip joint.

When a badly formed joint starts to degenerate after a period of time ranging from a few months to many years, the dog has the disease called Canine Hip Dysplasia. HD is not limited to dogs. All animals, including humans, can have badly formed hip joints. When one or more of the following, a bad fit, poor cartilage quality, poor muscle strength or a weak ligament, allow wear and tear on the joint so bone rubs on bone, remodeling of the bones takes place which can be so painful that it restricts free movement. Humans call it osteoarthritis and it has become a problem for that individual.

Is CHD inherited or environmental? In a word, "Yes." There is an inherited component because the shape of the hip joint, the quality of the cartilage, the potential muscle mass, and the connecting ligament is as much a product of the dog's genes as is the shape of its skull. There is also an environmental component in which CHD can be aggravated or suppressed.

There is a huge range of possible hip formations. The two parts of the hip joint can fit together perfectly or they can be practically disunited, or anything in between. If the shape of the socket (the acetabulum) is shallow with rounded edges and the top of the leg bone (head of the femur) is shaped so it makes poor contact with the socket, the hip has bad formation (dysplasia) and will very likely develop painful Degenerative Joint Disease (DJD) no matter how carefully the puppy is brought up. If, however, the socket is cup shaped and almost half of the head of the femur is seated inside it, how the puppy is brought up can influence whether the puppy's hip joint becomes diseased. Finally, if the shape of the socket is a deep cup with a strong rim and more than half of the head of the femur fits snugly inside it, the hip joint could probably withstand environmental stresses and not develop painful degenerative joint disease.

Many people want to know if breeders are responsible for canine hip dysplasia. Are they? The production of a puppy and its development into a dog has two parts: the breeder determines which sire and dam provide the puppy's genes and the nurturing actions of the persons bringing the puppy up can influence the expression of those genes. There is not one "hip gene." The complex hip joint is determined by many genes (polygenic), half from the dam and half from the sire. The better the hip joint of both parents, the better are the chances of a good hip joint in the puppies. However, the many genes involved combine in random ways and two dogs with good hip formation can produce a puppy with terrible hips. Still, it is likely that *most* of their puppies will have better-than-average hips.

General advice to dog breeders is to use at least one of the accepted radiographic ways to evaluate hip formation of all breeding animals and to gather radiographic information about as many of the dogs in the potential breeding pair's pedigrees, including their siblings and offspring, as possible. The more dogs having good hip formation in the pedigrees, the better the chances of puppies with normal hips. The only way a dog's hip formation can be evaluated is through x-rays. It cannot be checked by observation and a veterinarian cannot tell by feeling the joints. A veterinarian experienced in taking hip x-rays knows how to position the sedated dog's legs to get an accurate picture of its hip formation. Usually, canine orthopedists have more experience interpreting hip x-rays than veterinary generalists.

Does this let the puppy buyer off the hook? Not really. The puppy buyers can ask about hip-evaluation history in the parents' backgrounds. If the breeder makes use of the Orthopedic Foundation of America (OFA) the ratings of all the normal-hipped dogs in the pedigree will be listed on OFA's web site. As some buyers of puppies from working backgrounds seem to expect a guarantee that the dog will have no genetic problems, it is certainly something to be discussed before the puppy departs for its new home.

Now the puppy is home with the new owner where the environmental part of hip development continues. Studies have shown that puppies which are grown slowly and kept from rough physical activity have improved chances of normal hip development in borderline cases. This is because puppies which are kept lean and given good quality, lower protein adult dog food experience a more appropriate growth rate of their bones, ligaments and cartilage. The type of activities puppies engage in also contribute to its

hip development. During the first year or two it is recommended that rough play, excessive jumping, quick stops and turns, exercise on hard surfaces, and romping with bigger dogs be limited, as wear and tear like this may cause injury and remodeling of the hip joints.

Now we come to the ABCA. What, if anything, can a breed registry do to reduce the incidence of canine hip dysplasia and the disabling degenerative joint disease of severe cases? A disease with multiple genes involved in its cause and so many environmental components in its expression is a very difficult problem. That said, other dog breeds have increased the percentage of dogs with normal hip formation when those with poor hips were identified and not bred. Owners of working Border Collies can have hips which receive a normal grade by the Orthopedic Foundation of America (OFA) recorded on the dog's ABCA pedigree by sending the original registration certificate and the OFA certificate (and the processing fee) to the registry office in Perkinston, Mississippi. The ABCA encourages breeders to examine the hip scores in as many relations in the breeding pair's family as possible and it encourages puppy buyers to ask about this information. See the shaded box for preliminary data on what are the chances of getting good or bad hip formation from various mating combinations.

Members of the ABCA eye-hip committee are looking at current studies as well as data from the past 20-30 years to develop a breed-specific strategy to help breeders improve their puppies' chances of having normal hip formation.

Submitted by the ABCA Eye/Hip Committee
Sally Lacy, Chairman
Denise Wall, Mellissa DeMille, Amy Coapman

The only available predictive OFA figures are those they have extracted from some unspecified dog breeds in their data base. As soon as they can be obtained, data for Border Collies alone will be subjected to a similar analysis.

1. **When Dogs with Good or Excellent ratings are mated, there is a 12.5% incidence of puppies developing CHD, 87.5% will have normal hips.**
2. **When a dog with hips rated Good or Excellent is mated to a dog with hips rated Fair, the incidence of CHD puppies rises to 15%, with 85% normal.**
3. **When a dog which is dysplastic is mated to a dog rated Good or Excellent, the incidence of normal-hipped puppies drops to 75%, and the incidence of CHD jumps to 25%.**