

So, there's going to be an eye clinic and you might like to have your Boston examined, but what can you expect?

by Leasa Garvin

What is CERF?

The Canine Eye Registry Foundation, CERF, was founded by a group of concerned purebred owners/breeders with the goal of eliminating heritable canine eye diseases through registration, research and education. A registry is maintained of several purebred dogs including the Boston Terrier. In order to have your Boston Terrier registered with CERF, the dog will need to pass an exam performed by a veterinary ophthalmologist certified by the American College of Veterinary Ophthalmologists (ACVO). A list of qualified vets (diplomates) in your area can be found on the ACVO web site <http://www.acvo.com>.

One of the prime goals of CERF is to maintain an accurate research database of facts received from the exams done by the Diplomates and make the data accessible to anyone. A dog can be registered with CERF after the exam is completed and the paper work and a fee are mailed to CERF. All dogs examined by the Diplomates are recorded in the CERF research database as a statistic. All names are kept private unless the owner pays to have their dog's information made public. Reports are used as a resource to help breeders and ophthalmologists identify trends in eye disease. CERF is interested in educating breeders and the general public about inherited eye problems and hopes through its efforts eye problems can be greatly reduced in future generations of careful breeding.

Why have your Boston CERF examined and registered?

The goal for many breeders is to breed dogs that are clear from inheritable forms of eye disease in order to maintain a healthy gene pool for the future. The goal is to have healthy puppies, which will grow up to be healthy breeding stock. Since eye problems can cause many problems, including blindness, responsible breeders need to do all that is possible to eliminate the chance for problems.

By registering with CERF, you make public the fact that your dog is free of major inherited eye disorders and possibly a good breeding candidate. (Of course, this assumes the dog meets the breed standard and is free of other known health problems.) When you register a dog (one who passed the exam without major eye problems) with CERF, a certificate is mailed to you with a number that is good for one year from exam date. Annual re-registration is required to assure your dog's eye health and to



Dr. Bachrach examines Diamond's eye, looking for using the slit lamp.

be current on CERF registration. A dog that has no eye problems is considered clear for one year. The CERF number is recorded with AKC for dogs clear of eye problems and the number will appear on the dogs registration slip and certified pedigree. If your dog fails, the data is recorded for research purposes only and is kept strictly confidential.

What it all means

If your dog is clear, you can get the certificate from CERF by filling out the back of the form and sending in the fee.

The ACVO has two classifications for identifying if a dog with an eye disorder should be bred. If your dog has a disorder that is listed as "Breeders Option" you will need to decide if you wish to use the dog for breeding. Often the ACVO Diplomate can give you advice based on experience. If your dog has a "NO", the experts feel you should not breed this animal because the disorder is considered inheritable and may cause impaired vision or blindness.

The choice to breed or not to breed is yours. You are ultimately responsible. You can get advice from others and listen to the experts, but the final decision is yours. The healthy future of the Boston Terrier breed may be resting on your decision.

Signing up for the clinic

When signing up for a clinic, ask if it is for CERF and will be done by a Diplomate. Ask for a time that is good for you. Imagine, if you live 4 hours away from the clinic and they schedule your Boston in for the first time slot of 8 am! The person doing the scheduling may not know your situation and will just plug dogs into time slots. If you live more than an hour from the clinic let the organizers know so your dog can be plugged into a convenient time slot allowing for travel time.

Ask if there is a multiple dog discount offered by the vet or the club. At one clinic I saved \$5 per dog just by asking if there was a multiple dog discount. It was not publicized on the flyer and it added up to a decent saving on the 9 dogs I had checked that day.

A specialty club may be sponsoring the clinic; the club may be picking up part of the tab as a membership benefit. The Boston Terrier Tea Party, BTTP, recently held a clinic and my friend Vicki Kennedy and I were both given a discount just for being club members. We had 16 Boston Terriers to examine between us, making up half the Boston Terriers at the clinic. CERF offers a discount for registering 10 or more dogs at the same time.

Fill out the sign up form completely and neatly and mail it well in advanced of the deadline. It is important for the day to run smoothly that paperwork is completed accurately. Ask for a conformation of your appointment.

Clinic Day, before you leave home

Bring the AKC number of your dog and be prepared to answer questions such as the date of birth, sex, coat color and tattoo or Microchip number. In order for the CERF number to appear on your dog's registration papers your dog must have permanent ID such as a tattoo, microchip or DNA profile number. A certificate with N will be issued for dogs without permanent ID.

Keep in mind the day of the clinic can be a little stressful for you and your dog. You may have to drive some distance to get to the ophthalmologist's office. Your dog may be nervous or stressed about being at a vet office. My dogs love to go for rides, even better if the destination is several hours away.

A stress you may face... the ophthalmologist may find a problem in your dog's eyes and you may have to make some important decisions regarding your breeding program. Several of the eye problems that will cause a fail on the CERF examine have a recommendation of "No--do not breed". Others are listed

as “Breeders Option”. Think about the possibilities before they happen to you.

Load up your dogs and x-pen, your paper work, water and snacks and head to the clinic.

At the Clinic

Upon arrival at the clinic, the clinic organizer and the vet staff will greet you. If you have more than one dog, there may be a helper available to hold a dog for you. First order of business is to complete the CERF paper work. A form with several questions to answer and lots of bubbles to fill in to correspond with the information will need to be completed. It is very important to get all the information correct. If you are with a friend, have them go over the form for accuracy, otherwise ask one of the helpers to review it with you before you turn it in. This is the form the vet will use to record their findings. Take the time to double-check it while you are at the vet’s office.

What the Eye Doctor looks for

The eye exam is painless and most Bostons just stand for the exam.

At the recent BTTP clinic, the vet, Alan Bachrach, Jr. VMD, DACVO, owner of the Veterinary Ophthalmology of New England in Petersham, MA., said he wanted to check for persistent pupillary membrane or PPM, before he started his regular CERF exam. Dr. Bachrach explained that many vets do not check for PPMs when in the clinic situation. He, and others, feel it is very important to check for this condition. It needs to be done before eye drops are put into the eyes to dilate the pupil.

To do the exam for PPM, Dr. Bachrach looks into the dog’s eye with his penlight and slit lamp.

He is checking to see if any tiny amount of a membrane (or strands of blood vessels), which should have disappeared before birth, are still present within the eye. They may sometimes be present at birth and may disappear during the first few months of life. There are 4 types of PPMs the Diplomates look for in Boston Terrier eye. They are Iris Sheets, Iris to Cornea, Iris to Lens and Iris to Iris PPM. Presence of the first three types will mean a fail of the CERF exam. These types may cause poor eyesight or blindness. The presence of the last type, Iris to Iris, PPM does not constitute a fail and a certificate from CERF will be issued as “Breeders Option”. Both eyes are checked and any finding recorded on the forms.

Following the exam for PPM, the vet puts some drops in the eye and we wait 15 minutes or so to begin the rest of the eye exam.

When your dog’s pupil is opened wide from the medicine, the vet can look inside the eyeball and check for other eye ailments. The exam begins with the eyelids, then to the structures in the front of the eye, and lastly the portions in the back of the eye. Three different instruments will be used.

Cataracts, a cloudiness of the lens can be detected. Bostons have at least two forms of inherited cataract. One type, early onset, shows up in young dogs under the age of 2. The other type, late onset, occurs after 4 or 5 years of age. Both can cause blindness and a responsible breeder would not want to knowingly breed dogs with cataracts. It is believed that inherited cataracts are found in both eyes. Sometimes a cataract will form in one eye with an injury and this may not be inherited cataracts.

Another condition, Corneal Dystrophy, displays as a whitish gray spot on the cornea. This condition happens when part of the inner lining of the cornea is missing and fluid replaces it. The swelling can cause loss of vision. There are two types are Corneal Dystrophy-epithelial/stromal and Corneal dystrophy-endothelial seen in the Boston. The first type is listed as “Breeders Option” the second type is listed as “NO” for breeding according to the ACVO and CERF.

After looking at the inside of the eye an exam of the eyelids and tear ducts takes place. If extra eyelashes appear on the eyelid, Distichiasis is listed on the CERF form and this is a “Breeders



Drops are placed in the eyes to dilate the pupils.

Option” both the upper and lower lids of both eyes are checked. Distichiasis can cause problems if the eyelashes irritate the cornea. The third eyelid is checked for problems such as cherry eye where a tear gland may bulge out or not work properly or be red and inflamed.

Before the vet signs the form he checks and writes in the tattoo number or microchip number.

We have only discussed the common eye disorders that affect Boston Terriers. You can get lots more information on the Internet. The ophthalmologist conducting the clinic you attend will also be able to help!

A good site to check out with lots of information is Dr. Dennis Hacker’s site <http://www.animal-eye-specialists.com/handout.htm>. Other sites with lots of information, the CERF Internet site at <http://www.vmdb.org/cerf.html> and the ACVO site at <http://www.acvo.com/>.

Glossary of some words not explained in the text:

Lens--the part of the eye that focuses the image, it is located between the iris and the retina.

Iris—The colored part of the eye you see. It is located in front of the lens.

Cornea—The clear part at the very front of the eye ball.

Third Eye Lid—Soft tissue located on the nose side under the eyelid.

Acknowledgments and References:

- Thank you to Dr. Alan Bachrach for allowing me to photograph him during his eye clinic and for checking my article for accuracy.
- Thank you to Karen Graham and Lisa Perry, from CERF who answered many questions over the phone regarding this article.
- Sheryl Krohne, DVM, MS, DACVO and Dennis Hacker, DVM, Diplomate, ACVO for answered questions regarding this article.

Book

- Ocular Disorders Presumed to be inherited in purebred dogs, ©1999 American College of Veterinary Ophthalmologists. This book is available from CERF for \$35.00.

Websites

- Canine Eye Registry Foundation, CERF web site at <http://www.vmdb.org/cerf.html>
- Dr. Hacker’s site <http://www.animal-eye-specialists.com/handout.htm>
- American College of Veterinary Ophthalmologists site at <http://www.acvo.com/>