

# NEBCA Breeding Policy

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In continuing centuries of effort to produce the best herding dogs in the world, NEBCA advocates the breeding of only genetically sound dogs of proven working ability. All breeding dogs should be healthy and fit in accordance with the veterinary standards of the day. Breeders should understand that having a dogs hips x-rayed and approved is not sufficient in preventing hip dysplasia. It is suggested that breeder's be more aggressive with the idea that the genetic problems in our dogs are carried in bloodlines and they are urged to start thoroughly tracking litters, siblings, and parents siblings. The information gathered should then be used in selecting breeding stock. Breeders are urged to voluntarily remove questionable dogs from their breeding programs. When choosing replacement breeding stock, include in the evaluations the bloodlines with consistently better hips. No dog should be bred unless its eyes have been checked and certified free of Collie Eye Anomaly & Progressive Retinal Atrophy by a board certified Veterinary Ophthalmologist. Dogs with certified eyes that come from a litter, or produce any pups, with genetic eye problems should not be bred.

It is suggested that breeders keep a record of where their pups have been placed and maintain a purchase agreement with the buyer. In part, the purchase agreement should carry two clauses: 1) that buyers are encouraged to have eyes and hips checked and notify the breeder of the results; 2) the breeder will issue a disclosure statement to all owners of a litter found to contain a genetic problem.

## Buyer's Breeding Guidelines

To participate in the process of breeding Border Collies is to build upon centuries of effort to produce the best herding dogs in the world. The dual goals of this process are: 1) the raising of reliable working dogs that are 2) free of genetic health problems.

These dual goals have five areas of consideration:

- Pre-Breeding Health
- Working Traits
- Record Keeping
- Genetic Disorders
- Puppy Health

## Pre-Breeding Health

All dogs should be of good vigor and well exercised. Females are best bred between 2 and 8 years of age. They should have a complete physical and external reproductive tract examination and, be free of genetic health problems. Prior to breeding, vaccinations and booster shots for rabies, parvovirus, distemper and other contagious diseases should be updated to ensure some initial protection for the nursing puppies.

Heartworm and lyme disease tests, and fecal checks should be negative. A test for brucellosis is advisable. Males should also be current with physical exams, heartworm, lyme and fecal tests and, free of genetic health problems. They should be checked for cyrtorchid. A test for brucellosis is advisable.

### Working Traits

Beyond the goal of identifying what genes and problems to exclude in breeding, breeding programs should affirm the qualities and traits we want to encourage. Desirable traits center on power and balance, but also include endurance and stamina, longevity and durability, intelligence and athleticism, courage and loyalty, and temperament, factors all in the breeding of the best Working Border Collies. The best way to judge the potential working ability of a puppy is to watch the parents work. A beginner with working dogs may need help in separating good or poor working ability from good or poor training and/or handling.

### Record Keeping

Evaluating offspring is the most important factor in deciding if a breeding program is producing genetically sound and temperamentally fit, working dogs. A responsible breeder will keep good records. Do not hesitate to ask to see the results of hip and eye exams, or pedigrees. Established breeders will have owner names for all previous puppy placements from whom you can choose names to contact.

### Genetic Disorders

Evidence to date indicates that genetic problems can be significantly reduced by more strictly evaluating the bloodlines (ancestors, siblings and progeny) of breeding stock. Genetic disorders vary in the Border Collie. They include, but are not limited to, eye diseases, epilepsy and skeletal diseases. The two pressing problems today are the eye diseases and the skeletal disorder called Canine Hip Dysplasia.

### Eye Diseases:

There are two inherited eye diseases that affect Border Collies, Progressive Retinal Atrophy and Collie Eye Anomaly. Examinations are done by a veterinary ophthalmologist.

#### Progressive Retinal Atrophy (PRA)

There are two forms of this atrophy. Generalized PRA starts in the eye's periphery and spreads to affect the total vision field. It rarely leads to total blindness. The rare Centralized PRA is a central blindness of stationary objects that leads to total blindness. Dogs are checked at 2 years of age for these problems, and because of the progressive nature of the disease, they must be examined throughout the breeding life.

#### Collie Eye Anomaly (CEA)

CEA is not a progressive disorder, is present at birth and is detectable as early as 4 weeks of age, with 6-8 the usual time for the exam. Puppies should be checked as, occasionally, mild cases of CEA can be masked by developing pigmentation during normal eye development. Mild cases may never have problems while in severe cases there may be retinal detachment and bleeding leading to total blindness. There is no effective treatment. Cleared Dogs can be 'normal eyed carriers' and produce severely affected puppies. Dogs with either problem, cleared dogs that have affected offspring or dogs from litters where these eye problems exist, should not be bred.

### Canine Hip Dysplasia

Hip Dysplasia has long been considered to be an abnormality of the hip joints. However, recent evidence suggests that it may be a disease that can also affect the shoulder and knee joints and the joints between the vertebrae. It is in the hips where it is most likely to occur and cause problems. Puppies are born with normal hips, and it is only after birth that the abnormality appears. In a few weeks a laxity, or progressively loose fit, develops where the end of the thigh bone fits into the socket of the hip. This loose fit allows excessive movement of the thigh bone during normal activity such as weight bearing, walking, running & play. This ultimately leads to wear and tear on the bone and the inflammation of smooth cartilage covering both the bone and the socket. In addition, the ligament holding the thigh bone in place stretches and becomes thick and inflamed, cartilage erodes and is eventually lost while bone spurs develop which remodel the normal shape of the bone and socket. Canine Hip Dysplasia occurs in various degrees of severity. The severest cases will show in puppy hood with the mildest cases perhaps never being detected. Its manifestations will range from no apparent problems to complete loss of the hips. Dysplasia is detected by radiographs with the most accurate testing time after two years of age.

### Puppy Health

Puppies should be in a warm, dry and ventilated space. They should be examined, wormed, and inoculated in accordance with the veterinary standards of the day. They should be well handled and socialized to people. Common puppy diseases are distemper, hepatitis, leptospirosis, parvovirus and parainfluenza. They are controlled by a series of vaccinations, before and after they go to their new homes. Puppies should be examined promptly by the new owner's veterinarian. The first rabies vaccination is at three months, with the adult booster vaccination received at one year of age. Testing to date indicates that both over feeding of high energy protein food and various forms of environmental stress can worsen canine hip dysplasia. Even though dysplasia is genetically based, these compounding environmental factors must be understood by the puppy owner.