

Abbreviations Used on Sunnynook Large Munsterlander™ Pedigrees

The front page is a **Certificate of Registration**, the back a **Pedigree**. All the documents to verify this certificate are kept by Sunnynook Kennel and the LMAC Registrar as a permanent record. Your Sunnynook dog has a **registered name** preceded by a **kennel name**. For easy tracking of progeny, names in the first litter start with A, then B and so on. This allows us to recognize the dog's relatives at a glance. We encourage you to keep your dog's name short and to use it to avoid confusion. Occasionally owners choose a separate call name that is also recorded.

Below are explanations of abbreviations that reflect tests, conformation and health traits that we consider the basis for our selection and breeding of Sunnynook Large Munsterlanders™. Other voluntary designations are included in keeping with suggestions by VGM representatives at the 2007 Annual Meeting in Minnesota. Should German breeders wish to import dogs from North America, this Sunnynook Kennel approach will give them a dog with very similar, if not identical breeding criteria. Coupled with the optionally recorded forest traits, our pedigrees give German breeders the kind of information they expect to have on their own pedigrees.

Breed Registries

CLP = Czech Longhair Club

- Member of the international kennel club *Fédération Cynologique Internationale* (FCI)

DDR & KR = dogs registered in the former East Germany

LMAC = Large Munsterlander Association of Canada

- Operates a breed registry for Canadian and participating U.S. breeders, incorporated under the Animal Pedigree Act of Canada since 1999.
- Traces its roots to 1977 when its precursor, LMCNA (1977-2011), was formed in Alberta, Canada.

“**Cxx/xx**” = Registration Number & Tattoo, placed near the base of the inside of the right ear.

- C stands for registered in compliance with the Animal Pedigree Act of Canada.
- xx/ sequentially numbered by whelp date, females then males, then alphabetically by name.
- /xx birth year.
- Tattoo abbreviated to Cxxxx when placed in right ear.

LMCNA = Large Munsterlander Club of North America (1977-2011)

- See <http://www.lmcna.org>
- LMCNA registration numbers and tattoos follow the same convention as LMAC, but without the C.

ÖHZB Gr. Mü. = *Österreichisches Hunde Zuchtbuch Grosse Münsterländer*, Austria

- LM registry for Austria
- Member of the international kennel club *Fédération Cynologique Internationale* (FCI)

ZGM = *Zuchtbuch Grosse Münsterländer*, Germany

- Studbook for the Large Munsterlander maintained by the Verband Grosse Münsterländer e.V. (VGM)
- VGM was incorporated (= e.V.) in 1919 and owns the LM breed standard #118/b
- Member of the international kennel club *Fédération Cynologique Internationale* (FCI)

Field Tests

JGHV = Jagdgebrauchshundverband. JGHV, founded in 1899, is the parent organization through which all German breed clubs have a voice in the national administration for dogs (Verband Deutsches Hundewesen, VDH) and in decisions by the international kennel club FCI. JGHV administers some of the upper level tests (VGP), while breed clubs administer VJP and HZP in collaboration with JGHV.¹

In North America a fledgling companion to JGHV was created, called **JGV**. Dogs are unfortunately only eligible to enter JGHV or JGV tests if they are registered by a German, Austrian or Czech breed club. This limitation is an effort to resist the creation of subdivisions undermining the breed's hard won reputation.

- **VJP** = Verbandsjugendprüfung, literally, the association's youth (Jugend) test.
- **HZP** = Herbstzuchtprüfung This test is dubbed the breeder's test for its central importance, hence Zucht or breeding. The test is typically held in the second autumn after a pup's birth, hence Herbst.
- **VGP** = Verbandsgebrauchsprüfung, in use since 1892, Gebrauch meaning use or utility.
- **Sw** = Schweißprüfung or blood tracking test. TF = Tagesfährte or same-day track, or UF = Über-Nacht-Fährte over night track.
 - I-III = Prize I or Excellent, II Very Good and III Good.

For VJP and HZP only the score is reported and these speak for themselves. For VGP and Sw, score and Prize I-III are given.

NAVHDA = North American Versatile Hunting Dog Association (<http://www.navhda.org>), was started in 1969 in Canada as a tool for breeders to help maintain the field- and water-work characteristics of newly arriving and increasingly popular versatile hunting dogs. NAVHDA has since moved away from primarily a tool for breeders, by starting a for-fee registry in competition with breed clubs. NAVHDA's additional shift to include a dog sport orientation (e.g. Aims, Programs & Test Rules; p. iv) has been popular. NAVHDA offers over 200 tests in Canada and the U.S. each year.

NAVHDA uses approved judges for evaluating field work and a modest amount of conformation. Its scoring system employs a combination of raw scores multiplied by an index to give desirable traits more weight (= index selection) and also a pre-set range for each of Prize I – III categories (= independent culling levels). In the advanced UT and INV tests, training and obedience is a major factor being evaluated.

- **NAT** = Natural Ability Test (up to 16 mos. of age)
- **UPT** = Utility Preparatory Test
- **UT** = Utility Test
- **INV** = Invitational Test (requiring first a Prize I in UT)

VHDF = Versatile Hunting Dog Federation (<http://munster.sasktelwebsite.net/VHDF-Canada.html>), was started in 2007 to provide a tool for hunters and breeders. Any breed or dog is eligible to run and no registration certificate is compromised. Approved judges must be hunters and are trained to evaluate the highly heritable hunting-ability traits, as distinct from trained attributes. VHDF also offers a blood tracking test following the German system. VHDF operates in Canada and the U.S., responding to minor differences between countries.

- **HAE** = Hunting Aptitude Evaluation (up to 18 months)
- **AHAE** = Advanced Hunting Aptitude Evaluation
- **PE** = Performance Evaluation
- **BT** = Blood Tracking

Hunting-based Performance Tests

One unique feature of the JGHV testing is the possible recording of specific performances in an actual hunting setting, in addition to a dedicated test. The performance while hunting needs to be observed by an approved judge and reported via a signed letter kept on file. In LMAC, where these traits are not required for breeding and pose little or no conflict of interest, LMAC has accepted owner reports, supported by observers where possible.

Voice on pursuit of game. Today hunters can use GPS units to locate dogs. The voice selected for in versatile dogs and hounds did not only achieve locating, it allowed the hunter to distinguish mere following a track, from active chasing of an animal by sight or having brought an animal to stand. These traits have been in use for more than a hundred years. These uses are among the oldest uses of hunting dogs across cultures, including indigenous peoples in North America.

- **spl** = Spurlaut. Dog gives tongue while tracking rabbits, fox or ungulates, stops vocalizing when track is lost and resumes when track is re-found. Voice tends to be more subdued and with longer intervals between barks than when chasing by sight.
 - **LoT** = equivalent in English, Loud-on-Trail.
- **sil** = Sichtlaut. Dog gives voice while chasing rabbits, foxes or ungulates.
 - **LoS** = Loud on Sight
- **Standlaut** = Voice given when a pursuing dog has caused a game animal to stand to defend itself. It can be included in sil but voice tends to be more aggressive in tone.

“Lost” or complex retrieves. A versatile dog is expected to have enough independence to tenaciously pursue crippled game even out of sight of the hunter when necessary.

- **Vbr** = *Verlorenbringer*, or retrieve of lost game, is typically understood to be a retrieve of a wounded hare or fox that the dog has not seen but tracks out of sight, finds, catches and retrieves. This kind of work can be observed in hunting practice, including on pheasants.
 - **RbT** = Retrieve by Track.

- **Btr** = *Bringtreue*, or retrieving commitment. The test involves a fox laid 2 hrs. prior in a thicket at least 200 m from where the dog is sent to search, find and retrieve. The test requires that a dog overcome a natural aversion to carry a fox, showing that it is a fully reliable retriever in everyday hunting practice.
 - **RCT** = retrieving commitment test.

v.W. = vorm Walde. v.W. is a designation that frequently appears on LM pedigrees issued by the VGM. It is based on passing the slightly expanded *Herbstzuchtprüfung* by inviting those dogs and handlers that have already passed an ordinary HZP, have passed a conformation test and hip x-rays. It is intended to highlight the breeding promise of outstanding dogs. The family vorm Walde of northwestern Germany, notably two brothers Karl and Johann, were highly instrumental in founding the VGM in 1919. The first vorm Walde Zuchtprüfung was held in 1925.ⁱ

Conformation

Conformation aa/bb = Evaluations approved and maintained by LMAC.

- aa (before /) pertains to body conformation
- /bb (after /) pertains to coat conformation
- Ratings are: Excellent (exc.), Very Good (v.g.), Good (g.), Adequate (adeq.), Not adequate (not adeq.)
- Evaluation follows VGM criteria, taken from VGM test form dated May 2007.
- Also evaluates temperament by considering the dog's reaction to being examined by strangers in a neutral setting, i.e. without the distracting scent of game.

Inbreeding Coefficient

Genetic diversity in any breed is firstly influenced by the number and diversity of the founding dogs: 83 LMs in 1922. Secondly, mates should not be too closely related.

Wright's coefficient F is used to measure inbreeding. For example, an offspring from a first cousin-to-first cousin $F = 6.25$. The coefficient for your dog is based on both of its parents' pedigrees and includes the pup, and is therefore calculated over five generations.

Health

HD = hip dysplasia. This is evaluated by a board-certified radiologist describing the ball-and-socket fit and bone deformation, if any, visible on radiographs.

- **Farrow's VMI** = Dr. Farrow's veterinary medical imaging in Saskatoon requires radiographs at ≥ 18 months of age.
 - Ratings for HD-free hips by both Farrow's VMI and OFA are Excellent, Good or Poor.
- **OFA** = Orthopedic Foundation for Animals, Missouri, requires age ≥ 24 months

- **In Europe** radiographs can be taken as early as 12 months. Ratings are A = HD-free, B = Borderline, and $\geq C$ = HD with varying severity.
- **PennHip**[®] provides examinations based on the degree of displacement between ball & socket that can be achieved under pressure. LMAC has not yet considered this method as an option.

Elbow-D = Elbow dysplasia.

OCD = *osteocondrosis dessicans*, a cartilage anomaly in the shoulder joint appearing in young dogs.

Genotype xx, xx = gene 1, gene 2, etc.

- **B** = B locus Tyrosinase Related Protein 1 (*TYRP1*)². Where:
 - **BB** – is a black (& white) dog homozygous for black hair
 - **Bb** – is black but a carrier of brown colour (heterozygous)
 - **bb** – is a brown dog, ~ 1.5% LM puppies. Reflecting common origins with German Longhaired Pointer.
- **D** = a dilution of black colour caused by the melanophilin gene (*MLPH*)³. This dilute colour is a characteristic of some breeds such as the Weimaraner, which is a dilute brown. In the LM and some other breeds, it constitutes a disease characterized by hair loss and skin problems, variously called Black Hair Follicular Dysplasia, Color Dilution Alopecia or Blue Dog Syndrome.
 - **DD** – unaffected homozygous
 - **Dd** – unaffected carrier
 - **dd** – suffers from Black Hair Follicular Dysplasia.
- **Spotting gene.** All LMs, by virtue of having a breed standard that calls for black & white and not either or, have the identical genotype for spotting. Therefore, there is no need to mention this gene on the pedigree (<http://homepage.usask.ca/~schmutz/dogspots.html#Spotted>).

Spotting can greatly vary in extent of pigment on the body (plated, ticked) and its mix of black & white hairs (roan). Spotting is influenced by the gene *MITF* (microphthalmia associated transcription factor).

¹Uhde, Heinrich (1999). "Das Jagdgebrauchshundewesen: 100 Jahre Jagdgebrauchshundverband e.V. (JGHV)." Landbuch-Verlag, Hannover, Germany; 527 pp.

²Schmutz, Sheila M., T. G. Berryere, and A. D. Goldfinch (2002). *TYRP1 and MC1r genotypes and their effects on coat color in dogs.* Mammalian Genome 13:380-387.

³Philipp, U, H. Hamann, L. Mecklenburg, S. Nishino, E. Mignot, S.M. Schmutz and T. Leeb (2005). Polymorphisms within the canine *MLPH* gene are associated with dilute coat color in dogs. BMC Genetics 6:34, accessible online at <http://www.biomedcentral.com/1471-2156/6/34>.