Large Munsterlander Association of Canada® (LMAC)
Policy and Procedures Manual

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Contents

6.0 Appendices

6.1 Appointed Positions

A) Conformation Coordinator

6.2 Conformation Test and Judges

6.3 Forms

A) Litter Report Form

B) Conformation Evaluation Form

C) Ownership Form

D) Progeny Performance Award Form

1.0 Breed Name

Anglicized version of the German breed name.

The German breed name Großer Münsterländer, reflects the breed's origin in northwest Germany near the city of Münster.[1] This name has been anglicized to Large Munsterlander in North America and in other English-speaking countries. The LM world association (GMI) formed in 2019 uses Large Muensterlaender, replacing the Umlaut with the letter e.

2.0 Tests of Hunting Performance for Registration Eligibility

2.1 Background

The successful development of versatile hunting dogs in continental Europe was based on **three fundamental approaches** that are still advantageous today**:**

- Performance testing of breeding stock included tasks that hunters actually relied upon in practice. This was a departure from the prevailing idealized and partly sport-oriented field trials in the late 1800s;
- Formulating a breed standard that gives priority to a working-dog's function and this function dictated its form;
- Giving more weight in scoring to traits that have a high heritability, either demonstrated or presumed. This distinction between highly heritable 'ability' subjects as distinct from trained subjects allowed breeders to make rapid progress in their selection of breeding stock and offspring performance.

This mid-1700 drawing shows a small and larger bird dog and a leashed-tracking hound. These types were influential in creating German versatile breeds. Evidence comes from other artistic renditions and written records, corroborated by current-day molecular analyses.

In some European countries, versatility was more narrowly defined (searching, pointing, retrieving upland birds) while in others **broad versatility** also included water work and tracking on land and water, including big game. Craig Koshyk[2] draws this distinction by suggesting that broad versatility prevailed in countries east of the river Rhine and narrower versatility west. The Large Munsterlander is steeped in a broad versatility tradition that also serves hunters well in North America.

[1] Vornholt, Egon, Bruno Oelmann and Karl Wichmann (2019). "100 Jahre Große Münsterländer: Chronik des Verbandes Große Münsterländer e.V." Verband Große Münsterländer e.V., 46325 Borken, Germany, 135 pp.

[2] Koshyk, Craig. (2011). "Pointing dogs, Volume one: The continentals." Dog Willing Publications, Winnipeg, Manitoba, Canada; 365 pp.

Section 10.3 of the LMAC Bylaws points to **three organizations that train their judges to evaluate broad versatility**. The Jagdgebrauchshundverband e.V. (JGHV) was formed in 1899 to guide breed development and provide a voice for all hunting dogs and their owners in Germany. JGHV testing is contingent on registration by the original breed club that owns the breed standard, or by Weltverband-member breed clubs whose registry is approved by the founding breed club and promoted internationally by the Fédération Cynologique Internationale (FCI). In effect, this means that only LMs imported from Austria, Germany and the Czech Republic are eligible to enter JGHV tests in North America.

The North American Versatile Hunting Dog Association (NAVHDA) was modelled after JGHV when NAVHDA was founded in the 1960s in Canada. It deviated from JGHV so that it could better suit North American hunting practice (e.g. track of pheasant instead of hare, no test of loud-on-trail).

The Versatile Hunting Dog Federation (VHDF) was founded after NAVHDA experienced mission drift by creating a shadow breed registry that began in Canada. This registry violated the Animal Pedigree Act of Canada's one-breed-one-breed-association rule. The registry was subsequently moved to the U.S.[3] VHDF testing also put emphasis on evaluating primarily a dog's ability as a tool for breeders. VHDF introduced workshops and tests for blood-tracking of crippled big game with leashed dogs, which is now legal in many provinces in Canada and U.S. states.

JGHV, NAVHDA and VHDF have three types of tests for versatile dogs in the varying stages of a dog's development, exposure, training and experience, see table below. These are the core of LMAC's eligibility for registration.

- A young-dog test (Hunting Aptitude Evaluation (HAE), Natural Ability Test (NAT), Verbandsjugendprüfung (VJP)) is available up to 1.5 years of age. At this young age the dog is not amenable to rigorous training or experience. Therefore, these tests show the extent of a dog's rudimentary hunting ability inherited from its parents.
- A young adult, at approximately 1-3 years of age, has just enough maturity to have outgrown puppy behaviours. The dog can have benefitted from some hunting and training, such that it can be expected to show the extent to which it's basic ability could be shaped toward hunting. Ability combined with training at this stage shows the degree to which a dog can master the complete set of tasks before and after the shot, on land and in water. Decades of experience have shown that these advanced tests are the most successful tool a breeder can have for developing a consistent and capable line of hunting

[3] Schmutz, Joe. (In Press). "2020: The North American Versatile Hunting Dog Association (NAVHDA) Celebrates 50 Years. How did a German immigrant lead the founding of NAVHDA in Canada?" Canadian Outdoorsman.

dogs: Advanced Hunting Aptitude Evaluation (AHAE), Herbstzuchtprüfung (HZP) and Utility Preparatory (UPT) or Utility (UT) tests.

2.2 Passing Scores in Approved Tests

If a dog fails a test, it can be repeated. The pass/fail breakpoint is set so that a dog that needs assistance from the handler via voice encouragement or walking further down a track can still complete the task and thus pass the subject.

Table 1. Minimum scores and totals needed to pass in both VHDF and NAVHDA young-dog tests to qualify for application to breed. Minimum scores for VJP are the same as for AHAE.

Natural Aptitude of Young Dogs	Nose	Search	Pointing	Tracking	Water	Desire	Cooperation	Total/Prize
VHDF - Hunting Aptitude Evaluation (HAE)	5	5	5	5	5	5	5	50
NAVHDA – Natural Ability Test (NAT)	3	2	2	2	2	2	1	III

The most common “hunting level” or advanced ability tests available and their passing scores, are shown in Table 2. These are sponsored by VHDF-U.S. or VHDF-Canada and NAVHDA.

Table 2. Minimum scores and totals needed to pass in an advanced ability tests to qualify for application to breed.

Advanced Ability Tests	Field search	Pointing	Search behind duck	Nose	Desire	Cooperation	Steadiness/manners	Retrieve of shot bird	Marked water-retrieve	Blind water entry	Game drag	Walking at heel	Remaining by blind	Steadiness by blind	Obedience	Stamina	Total/Prize
AHAE	5	5	5	5	5	5	3	3	3	3	3				3		130
UPT	2	2	2	3	2	1	1	1	1		1	1		1	2		III
UT	2	2	2	3	2	1	2	1	1		1	1	1	1	2	2	III

2.3 Optional Tests and Traits

In addition to the natural aptitude and hunting-level tests, all three organization also offer a third tier of testing for the fully finished hunting dog. These tests (Invitational Test (IT) of NAVHDA, Performance Evaluation (PE) of VHDF and Verbandsgebrauchsprüfung (VGP) of JGHV) anticipate ample hunting experience

on the part of the dog and expect non-slip obedience. These tests are considered optional for eligibility but can provide much assurance to a prospective owner of the high quality of breeding stock used by a breeder.

In addition to the above tests, VHDF also provides a test of blood tracking for crippled big game. This test is also optional and is appropriate at a time when many North American jurisdictions have changed regulations to allow the use of dogs for hunting big game in response to increasing demand from hunters.[4] Blood-tracking of shot big game is enormously useful especially during the snow free part of a hunting season. The use of dogs reduces animal suffering and protects the quality of wild meat. Wildlife Acts in Canada require that a hunter makes every effort to recover shot game.

Blood Track: VHDF offers a blood track 400 m long, using 400 ml of blood spread at intervals, 4 or 12 hrs. before the test. VHDF-approved judges score performance (0-12), including the degree of difficulty provided by local conditions on that day.

As a general guide:

8 points are allocated for a completed track
2 additional points for indicating the simulated wound-bed
1-2 points for other exceptional difficulties overcome by the dog-handler team.

The score is reported on the LMAC pedigree as BT (4 or 12 hrs) X (points). A score of 6 is considered a pass in this test.

For the following traits there are no sponsored tests. LMAC relies on the owner to provide a signed and detailed description, with date and place of the event. Ideally this should be witnessed by at least one other hunter but since these traits are not required for breeding, LMAC relies on the integrity of the dog's owner. The information will be sent to the LMAC Registrar and appear on the pedigree.

Retrieve by Track: Occasionally a rabbit or hare, upland bird or waterfowl is crippled but can still walk to try and escape. When a dog tracks and retrieves such an animal independently and out of the influence of the owner (300 m or more), this accomplishment deserves to be applauded. Dogs that can show cooperation during hunting and yet act independently when the situation calls for it, can be a great asset for breeding. Reported as RbT (Species) on the pedigree.

Response to Predators: LMAC has devised a scheme whereby dogs are ranked from 0-3 based on a description of how fervently the dog responded to medium-sized predators or other game capable of defense. In North America, a dog's gumption can be witnessed when it encounters porcupines, which

[4] Jeanneney, John. (2015). "Tracking dogs for finding wounded deer." http://www.amazon.com/Tracking-Dogs-Finding-Wounded-Deer/dp/0972508929

dogs often do while hunting. Intelligent dogs learn after a few painful encounters to point or 'stand' porcupines thereby alerting the owner. While such attacks, especially if they persist with age, are undesirable, a modicum of gumption is called for when hunting geese or cranes as these, when crippled, can mount a formidable defense. Reported as RtP 0-3 (Species) on the pedigree.

Loud: Giving tongue or voice is a valuable part of hunting in Europe. It can be useful in North America also, when hunting rabbit or hares, particularly in dense cover (e.g. LMAC News Vo. 38, # 4, p. 11-12). There are two categories of voice:

- Loud on Sight, when chasing mammals. Reported as LoS (Species)
- Loud on Track. In the JGHV system, this qualification is only given when pursuing rabbits or hares, where it is particularly useful in hunting them. Reported as LoT (Species).

3. Membership to LMAC

Membership Application Form and how to join/renew
www.lmcanada.net/LMAC.html

Members agree to abide by the LMAC Bylaws http://www.lmcanada.net/LMACbylaws2018.pdf and the Animal Pedigree Act of Canada https://laws-lois.justice.gc.ca/eng/acts/a-11.2/index.html

3.1 Complimentary Membership Policy

At the LMAC board meeting on May 2, 2019 a motion was passed that complimentary membership would be for 3 years, not one year as has been the tradition for many years.

To further clarify:

- NEW owners of LMs will receive this 3 year complimentary membership.
- Owners who already have a LM currently but are not LMAC members, will receive a one year complimentary membership (paid as part of the registration fee).
- Owners of pups who are already LMAC members will not receive a complimentary membership.

4. LMAC Breeding Practice

4.1 Applying for Eligibility to Breed.

When you believe that your dog has met the **Large Munsterlander Association of Canada** requirements and wish to breed or make your sire available for breeding, mail the following documentation to the LMAC Registrar http://www.lmcanada.net/LMACofficers.html:

Sheri Hallwyler
12401 S. Casto Road
Oregon City, OR 97045
U.S.A.
Phone: 503-651-1884 (evenings)
e-mail hooch@teleport.com

Documents needed to apply for eligibility to breed:

- 1) completed Total-dog Profile (contact the LMAC Registrar for a form)
- 2) Copies of test score documents
- 3) Copy of registration certificate and pedigree (i.e. front and back)
- 4) Copy of hip & elbow dysplasia certification
- 5) Copy of conformation evaluation
- 6) Photo of your dog, in profile, showing the right side, against a plain background.

For **new kennels**, owners of LMAC-approved females should contact the Registrar for a "New Kennel Application Form." Once approved by the Registrar, the kennel name will be added to the LMAC webpage with their contact information. Please email information to the Registrar who will notify the webmaster.

4.2 Hip & Elbow Certification

Hip & elbow evaluation is required. Note that films are not returned, therefore if you or your vet wants a copy, please make one before submitting the original for evaluation. However, many vets now use digital instead of film, so then they'd have another copy.

Hips

Option 1 - Farrow's VMI in Saskatoon

- Dogs must be 18 months or older.
- Have your vet take a high quality radiograph of the extended ventrodorsal projection of pelvis and hips (including full pelvis and stifles), with dog awake or under anesthesia.
- Include a copy of the dog's registration.
- Email to Dr. Chuck Farrow at teacher7@sasktel.net.

Option 2 - Orthopedic Foundation for Animals in Missouri

- See above for x-ray procedure.
- Dogs must be 24 months of age or older.
- The evaluation charge will be explained by your veterinarian who will send the x-ray on your behalf to:

Orthopedic Foundation for Animals (OFA)
2300 E. Nifong Blvd.
Columbia, Missouri U.S.A. 65201-3856
phone 573-442-0418
fax 573-875-5073
ofa@offa.org

Elbows
Have your vet take three x-rays of each elbow: lateral, flexed lateral, and cranio-caudal projections. These x-rays may be best taken under sedation.

4.3 Total-dog Profiles

As part of a dog becoming eligibile to breed, owners of dams and sires should contact the Registrar and provide the necessary information for the Registrar to compile a Total-dog Profile. The principle behind the T-dP process is for the breeder to select a sire that complements the dam's strong and not-so-strong characteristics. When breeders of versatile dogs have 20 or more important characteristics to consider, it will be the rare dog indeed that has all these 20 with 100% satisfaction.

For the Total-dog process to work, breeders and sire owners have to have the courage to be candid in their descriptions. The Total-dog Profile is not for promotion or advertising. To protect dam- and sire-owners from misinterpretation of their candor, the Total-dog Profile is for dam- and sire owners' eyes only. For example, the text can explain that a dog had top scores in retrieving, but needed to be trained to deliver reliably to hand. Or, a dog showed excellent work in water from early puppyhood on, more so than the scores alone indicate.

When an owner contacts the Registrar, the Registrar will send a form to the owner and work with the him/her to complete this form. The Total-dog Profile has several parts:

1. A picture of the dog, showing right side, simply standing. This is often the same picture that is used for the Conformation report.
2. Basic information, including name, whelp date, colour characteristics, hips, elbows, & teeth results, and breeder and owner.
3. Scores of field tests.
4. The owner's descriptions in her/his own words of: Working Style, Training and Compensation, Temperament, Conformation, Optional Traits (e.g. Blood Track, Loud-on-Trail) and Once-on-a-Pedigree traits.
5. A pedigree

4.4 Inbreeding Coefficient

In order to maintain the fertility and stamina of LMs, LMAC recommends that the inbreeding coefficient of a dog be $\leq$ 5%. Until 2020, this was calculated from the 4 generation pedigree of each parent plus the planned pup's generation, for five generations in total. Beginning in 2020, it is calculated based on all 4 generations shown on the pup's pedigree. The method used is Wright's inbreeding coefficient F.

4.5 Genotype

Genotype is shown on the registration certificate of a LM pup. This can be based on DNA testing of each parent, or it can be derived from previous DNA testing of parents, or even grandparents, if both members of a mating were homozygous.

Coat Color (see http://homepage.usask.ca/~schmutz/LargeMunsterlanderColor.html)

BB is used for a LM that does not carry the brown allele (b) at the *TYRP1* gene. There are actually three common b alleles but most DNA labs only report b, not which allele. Brown dogs would be bb. The b allele can persist because the LM was originally part of the German Longhair breed and because some sanctioned breedings to German Longhairs were done by the VGM. Brown LMs are recorded, not registered. They are healthy hunting dogs, but not eligible to breed because they do not meet the breed standard.

DD is used for a LM that does not carry the dilute gray allele (d) at the *MLPH* gene. In LMs, dogs that are dd are born gray and white and the gray hairs gradually break off. This is also called Black Hair Follicular Dysplasia. Therefore, pups born gray will have a coat that is not protective and are generally euthanized.

HealthGene in Toronto (http://www.healthgene.com/canine-dna-testing/) and VetGen (https://www.vetgen.com/) in Michigan are two reliable labs that offer these coat color DNA tests.

Disorders

A DNA Test for Increased Susceptibility to Urate Kidney Stones is available. This disorder is also called HUU for hyperuricosuria. This DNA test is commercially available through the Veterinary Genetics Laboratory at UC Davis (http://www.vgl.ucdavis.edu/services/Hyperuricosuria.php). This disorder is not inherited as a Mendelian trait. Dogs homozygous for the mutation have an increased predisposition to develop urate kidney stones or uroliths. Susceptibility to kidney stones is higher in homozygous males ($\leq$ 35%) than females. Given the low frequency of the mutation reported in LMs (13.5%), and the low chance of kidney stones, LMAC does not require this test.

4.6 Recognized Registries

LMAC eligibility requirements (see Bylaws) are higher than those of some other countries or registration services. Therefore, only LMs registered in the following registries meet LMAC's requirements. All of these breed organizations are members of the international kennel club Fédération Cynologique Internationale(FCI)**.**

- CLP = Czech Longhair Club, which operates the only registry for LMs in the Czech Republic.
- ÖHZB Gr. Mü.= Österreichisches Hunde Zuchtbuch Grosse Münsterländer, refers to the registry for the LM in Austria.
- ZGM = Zuchtbuch Große Münsterländer, identifies the original registry for the Large Munsterlander in Germany, maintained by the Verband Große Münsterländer e.V. (VGM). This is the only registry by which a LM can be registered in Germany. The VGM is a member of the Jagdgebrauchshundverband which in turn is a member of the national kennel association, Verband Deutsches Hundewesen (VDH).
- GMI = Grosser Muensterlaender International e. V. and refers to the world association for LMs created by the VGM in 2019. In the future, registries in other countries might align their process and requirements with those of the VGM-created GMI to "promote the breeding, management and distribution of the hunting dog breed Großer Münsterländer of Germany in all countries." This

international collaboration for the benefit of the LM worldwide would be done under the auspices of FCI.

4.7 Responsibilities and Benefits of a LMAC® breeder

LMAC invites capable and dedicated LM owners to join the ranks of breeders for the benefit of the LM as a physically and mentally sound, versatile hunting dog.

The breeder's role is to interview and choose hunting homes. The dogs need the field exposure to channel their energy and drive. The breeder is expected to provide a healthy and enriched environment for puppies following sound animal care. The breeder is to tattoo the puppies with numbers provided by the Registrar. The breeder is to maintain a kennel record, dates and nature of copulatory ties, whelp date, dead and surviving puppies, etc.

Once the puppies leave, it is the joint responsibility of the breeder and LMAC to keep in touch with owners, at least via the informative LMAC newsletter. Many breeders stay in regular contact with their owners to help troubleshoot if needed. Some breeders enter into written sale contract that stipulate expectations by both the owner and breeder, and outlines the kind of guarantee a breeder is willing to offer. See also Section 4.3 of the LMAC Bylaws.

Benefits

- LMAC's breeding strategy offers affiliated breeders and hunters two special benefits. Hunters can be confident that LMs from LMAC-affiliated breeders are capable in field and water before and after the shot as proven by four generations of performance-tested ancestors. LMAC LMs also uphold a 100-year-old breed standard within the laws and hunting practices in North America.
- Owners of LMs eligible to breed are able to view the Total-dog Profiles for approved males and females.
- Breeders can ask for assistance in choosing a mate, the calculation of inbreeding coefficients and interpretation of Once-on-a-Pedigree considerations.
- Litters will be advertised in advance of whelping on the LMAC website www.lmcanada.net
- Records are kept by LMAC and registration certificates and pedigrees are provided.

5. Balanced selection for health and temperament

5.1 Background

Breed clubs can choose to make use of scientific advances to adapt their breeding strategies to the biological realities in a flexible manner. Broad patterns of inheritance that are recognized today include: Mendelian-, chromosomal- and multifactorial genetics, and teratogenesis. These patterns range from high to weak heritability, and can be incorporated to advantage in a breed-management approach.

Health characteristics vary in the burden they pose to both dogs and their owners, and vary in the degree of heritability. If selection were intense in its application and heritability low, then a breed could be expected to suffer as much or more from the lost genetic variety and reduced breeding options than the trait in question might pose. The selection pressure employed should reflect these realities and select more strongly against traits that represent a heavy burden and are highly heritable. Scientifically sound studies should be relied upon for heritability estimates (e.g. Ackerman, L. 1999. The genetic connection: A guide to health problems in purebred dogs. AAHA Press, Lakewood, CO.)

The selection pressure employed for performance, health and conformation characteristics should be in balance to maintain these joint traits while striving for a viable population of working Large Munsterlanders internationally, and in North America when possible.

LMAC has employed a strategic approach to selection by considering both heritability of a trait and the burden it presents. LMAC has furthermore been able to make use of recently developed DNA tests for dogs carrying but not expressing the recessive gene copy (allele) for brown color and for Black Hair follicular dysplasia, which are single-gene Mendelian traits. The former LMCNA's novel and graded approach to selection has led to an award from the Canine Health Foundation and an article describing the approach has been printed in the newsletter of the German Gesellschaft zur Förderung der Hunde.

5.2 Once-on-a-Pedigree

A list of undesirable traits known to occur in LMs is printed below and their impact on breeding eligibility is indicated. The LM incidence data are from 2000. The list below and its judgment in breeding eligibility deviate from the list of "eliminating faults" in the breed standard FCI, regarding (a) Pale nose leather; (b) entropion and ectropion; and (c) Overshot or undershot mouth. These modifications have been made with due consideration and input from knowledgeable experts. The cases where such traits were accepted for breeding have also been monitored and the results support the modification and show that no harm was done to the gene pool.

(Note table at end of document)

6.0 Appendices

6.1 Appointed Positions

A) Conformation Coordinator

The Conformation Coordinator should be appointed or reconfirmed on an annual basis. This position need not be held by a Board Member. Any Conformation Judge who is a Regular or Associate Member may hold this position.

Duties

- Receive any conformation report or the data pertinent to a conformation evaluation
- Approve all conformation reports, and suggest edits if deemed appropriate
- Forward a copy of all conformation reports to the Secretary for backup storage
- Write an annual conformation report to be published in the newsletter, typically the Summer issue
- Organize conformation evaluations for LMs 18 months or older that have passed at least a pup test, based on owner requests. Note this includes suggesting a judging team, location, and date within the year.
- Receive and evaluate new Conformation Judge applicants (see http://www.lmcanada.net/Conformation.html for required applicant information) and approve as Apprentices, when appropriate
- Organize sessions to educate new Conformation Judge applicants when at least two have applied. These can be given by the Conformation Coordinator or with assistance from other qualified LMAC members.
- Assign Apprentices to opportunities that occur for Conformation Evaluations
- Approve Apprentices as Conformation Judges when appropriate

6.2 Conformation Tests and Judges

Conformation Evaluation is a required aspect for a LM to be Eligible to Breed, as of the 2020 Bylaws. It was recommended since LMAC began.

As of January 2012, LMAC Conformation Evaluation will be conducted with at least one certified judge and a minimum of one LMAC member who observes and signs as a witness and recording assistant.

LMs should be 18 months or older for conformation evaluation, intact and not pregnant or have recently whelped. Dogs 15-18 months of age may undergo "preliminary evaluation" and is the custom in the VGM, if they obtain a very good in body and a very good in coat, then this may count as equivalent to an adult evaluation.

LMAC Conformation Judge Application Procedure

LMAC members (Regular or Associate) who are interested in becoming LMAC Conformation judges should:

- have or have had a LM that has undergone conformation evaluation
- have hunted with an LM and observed field endurance and how a coat functions in water
- have participated in a Zoom or in-person session on the background of conformation in the LM
- have apprenticed at an in-person conformation evaluation
- have passed a written exam administered by the Conformation Coordinator

The applicant should submit a letter to the Conformation Coordinator indicating his/her experience hunting upland birds and waterfowl, including with a dog or dogs. Explain how many LMs the person has owned, over what period. Indicate any other related background he/she may have, such as judging show dogs, assessing conformation traits as a field test judge, anatomy courses about domestic animals, handling dogs in hunting tests, etc.

6.3a

LMAC Litter Report Form[1]

Dam:[2] _____

Registration: _____ Hip Rating: _____Elbows:_____

Test Results: _____

PPAs earned (year): _____ Other (eg DNA) _____

Sire: _____

Registration: _____ Hip Rating:_____ Elbows:_____

Test Results: _____

PPAs earned (year): _____ Other (eg DNA) _____

Mating observed by: _____

Kennel Name: _____

Whelping Date: _____Pups Whelped: ____Pups Surviving: _____

Mating was Natural / Artificial (circle one)?[3]

Whelping: Natural ___; OR Explain _____

Regist. #/ Tattoo[4]	**Micro-chip #**[5]	**Pup name**[6]	**Sex**	**Coat color**[7]	**Markings**[8]	**Head**[9]

Contact info for Microchip provider :_____

BREEDER (Address, Tel. & e-mail): _____

_____

_____

Report anomalies or "not checked." [10]

Cleft palate:	Up. jaw undershot:
Undescended testicles:	Up. jaw overshot:
Black-hair follicular dysplasia	Heart murmur:
Rear dewclaws:	Umbilical hernia:

I certify that the above information is correct and that the puppies have been tattooed and/ or microchipped (indicate which).

SIGNATURE: [11]_____ **DATE:** _____

Enclosures: [12]

a) A page showing pup name, call name if different, owner, address, telephone and e-mail.

b) Registration fee of $30 (U.S. or Can. $) per pup, payable to LMAC.

c) Signed Ownership Application Forms (see http://www.lmcanada.net/LMACOwnership%20RevOct2020.pdf)[14]

d) Send hard copies of above **and** also owner addresses electronically in document or excel formats

Mail to: LMAC Registrar (2024: Derek Oderkirk, 243 Brookmore Lane, Saskatoon SK S7V 1C2 ddpoder@gmail.com

Adapted from VGM Form, May 2007, Revised Dec. 2011, March 2023

[1]**Notes.** This report is an important LMAC document. This information will become part of LMAC's permanent record, but you should also keep a kennel record of your own.
Registration certificates will not be issued until:
i) the Litter Report Form is complete and signed,
ii) signed LM Ownership applications have been received showing owners' contact info,
iii) payment has been received.
Breeders need to provide a copy of the LMAC Ownership application signed by each owner. Ask owners to download copies from the LMAC website. Begin this process early to allow time for mailing.

[2]**Fill in by typing** into this word document or write clearly. Fill data fields completely where applicable to help ensure record accuracy. Explain blanks.

[3]**Artificial insemination**. If mating was artificial, ask your veterinarian to document the dam and sire involved, confirming tattoo or microchip. Note: in some states it is illegal for a person being neither a veterinarian nor the owner, to do the artificial insemination.

[4]**Tattoo.** All litters receive a group of registration numbers, allocated by birth order in any given year. Report the total number of pups born after whelping is completed. Re-contact the Registrar 1-2 weeks in advance of tattooing (6-8 weeks of age), to report the number of surviving pups that are to be tattooed, and to request your registration numbers. The registration number will be part of the tattoo. All LMAC pup tattoos begin with C. Use a two-digit number for year with the pup's registration number in front of year, e.g. C1106 in ear, written as C11/06 on registration certificate. Put tattoo in hairless base of right ear. Canadian breeders must provide tattoos visible to the naked eye, but can use microchips in addition to tattoos.

[5]**Microchips** can be used in addition. However, the registration number will be the main identifier for the pup and both registration and microchip number will be shown on the registration certificate.
Provide contact info (Web address, Telephone) for the microchip provider.
Send a copy of the veterinarian's statement on clinic letterhead with signature to verify that pups have been microchipped as indicated.
All LM pups are to receive a tattoo after weaning (≤ 10 weeks)!

[6]**Name** of pup. Do not exceed 25 characters of kennel name, pup name and spaces combined. Also report a separate call name if different from registered name.

[7]**Coat color,** is normally "Black & white." Brown and white pups are also registered, in an appendix, but not used for breeding. Pups with the abnormal and rare grey- instead of black hair are unhealthy and should be euthanised.

[8]**Markings** refers to skin-pigment distribution as plated or ticked, with 'roan' (black & white intermingled hairs) possibly appearing later. When no substantial numbers of small black spots or ticks appear by 3-4 weeks of age, LMAC describes these pups as plated. Plated pups often have no or very few black spots on their belly, and are born with pink on their nose and/or foot pads. When substantial black pigment does begin to show in the skin and hairs, we call the pup ticked. Pigment moving to the outer layers of skin can form small spots of solid black hair, can form roan areas or a mix of roan and ticks. Roan is not distinguishable from ticks at this early age and therefore these are lumped together as ticked in describing a pup. For consistency, decide on these markings around 3-6 weeks because all puppies darken with age, and this darkening continues into adulthood.

The distinction between 'Plated' and "Ticked' is not sharp. However, a look at our adult LMs shows two types, those with big areas of white between black plates, and those with primarily dark bodies of plates plus ticks and/or roan. These color distinctions help identify dogs in addition to a tattoo. Also,

some owners have a preference for dark or light pups. Our dogs become darker into adulthood, not lighter.

[9]**Head** markings serve as a further, natural identifier for pups. A "Black head" may have some white on chin and still be called black, "Snip" = small spot near nose leather; "White muzzle" = white on muzzle; "Blaze" = white between eyes; "Star" = separate white spot between and above the eyes.

[10]**Anomalies** are rare in the LM thanks to many generations of selective breeding. To ensure the dogs' continued health, report all anomalies, do not leave blank. Report other anomalies if they occur in addition to those listed below. Indicate "not checked" if this has to be the case. Your vet will look for these during a routine health check, ask for this record. A visit to the vet is advisable before pups leave, as protection for the breeder. Identify pups which have:

Cleft palate: These pups have difficulty nursing and milk regularly bubbles out of their noses. These pups should be euthanized, and its occurrence recorded.

Lower jaw undershot or overshot. The normal scissors bite with lower incisors closing just inside (behind) the upper incisors allows dogs to groom burrs and parasites and manipulate small things. By age 8 weeks when most pups leave, the pups' bite can still change, so report only the obvious cases which will be confirmed later. Undershot bites have lower-jaw teeth in front of the upper; overshot, substantially the reverse.

Undescended testicles, both testicles should be descended by 8 weeks. Check more than once, as they can move up and down still at this young age. Sometimes testicles take up to 16 weeks to descend. This delay must be noted and the owner be informed as dogs with undescended testicles are not eligible for breeding.

Black hair follicular dysplasia. If black hair is grey at or soon after birth. Both the sire and dam will be carriers of this recessive disease (Dd). Repeat matings are then to be avoided and the dogs involved mated only with known non-carriers identifiable with a DNA test at HealthGene, for example.

Heart murmurs are only detectable by the veterinarian. They can disappear later, but any occurrence should be noted and monitored later by the owner's veterinarian.

Rear dewclaws are prone to serious injury and should be noted and removed within days after birth. They can be snipped of with scissors, or twisted off with two hemostats. Consult your veterinarian or an experienced breeder for advice. Front dew claws remain.

Umbilical hernia, these vary in severity and all cases should be recorded.

[11]**Sign & date** the form as an indication that you vouch for the accuracy of these records.

[12]**On a separate page**, report owners' addresses, telephone and e-mail address. Owners who have not previously been members of LMAC will receive a complimentary 3-year membership. Repeat owners whose membership has lapsed will receive a complimentary 1-year membership.

13 Owners need to sign an ownership application for each new LM they acquire. Registered owners will be those who signed this form and the address and contact info shown here will be used to complete the registration papers.

Any questions? – ask the Registrar or an experienced LMAC breeder.

Good luck with your litter!

Conformation Evaluation

http://www.lmcanada.net

Insert picture of dog

Held at:

Dog: Sex: Tattoo: Readable: Whelped:

Owner Name & Address:

Height:[1] Length: Weight: Condition:[2] L/H ratio:[3]

Body type:[4] Testicles: Eye color:[5]

Teeth: Bite: Premolar alignment (100% = ideal):

Gait:

Coat. Length at withers:
Guard hair:
Undercoat:
Ear feathering:

Front leg feathering:
Hind leg feathering:
Tail feathering:
Belly feathering:

Temperament:

Summarize the main body-build features as a final evaluation.

Additional comments (if any):

Faults that preclude breeding:

Overall rating[6] Body: Coat:

Judge, Apprentice Names & Roles

1. _____
2. _____
3. _____

[1] Breed standard for females 58 – 63 cm; males 60 –65 cm, tolerating up to 67 cm in males
[2] Body condition/nutrition: Very thin; Lean; Good; Overweight; Obese
[3] Length/Height ratio: If ≤1.03 = ~ square; if 1.05-1.06 = tends to the allowed 2 cm longer than high; if >1.06 = long rectangle
[4]Body type: Considering bone and muscle but not fat, rank the dog as Light, Medium or Heavy boned.
[5]Eye color: Dark brown / Brown / Light brown / Light
[6]Overall designation: Excellent; Very Good; Good; Adequate; Inadequate

Adapted from VGM Form, May 2007, Revised Dec. 2011, March 202

Adapted from VGM Form, May 2007, Revised Dec. 2011, March 2023

6.3 C **LMAC® Dog-ownership Application**

LMAC (http://lmcanada.net/) is pleased to learn that you have chosen an LM as your next hunting companion. This makes you one of over 2000 North American hunters who had chosen an LM. According to the feedback we received, the LM is attractive for several important reasons. Among these are the fact that behind your LM and your breeder stands a well-organized LMAC breed club with sound performance criteria. All Canadian and affiliated U.S. breeders satisfy these criteria prior to breeding. This LMAC practice is encouraged and enforced through the LMAC registry, which is the gateway into the management of our breed.

We encourage you to consider the substantial value that this provides to you, and also consider your role in LMAC's continued success. LMAC encourages you to confirm your commitment by completing and signing the form below in advance of obtaining an LM.

Name(s):_____

Address:_____

Telephone Number:_____

E-Mail Address:_____

I (We), the undersigned, apply for dog ownership and membership in The Large Munsterlander Association of Canada and in so doing agree to be bound by the LMAC Articles of Incorporation, the LMAC® Bylaws, the Animal Pedigree Act of Canada, and regardless of citizenship or place of residency, consent to the jurisdiction and regulation of the Minister of Agriculture of Canada for the purpose of enforcing the Animal Pedigree Act. This includes, but is not limited to, agreeing to not seek registration for a Large Munsterlander with any registry other than LMAC® without the express written consent of the Registrar of LMAC®. This includes allowing my male dog to sire pups that will not comply with the LMAC registration requirements and be registered by LMAC.

Signature:_____ Date: _____

Signature:_____ Date: _____

Date Received:_____ Breeder's Signature:_____

Date Received:_____ Registrar's Signature:_____

Dog's Registered Name:_____

LMAC® Registration/Tattoo Number:_____

Comments:

Note: Owners please send signed form to breeder.

6.3D

Progeny Performance Award

This award is in recognition of the excellent genetic contribution to the Large Munsterlander Association of Canada gene pool made by

___name of dam or sire in bold____

in the _____ litter.

Owned by:

_____

Name of Offspring	Test	Score	Rating

(list of the pups that passed a young dog field test, minimum 4)

_____ _____

Registrar
Large Munsterlander Association of Canada
(document prepared by the Registrar)

Date

5.2 Large Munsterlander Association of Canada® Guidelines

Once-on-a-Pedigree

Condition	Description	LM cases	Burden	Inheritance according to Ackerman(1)	Recurrence risk in offspring
Fully eligible to breed					
Carrying gene for brown hair	Dogs that have produced brown-and-white offspring or are proven carriers in DNA tests.	4	None	Autosomal recessive	25% from two carriers
Missing and/or Extra Premolars	Missing and/or extra upper and/or lower premolars.	23	Low	"..autosomal recessive trait..." p.42	25% from two carriers
Tight Scissors Bite	Incisors overlap too tightly, causing teeth to wear excessively.	5	Low	Tooth set not specified	?
Hind Dewclaws	Fifth toe found on inside of hind legs. Must be removed when pups are 2-3 days of age.	1	None	Not mentioned	?
Not eligible to breed					
Hypoadrenocorticism (Addison's Disease)	Adrenal dysfunction leads to lethargy, anorexia, vomiting, muscle weakness and collapse in shock). Easy to misdiagnose, confirm with blood tests. Drug therapy reqd.	1		"It is best not to breed affected animals especially those with familial hypoadrenocorticism." p 69	?
Miniature Size	Exceedingly small stature (less than 21" tall).	1	None		?
Persistent unprovoked aggression toward dogs		2	Medium		Medium
Persistent unprovoked aggression to people		2	Medium		Medium
Gun Shy	As determined field judges, a dog is so disturbed by gunfire that it leaves the area in fright or refuses to continue hunting.	2	High		Medium
Demodectic mange, if persisting into adulthood	Inflammation of hair follicles partly due to Demodex mites and partly to an inherited or acquired immune defect.		Low	Unknown	?
Elbow Dysplasia	Lameness in the front leg(s) beginning at about six months of age. Elbow held outward from the chest (wide stance). Confirmed by x-rays.	1	High	Calls it OCD of elbow "...likely controlled by many genes." p. 113	Medium
Hip Dysplasia (HD)	Structural malformation of hip joint. Confirmed by x-rays.	42	High	"polygenic" p. 116	Medium
Undescended Testicle(s)	Failure of one or both testicles to descend into the scrotum. Undescended testicle should be removed - prone to cancer.	8	Low	"...likely polygenic." p.173	Medium

Black Hair Follicular Dysplasia (BHFD) Carrier	Dogs that have produced offspring with black hair follicular dysplasia.	4	None	autosomal recessive p. 54	25% from two carriers

Breed with caution, condition can occur only Once-on-a-Pedigree

Allergies (contact)	Inflammation of the skin, redness, itching	3	Variable	Not mentioned	?
Allergies (inhalant - canine hay fever)	Allergic reactions including itchy red bumps and/or generalized itching, sneezing, runny nose, etc.	3	Variable	"...believed to be heritable....mode of inheritance is not clear-cut." p. 93	low
Black Hair Follicular Dysplasia (BHFD) carrier	Dogs that have either produced offspring with Black Hair Follicular Dysplasia or have tested positive, should be bred only to dogs tested and found free of the BHFD allele.	4	None	Autosomal recessive, p. 54	25% from two carriers

Condition	Description	LM cases	Burden	Inheritance according to Ackerman(1)	Recurrence risk in offspring
Crossbite	Lower incisors overlap the upper incisors (opposite of proper scissors bite).	3	Low	Variable	?
Extra or missing incisors, canines or Molars			Low	Tooth group not specified	?
Luxating Patella (medial)	Kneecap slips inward because groove is too shallow, ligaments too weak, or tendons misaligned. Surgery helps.		High	"...considered heritable..." p. 128:	Med.
Overshot Jaw	Upper jaw is longer than the lower jaw, teeth overlap without touching. Extraction of the lower canine baby teeth, and later adult teeth, may be required.	4	Low	Variable	?
Undershot Jaw	Lower jaw is longer than the upper jaw.	3	Low	Variable	?
Umbilical Hernia	Umbilical ring does not close properly. Abnormal protrusion in the umbilical area noticeable by 4-6 weeks of age. Surgical correction is fairly simple if necessary.	7	None (if surgically repaired)	"They are believed to be inherited in most cases and both recessive and polygenic threshold has been postulated." p. 111:	Medium
Ectropion	The lower eyelid rolls outward, exposing the eye to irritation. Several young dogs judged to be ectropic by in field tests have later outgrown the condition (but are included in the incidence number). Surgical correction is fairly simple if desired.	10	Low	"Guidelines do not exist regarding the suitability of dogs with ectropion for breeding." p 153	low

Entropion	The lower eyelid rolls inward, and the cornea becomes irritated and scratched by the eyelashes. Surgical correction required.	1	Medium	"Polygenic" p. 154	Med.
Heart murmur, persists to adulthood	Incomplete closure of tricuspid valve allows backflow of blood.		Low	Heritable nature suspected in Labradors p. 36	low
Luxating Patella (lateral)	Kneecap slips outward because groove is too shallow, ligaments too weak, or tendons misaligned. Surgery helps.	3	High	Heritable nature not proven p. 128:	low
Osteochondritis dissecans (OCD)	Cartilage defect generally found in the shoulder joints, evidenced by lameness and confirmed by x-rays. Surgical correction may be necessary.	10	Medium	"...trauma, genetics, growth rates, nutrition and ischemia play a role." p. 123	low
Ruptured cruciate ligament	Ligament that connects femur and tibia in knee joint is ruptured.	2	High		
Gun Sensitive	As determined field judges, a dog obviously disturbed by gunfire but still willing to continue hunting.	5	Medium		Med.
Dog should be euthanized.					
Hydrocephalus	Enlargement of the dome of the skull caused by excessive accumulation of cerebrospinal fluid in the ventricles of the brain.	1	High	heritable nature not confirmed; environmental causes include infections, toxins, poor nutrition during pregnancy. p. 136	?
Cleft Palate	Failure of the bones of the palate to form completely, resulting in an opening between the oral and nasal cavities. Pups generally can not nurse.	2	Variable	may be hereditary or environmental (e.g. drugs given during pregnancy) p. 73	low
Black Hair Follicular Dysplasia (BHFD)	Pups are born with grey and white appearance; grey hair fails to grow normally.	5	High	Recessive	0-100% depends on mate

(1) Lowell Ackerman, 1999. The genetic connection: A guide to health problems in purebred dogs. AAHA Press, Lakewood, Colorado.

[1] Breed standard for females 58 – 63 cm; males 60 –65 cm, tolerating up to 67 cm in males

[2] Body condition/nutrition: Very thin; Lean; Good; Overweight; Obese

[3] Length/Height ratio: If ≤1.03 = ~ square; if 1.05-1.06 = tends to the allowed 2 cm longer than high; if >1.06 = long rectangle

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