



GERMAN SHEPHERD DOG CLUB OF SINGAPORE
(A Member Of The World Union Of The German Shepherd Dog Club)
(Affiliated with the Singapore Kennel Club)



GERMAN SHEPHERD DOG CLUB OF SINGAPORE **BREED IMPROVEMENT SCHEME**

1. OBJECTIVE

The ideal of implementing a breed improvement scheme was mooted in 1987. Its objective is to improve the breed in all its aspects, in particular, to improve the breed's temperament, anatomy, hip dysplasia status, type and working aptitude in fine with the breed standard of the W.U.S.V.

2. CONTENT

Under the breed improvement scheme, there are various measures and recommendations:

- 1) Hip dysplasia scheme.
- 2) Breed survey.
- 3) Pre-requisition at specialty show.
- 4) Breeding partners recommendation.
- 5) Pedigree cum breed survey certificate.

The scheme is open to all German Shepherd Dogs registered with the Singapore Kennel Club and with official tattoo numbers on their ears (for identification purpose).

For imported dog, its tattoo number, hip x-ray and breed survey will be recognised if they were done officially by its club from the country of origin.

3. HIP DYSPLASIA SCHEME

3.1 Objective

To reduce the incidence of hip dysplasia and improve the breed through selective breeding from identifying phenotypes and by progeny testing, understand their genotypes.

3.2 Introduction

The official hip dysplasia scheme administered by the Singapore Kennel Club and endorsed by the Singapore Veterinary Association was implemented in 1987. The scheme is to identify and certify the hip status of German Shepherd Dog on the basis of x-ray film submitted in accordance with the procedure and guideline set. The owners of German Shepherd Dog are urged to have their dogs x-rayed regardless of whether they intend to breed the dogs or not; as when more dogs with hip status known will help to identify the better breeding stocks from less desired breeding combinations.



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3. HIP DYSPLASIA SCHEME

3.3 Hip Score & Classification

There are nine areas to be assessed and evaluated for each side of hip. (Appendix 1 shows the hip x-ray form.) Each area is scored from 0 to 6, with 0 being the best and 6 being the worst. Thus, the score for each side of hip ranges from 0 to 54 and the total score of a dog (for both hips) is from 0 to 108. The final result is classified into grades with total scores as following:

NORMAL	: 0 to 4
NEAR NORMAL	: 5 to 9
ACCEPTABLE	: 10 to 30
FAIL (or unclassified)	: above 30

3.4 Procedure

- Step 1: When applying for the hip x-ray form, bring the relevant pedigree to the Singapore Kennel Club. Upon paying the necessary fee, a hip x-ray form shall be issued. (The form comes in running number and duplicate.) The pedigree shall be retained by the Singapore Kennel Club until the dog is x-rayed; and it shall then be stamped 'HIP X-RAYED'. A record of each form issued shall be kept by the Singapore Kennel Club.
- Step 2: Bring the hip x-ray form to a vet for x-ray. Two x-ray films shall be taken. The vet shall send one film with the original copy of the hip x-ray form to the Singapore Kennel Club and keep the other film with the duplicate copy of the form.
- Step 3: The Singapore Kennel Club shall then send the film and the form to Australia for assessment and evaluation.
- Step 4: When the film and the form with the result are received by the Singapore Kennel Club from Australia, a certificate of hip x-ray shall be issued. (Appendix 2 shows the hip x-ray certificate.) The Singapore Kennel Club shall retain the film and a photocopy of the form. The certificate and the form shall be sent to the relevant vet. The vet shall then advise the person concerned and hand him the certificate.

3.5 Guideline

- All dogs being x-rayed for submission to the hip dysplasia scheme must be properly identified - the dogs shall be tattooed with numbers and letters in the right ear according to the Singapore Kennel Club tattoo scheme, or shall have tattoo numbers/letters done officially in other countries recognised by the relevant clubs.
- All dogs considered for the hip dysplasia scheme must be of a minimum age of twelve (12) months.
- X-ray film must be properly identified at the time of exposure with date, Singapore Kennel Club tattoo number, left or right marker and any other relevant identifications that the vet may deem relevant. No x-ray will be accepted if the identification is written on or glued on.



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- d) The dog shall be anaesthetized while x-ray films are taken. Idemnity for the dog anaesthetized shall be between the owner and the attending vet, and not the Singapore Kennel Club or German Shepherd Dog Club Of Singapore.
- e) Two exposures of a single V-D view are necessary. The x-ray film is taken of the pelvic area with the dog in dorso recumbency. It is to note that the x-ray film must include the patella and stiflejoint so that an assessment of correct positioning can be made. The femur must be extended and parallel (refer Appendix 3 for radiographic procedure).
- f) As much anonymity as possible must be maintained in the x-ray films.
- g) Both Singapore Kennel Club and German Shepherd Dog Club Of Singapore do not accept responsibility for lost x-ray films in the mail and for non-diagnostic x-ray films being returned without assessment.
- h) Both Singapore Kennel Club and German Shepherd Dog Club Of Singapore reserve the right to reject any x-ray films if the scheme guidelines are not adhered to, and to make any amendments to the scheme as necessary from time to time.

4. BREED SURVEY

4.1 Objective

To promote and offer guidance for the uniform development of the breed and to improve its inherent working qualities. Dogs and bitches shall be awarded classification in either Breed Survey Class I or II if it is expected that they will contribute to the overall development of the breed.

4.2 Introduction

At a breed survey, the dog will be measured (withers height, chest depth and chest circumference) and weighed. A licensed breed surveyor will go through the dog thoroughly and record his findings on a standard format (refer Appendix 4). Its colour, coat, dentition and anatomy will be recorded. He will evaluate the muscular development and firmness in ligaments when the dog is in stance; and the drive and reach, firmness of back, elbows, hocks and pasterns when it is in movement. In the assessment of temperament and character, the breed surveyor will evaluate the dog's condition of nerve, courage, watchfulness and reaction to gun test. The breed surveyor will then summarise the virtues and faults of the dog, and after studying its pedigree give advice on selection of breeding partner. The first official breed survey was held in May 1988. Record of breed surveys conducted will be published on a regular basis. German Shepherd Dog Club Of Singapore shall keep a Breed Survey Register.

4.3 Classification

The classification of breed survey is Class I, Class II or Fail (unclassified). The requirements of each classification are stated below:



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- CLASS I - Anatomically and temperamentally far above the breed average.
- Within the limits of size specified in the breed standard.
 - Faultless gapless healthy dentition with correct scissor bite.

4. BREED SURVEY

4.3 Classification (continued)

- CLASS I - Double premolar 1 is allowed.
- Firm and sure during gun test.
 - Pass hip x-ray (hip score not more than 30).
 - Temperament firm and outgoing.
- CLASS II - Anatomically and temperamentally above the breed average.
- Not more than 1 cm over or 1 cm under the size limits specified in the breed standard.
 - Slightly level bite.
 - Incomplete dentition such as missing no more than two premolar 1, or one premolar 1 and one incisor, or one premolar 2.
 - Distemper teeth, or severely worn teeth not due to age.
 - Hip x-ray score from 31 to 50.
 - Wavy coat, or slightly long coat provided it is without tufts on the ears or flags on either legs or tail.
 - Slightly tipped ear at the point or pronounced sideways bending tail.
- FAIL (Unclassified) - Over or undershot bite. (Overshot occurs when incisors of upper jaw protrude 2 mm or more from incisors of lower jaw.)
- Incomplete dentition such as missing one premolar 3 or 4, or two incisors, or one canine, or one premolar 2 and one incisor, or one premolar 2 and one premolar 1, or two premolar 2, or one molar, or altogether more than three teeth.
 - Fail gun test.
 - Hip x-ray score of more than 50.
 - Temperament infirm, shy, aggressive.
 - Long coat.
 - Severely hooked or rolled tail, or soft and non-erect ears.
 - One-sided or double-sided cryptorchidism, or uneven sized testicles.
 - Albino characteristics such as lack of pigmentation with pink nose, white or near white coat but black nose.



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4.5 Procedure

Whenever a breed survey is planned, members will be notified in advance the date, time, venue and name of the licensed breed surveyor. Anyone who wishes to have his dog surveyed is to submit an application form provided together with the necessary fee and a copy of the dog's pedigree before the closing date. A breed survey certificate (see Appendix 4) with official endorsements will be issued to those dogs which passed.

4.6 Guideline

a) **QUALIFICATION**

After receiving the application forms, they will be checked to determine whether the dogs are eligible to participate in the breed survey basing on the guidelines below:

- i) Minimum age is eighteen (18) months on the day of breed survey.
- ii) Its pedigree is registered with the Singapore Kennel Club.
- iii) Has hip x-ray result or certificate.
- iv) Must not be overbred or come from known severe faulty hereditary lines or stock.

German Shepherd Dog Club Of Singapore may refuse any dog to be surveyed on the day of breed survey if the dog shows signs of severe sickness, nerve disorder or other severe constitutional weakness.

b) **CLASSIFICATION FOR LIFE**

The classification given to a dog presented for breed survey shall be for life.

c) **RE-SURVEY**

Dogs which have been classified as Breed Survey Class II or failed to gain classification, may be re-presented at any subsequent survey. They shall then be given the opportunity to achieve class I or be classified as the case may be. If the dog fails with the same fault once again, it shall not be allowed any further survey.

However, if he fails the second time but it is not for the same fault as in the first survey, he may be allowed re-survey only once more. For each re-survey, a separate fee has to be paid and the owner must indicate on the application form that it is a re-survey.

d) German Shepherd Dog Club Of Singapore reserves the right to make any amendments as necessary from time to time.

5. PRE-REQUISITION AT SPECIALTY SHOW

In an effort to encourage more dogs to be breed surveyed, recommendations to impose certain pre-requisitions at specialty show are made.

- a) To be eligible for award of 'Excellent (V)' grading, Challenge Certificate or 'Best Singapore Whelped' title, the dogs must be classified as Breed Survey Class I or II. Otherwise, the highest grading possible is 'Very Good (SG)' and no Challenge Certificate or 'Best Singapore Whelped' title can be awarded.



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- b) Gun test will be necessary at adult class.
- c) German Shepherd Dog Club Of Singapore reserves the right to introduce other pre-requisitions as deemed necessary in the future.

6. BREEDING PARTNERS RECOMMENDATION

6.1 Objective

- a) Identify a pool of stud dogs
- b) Advise on the selection of breeding partners.
- c) Follow up on breeding programme.

6.2 Introduction

Identify a pool of stud dogs that may be worthy of improving the breed. By studying the information in the breed survey, and taking into consideration the genotype and phenotype make-up of the dogs plus any other relevant data available, recommendation will be made to provide a guideline on choosing the more suitable breeding partners.

Gathering of information about the puppies produced and their development later on is vital to ascertain the effectiveness of the breeding partners recommendation and provide future direction.

7. PEDIGREE CUM BREED SURVEY CERTIFICATE

The proposed pedigree cum breed survey certificate is an informative and useful supplementary document to the pedigree certificate issued by the Singapore Kennel Club. Its design is similar to the German SV version. It provides litter mates, bloodline analysis, hip status, breed survey classification and description of the dog and its parents and fore-parents up to four generations. It is the document that contains almost everything you need to know about the dog. A fee will be charged for the issue of certificate.

Appendix 1. HIP X-RAY FORM

SKC Registered Name
 SKC Registered No. SKC Ear Tattoo No.
 Breed Sex Date of Birth
 Date Radiograph Taken
 Name of Owner
 Address

Sire:	PGS	
	PGD	
Dam:	MGS	
	MGD	

I hereby declare that:

- (a) the particulars above are correct and relate to the dog submitted for radiographic examination.
 - (b) the dog has not previously been scored under this scheme.
 - (c) I give permission for a copy of this completed certificate to be sent to the GSDL geneticist for evaluation and use.
- (NB deletion of any of these items invalidates this application)*

Owner's signature Date
 The Singapore Kennel Club/should check the registration certificate.
 Name of Veterinary Surgeon submitting radiograph
 Address

Signature of Veterinary Surgeon Date

PLEASE TYPE ALL INFORMATION (OR USE BLOCK CAPITALS)

FILM DEGREE OF TILT SCORING UNIT

QUALITY: Satisfactory; Too thin; Too dark; Extraneous marks.
 POSITION: Satisfactory; Tilted laterally left/right; Femora not sufficiently extended; Femora not evenly extended.

HIP JOINT	RIGHT	LEFT	
Norberg Angle			
Subluxation			
Cranial Acetabular Edge			
Dorsal Acetabular Edge			
Cranial Effective Acetabular Rim			
Acetabular Fossa			
Caudal Acetabular Edge			
Femoral Head/Neck Exostosis			
Femoral Head Recontouring			
TOTALS			Total Score

I HEREBY CERTIFY that the above-named animal was examined under the rules of the BVA/GSDL Hip Dysplasia Scheme.

Signed Date of Examination

Appendix 2. HIP X-RAY CERTIFICATE

JOINT SVA/GSDC HIP DYSPLASIA SCHEME

CERTIFICATE OF EXAMINATION

SKC Registered Name :

SKC Registered No. :

Ear Tattoo No. :

Breed :

Sex :

Date of Birth :

This is to certify that the above-named animal was examined under the rules of the SVA/GSDC Hip Dysplasia Scheme and the result of examination of the hip joints is:

Score:: Right Hip Joint _____ /Left Hip Joint _____

Total _____

Signed: _____
GERMAN SHEPHERD DOG CLUB OF SINGAPORE

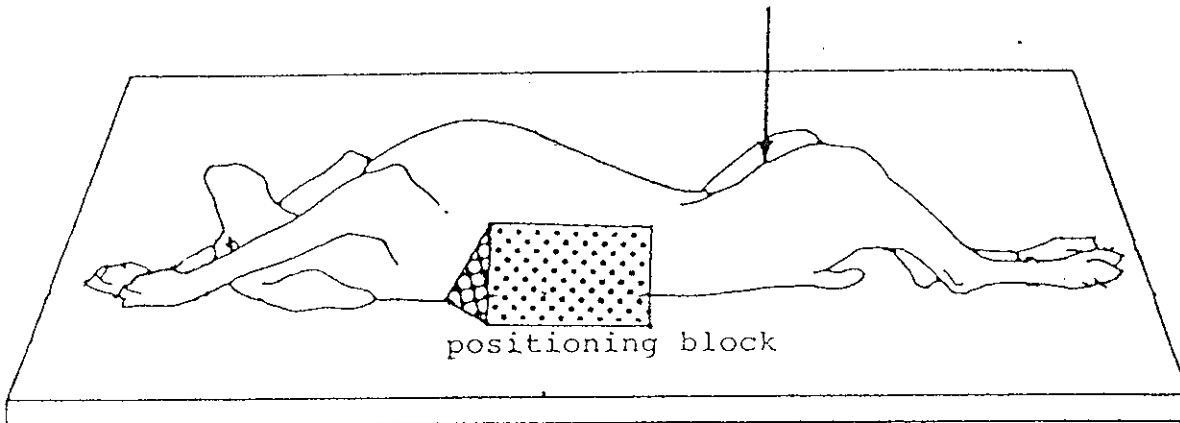
Signed: _____
SINGAPORE KENNEL CLUB



DATE: _____



Appendix 3. RADIOGRAPHIC PROCEDURE



POSITION: Dorsal recumbency

BEAM CENTER: Level of trochanters

FIELD OF VIEW: From tuber coxae to below stifles

MARKER: "VD", and "R" or "L"

COMMENTS:

1. Every effort must be made to prevent obliquity of the pelvis. firm support of the dog's body with a trough, foam rubber blocks, or sandbags will help.
2. Extend the rear legs parallel to each other with the tail between the legs and parallel to them.
3. Rotate the stifles inward so that the patellas are centered on the patellar groove. This requires a lot of strength when positioning large dogs. The legs of small dogs can be over-rotated.
4. In large dogs it might not be possible to include the entire pelvis and stifles on the same radiograph. If a portion of the pelvis must be deleted, it is better to leave out the cranial portion of the tuber coxae rather than the stifles. The patellas must be included in a hip dysplasia study.
5. Strive for good contrast: high mAs and low kVp. A grid is usually necessary.

Appendix 4. BREED SURVEY CERTIFICATE



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BREED SURVEY FORM

Name of Dog:

SKC Reg No.: Tattoo No.: Class:

GSDC Survey No.: Survey Date: HD Status:

Date of Birth: / / Training Title:

I) General Information

- a) Height at Withers : cm
- b) Depth of Chest : cm
- c) Chest Circumference : cm
- d) Weight : Kg
- e) Pigment : strong / good / sufficient / paling
- f) Coat : normal / short / slightly long / long
- g) Testicles : well developed / small / uneven

II) Description of the general appearance and constitution, size, structure, angulations and movement, firmness of back and joints, character and temperament.

a) General Description :

b) Colour and Markings :

III) Temperament and Nerve Test

- a) Character : firm / natural / lively / good-natured / uneasy
- b) Watchfulness : present / absent
- c) Condition of Nerves : firm / sufficiently firm / slightly overexcited
- d) Confidence : present / sufficient
- e) Reaction to Nerve Test : firm / sufficiently firm
- f) Hardness, Courage & Fighting Instincts : pronounced / present

IV) Structural Evaluations while standing and during movement

- a) Sex Characteristics : pronounced / present
- b) Constitution : strong / medium strong / dry / slightly coarse / slightly fine
- c) Expression : lively / noble / slightly unfriendly / dull
- d) Proportions : correct length / slightly long / slightly short / strong / substantial / slightly heavy / sufficiently substantial / slightly deep / slightly broad / slightly narrow / flat ribbed / barrel ribbed
- e) Bones : strong / medium strong / dry / sufficiently dry / slightly coarse / slightly fine
- f) Muscular Development : strong / sufficiently strong / dry / sufficiently dry
- g) Firmness in Stance and Ligaments — Front : very good / good / sufficient
- Rear : very good / good / sufficient
- h) Angulations — Front : very good / good / sufficient
- Rear : very good / good / sufficient
- i) Back : firm / sufficiently firm / slightly soft / slight dip behind wither
- j) Firmness in Elbows : very good / good / sufficient
- k) Firmness in Pasterns : very good / good / sufficient
- l) View from Front : correct / tendency to stand wide / french footed / lower arms slightly bowed
- m) Croup : long / correct length and lay / slightly short / slightly flat / slightly steep
- n) Firmness of Hock Joints : very good / good / sufficient
- o) Gait : Trot springy / very good ground covering / good back transmission / moves correct front/rear / narrow front/rear / wide front/rear / moves slightly cow hocked / slightly bow legged / tendency to pace
- p) Reach : very good / good / sufficient
- q) Drive : powerful / good / sufficient / slightly restricted
- r) Toenails : dark / medium / light
- s) Feet : front/rear round/closed / front/rear slightly long / front/rear flat/open
- t) Head : very strong / strong / slightly fine / slightly narrow / slightly short / slightly long
- u) Eyes : dark / medium / light
- v) Upper Jaw : strong / sufficiently strong / slightly narrow / slightly long
- w) Lower Jaw : strong / sufficiently strong / slightly weak
- x) Dentition : healthy / strong / without gaps / scissor bite / slightly under developed / partly discoloured / irregular spacement of teeth / level bite / middle incisors level / due to age — yes/no
- y) Dentition faults :

V) Particular Virtues and Faults
(in addition to Section II)

VI) Advice for selection of breeding partner
(recommendations and warnings)

BREED SURVEYOR

REGISTRAR OF GSDC

DATE