

International Breeding Recommendations

Icelandic Sheepdog International Cooperation – ISIC

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New Version, fall 2024

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Summary of the Breeding Recommendations

Population

Breeding Age:

- **Recommendation:** Not to breed dogs younger than 24 months.
- **Strong Encouragement:** Wait until closer to 36 months for breeding debut to gather comprehensive health and genetic information.

Offspring Limit:

- No male should produce more than five litters or 25 puppies (whichever comes first), and no more than twice that as a grandfather.
- No females should have more than four litters or 20 puppies (whichever comes first), and no more than twice that number as a grandmother.

Inbreeding:

- Average inbreed level should be kept to a maximum of 2.5% over 5 generations.

Genetic Diversity

Wide Breeding Base:

- Select as many males and females for breeding as possible.

Technology:

- Use software to calculate inbreeding percentages and mean kinship, avoiding close relatives within 5 generations.

International Exchange:

- **Strongly Encouraged:** Exchange breeding animals between countries to limit inbreeding.

Health: Eyes & Hips

Eye Examinations:

- Should be conducted before breeding, especially for dogs under 3 years of age.
- Dogs with hereditary eye diseases are not recommended for breeding.

Hip Dysplasia:

- All breeding dogs should have an official known hip dysplasia (HD) status.
- Dogs with D or E hips should not be used for breeding.

Ethics and Welfare of the Bitch

Breeding Age:

- For bitches aged 7 years or older, check with national kennel clubs to confirm eligibility for breeding.

Veterinary Certificate:

- A veterinary certificate is recommended for breeding bitches older than 7 years.
- Breeding should not occur after the bitch turns 10 years.

Rest Periods:

- A 12-month rest is recommended if two litters are born within 12 months.

Cesarean Sections:

- Bitches that have had two cesarean sections should not be bred again.

Artificial Insemination (AI):

- AI should only be used for logistical reasons and should not be used if either dog shows no interest in natural mating.

Breeding Restrictions:

- Mating between close relatives such as full siblings, father to daughter, mother to son, grandfather to bitch, etc., is prohibited.

Mentality and Temperament

Mentality:

- ISIC recommends participation in official mental tests like MH (Mentalbeskrivning Hund) and BPH (Behavior and Personality Assessments) where available.
- Where mental tests are not available, ISIC encourages participation in dog sports and activities to provide ongoing temperament assessment.
- Any dog displaying abnormal fear or unprovoked aggression in daily situations should not be used for breeding.

Working Abilities

Herding Abilities:

- ISIC recommend participation in herding tests like NHAT where available.

Working Abilities:

- ISIC encourages participation in various working activities to preserve the breed's versatile working capacity.

The Aim of the Breeding Committee in ISIC

The Breeding Committee in ISIC aim to support the breeding of healthy dogs with good working ability and the typical behavior of a farm and herding spitz, as described in the Icelandic Sheepdog Breed Standard.

Key Points:

- **Healthy Dogs:** Strong, in good condition, with a thick, weatherproof coat, with good temperament, fulfilling club health recommendations.
 - **Good Type:** Dogs displaying the physical characteristics that clearly separate the Icelandic Sheepdog from other breeds, as detailed in the Icelandic Sheepdog Breed Standard.
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The Breeding Committees' Task

The task of the ISIC Breeding Committee is to formulate overarching goals for the entire breed population. The recommendations must be targeted, long-term, and sustainable, ensuring they do not lead to deficiencies in mentality, function (farm and herding characteristics), or drain the breed of genetic diversity. Mental qualities must be adapted to function and society's requirements.

The recommendations are based on:

- National kennel clubs, animal welfare laws, breed club rules, recommendations, and breeding policies.
- Jointly collected official comparable statistics regarding population size, mentality, working abilities, health, and conformation.
- Common knowledge held by member clubs' breeding committees and representatives.

Breeders' Main Challenges Going Forward:

- **Reduce the Risk of Losing Genetic Diversity:** Ensure breeding practices do not diminish the genetic pool.
 - **Prioritize Breed-Typical Temperament:** In addition to good health and typical dogs, emphasize that the temperament is adapted to society's needs.
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Important Note on National Regulations

Regardless of the recommendations from ISIC, local laws and national guidelines must always be followed. National kennel clubs may have stricter rules or specific requirements, and these should take precedence over ISIC recommendations where applicable.

The ISIC breeding recommendations serve as overarching goals to support the breeding of healthy, well-functioning Icelandic Sheepdogs across all member countries. However, different countries may face unique challenges in their breeding programs. Therefore, these recommendations cannot be universally prioritized by ISIC. Each country should prioritize them based on their specific national breeding strategies and needs.

Population

In closed populations, inbreeding is inevitable and increases with each generation. Past events, like population declines, have permanently reduced genetic diversity. Given the breed's small founder population, the current international population is closely related. It is vital to use many animals in breeding.

Recommendations:

- **Avoiding breeding dogs (both males and females) younger than 24 months.**
ISIC strongly encourages waiting until the dogs are closer to 36 months for their breeding debut. This allows breeders to gather more comprehensive health and genetic information, as some issues may not appear until later.
 - **Maintain a generation interval of 5 years.**
Breeding younger dogs can shorten the generation interval and accelerate the loss of genetic diversity, making it important to wait until full maturity (2-3 years)
 - **The number of offspring from a single male should not exceed five litters, or 25 pups (whichever comes first), and no more than twice that number as a grandfather.**
This corresponds to 5% of the total puppies born over a 5-year generation interval, if 100 puppies are born annually.
 - **The number of offspring from a single female should not exceed four litters, or 20 pups (whichever comes first), and no more than twice that number as a grandmother.**
 - **Average inbred level should be kept to a maximum of 2.5% over 5-generations.**
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Genetic Diversity

To minimize further loss and prevent emerging of recessive traits, it's crucial to breed from as many distantly related animals as possible. Advances in technology allow us to calculate inbreeding and track genetic contributions over generations, identifying individuals with low inbreeding to preserve important gene variants. International cooperation is essential to maintain diversity.

Recommendations:

- **Maintain a Wide Breeding Base and increase genetic diversity** by using as many males and females as possible.
By using at least 20 males and 20 females at the same time, the risk of losing genetic diversity will be lowered. Theoretically, there should be bred with dogs from each litter, meeting the breeding criteria.
- **Utilize tools such as Mean Kinship** calculations and future DNA tests that measure individual inbreeding percentages.

ISIC strongly encourages the exchange of breeding animals between countries, minimizing inbreeding.

Breeding Restrictions - Prohibited Matings:

- To preserve, or preferably extend, the genetic diversity of the breed, matador breeding and heavy inbreeding should be avoided. Mating between siblings, mother to son or father to daughter should never be performed.
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Health: Eyes and Hips

A general rule is that a breeding program should not exclude more than 50% of the breed population. The breeding stock should be selected from the best half of the breed population, ensuring that only healthy animals free from any diseases or deformities are used for breeding.

Eye Examination - Recommendations:

- All individuals used in breeding should have an official known eye examination with clear results free from hereditary diseases.
- Eye examinations should be conducted close to the time of breeding, especially if the dog is under three (3) years of age. Some eye diseases, like cataracts, may not appear clinically until the dog is up to three (3) years old.
- Dogs diagnosed with hereditary cataracts should not be used for breeding.

An updated list of hereditary eye diseases for Icelandic Sheepdogs will be provided as an appendix to these breeding recommendations.

Hip Dysplasia - Recommendations:

- All individuals should have an official known hip dysplasia (HD) status.
- Dogs with D or E hips should not be used for breeding.
- ISIC recommends that the earliest age for X-ray of the dog, should be at 18 months of age.

An Icelandic Sheepdog can officially be HD scored after twelve (12) months of age. Because an Icelandic Sheepdog is not fully developed until 2-3 years of age, an X-ray result is more likely to correspond to the true condition of the hips at 18 months.

Ethics and Welfare of the Bitch

For bitches aged 7 years or older, it is essential to check with national kennel clubs, as regulations may prevent the registration of puppies from older females.

- **A bitch should have her first litter before she is 5 years old.**
- **If a bitch is bred after 7 years, a veterinary certificate is recommended** to confirm she is healthy enough to carry and raise a litter. Breeding should not occur after 10 years.

- **Adequate resting periods are necessary**, with a 12-month rest recommended if two litters are born within 12 months.
 - **A bitch that has had two cesarean sections should not be bred again**, as it is crucial to preserve the breed's natural birthing ability, with cesarean sections reserved for emergencies only.
 - **Artificial Insemination (AI) should only be used when both dogs have previously mated naturally**. It is important that the Icelandic Sheepdog retains its ability to mate naturally. AI should not be used if either dog shows no interest in natural mating or if they have a non-injury-related illness or deformity that prevents mating.
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Mentality and Temperament

The breed standard describes the Icelandic Sheepdog as alert, cheerful, friendly, inquisitive, playful, and confident with a gentle temperament. Any dog showing aggression, excessive shyness, or other abnormal behavior should not be used for breeding.

Recommendations:

ISIC recognizes the value of mental descriptions like MH (Mentalbeskrivning Hund) and BPH (Behavior and Personality Assessments in Dogs) and other similar mental descriptions.

- If these tests are available in a country, ISIC recommends that dogs are described.
- As these tests are not universally accessible, ISIC encourages participation in dog sport and activities, which provide valuable insights into a dog's mentality throughout its life.

ISIC encourages breeding decisions aligned with the breed standard, emphasizing that any dog displaying abnormal fear or unprovoked aggression in daily situations should not be used in breeding.

Working Abilities

ISIC supports the preservation of the Icelandic Sheepdog's herding instincts. While a common herding ability test is desirable, it is recognized that this is not available in all countries.

Recommendations:

- **Herding:**
Where possible, ISIC recommends participation in tests like FCI Natural Herding Aptitude Test (NHAT) or similar alternatives.
 - **Working abilities:**
ISIC encourages owners to engage their dogs in various working dog activities to preserve the breed's versatile working capacity.
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Appendix

An updated list of hereditary eye diseases for Icelandic Sheepdogs will be provided separately as an appendix to these breeding recommendations.

Final Notes

- **Compliance:** Ensure all breeding practices comply with local laws and national kennel club regulations.
- **Sustainability:** Focus on long-term sustainability by preserving genetic diversity and maintaining the breed's working and temperament traits.
- **International Cooperation:** Foster international cooperation to enhance breeding practices and preserve the Icelandic Sheepdog's unique characteristics.