

BUILT FOR CLIFFHANGING ...



AND CUDDLING

ELIN STRAND AND MAGNUS ENGER

The Norwegian Lundehund's six-toed paw is just one feature that sets this Non-Sporting Group newcomer apart.

By Mara Bovsun



When dog people talk of the breeds they love, one eternal cliché is bound to pop up:

They're not like other dogs.

Almost everyone says it, and believes it to some extent, whether the topic is Labrador Retrievers or Affenpinschers. But in our hearts we realize that, despite variations in size, shape, coat, and temperament, most dogs, essentially, are the same.

Then there is the Norwegian Lundehund.

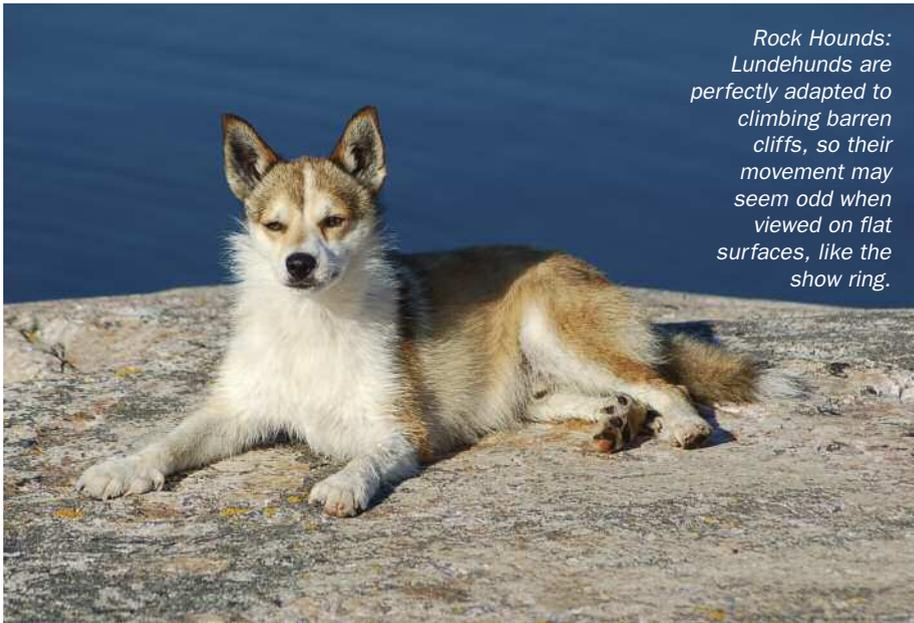
Perhaps it's the front legs that can stretch sideways, like a gymnast on the rings ... or the ears that fold like origami ... or the neck that cranes back so far that the tip of the nose brushes the spine.

Maybe it's because they have "thumbs."

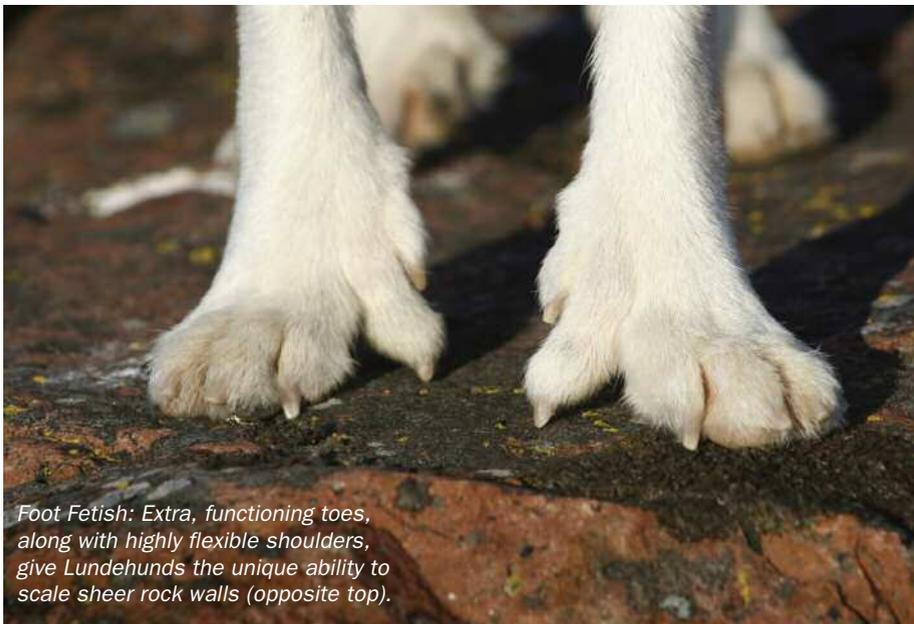
But there's no question—this breed certainly is *not* like any other.



ISTOCKPHOTO.COM/PAUL TESSIER



Rock Hounds: Lunde-hunds are perfectly adapted to climbing barren cliffs, so their movement may seem odd when viewed on flat surfaces, like the show ring.



Foot Fetish: Extra, functioning toes, along with highly flexible shoulders, give Lunde-hunds the unique ability to scale sheer rock walls (opposite top).

life as hard and perilous as the rocky cliffs. Puffins, also known as sea parrots because of their colorful beaks, were hunted for feathers and meat, which was pickled to last through the long Arctic winters.

But it wasn't like you could pluck them out of a bush. Puffins build their nests in little fortresses formed by caves and crevices in cliff walls. For centuries, this strong, flexible little dog was the only way to reach them. The dogs would climb sheer rock walls, worm their way into the tiny passages, and snatch the birds. Then they'd skid down the cliffs, with the squawking, flapping prize in their mouths.

In the mid-1800s, new technology—nets—put the dogs out of a job. Later, puffin populations dropped so low that the birds ended up on the endangered-species list, and hunting was outlawed. The dogs had outlived their purpose and, like their prey, faced an uncertain future.

In much the same way the puffin has struggled back from the brink of extinction, the story of the Lunde-hund through the 20th century has been a battle to survive.

Under the Midnight Sun

Every four years, a small group of fanciers gather on Vaeroy island with their dogs. They come for a special show held during the Norwegian summer, when the sun never sets.

In 2009, 120 Lunde-hunds and more than 200 people attended the event,

sponsored by the Norwegian Lunde-hund Club. It was a gratifying sight for fancier and judge Christen Lang, who was honored by the Norwegian Kennel Club for his work in bringing the breed back from the brink of extinction. When he came into the breed, there were only 60 left. And there was a time when the population could be counted on one Lunde-hund paw.

The group toured the abandoned fishing village of Mostad, said to be the last place where pure Lunde-hunds were found, and headed out to a grassy meadow. Behind the village is the mountain, Måstafjellet. On the side facing the North Sea is where puffins make their nests, and where the dogs' ancestors hunted.

For this event only, and by special permit, Lunde-hunds are allowed to run free, but not to hunt. Puffin hunting in Norway has been banned since World War II.

Once on the island, the dogs seem to know exactly what to do, no training needed, says Lang. He saw how hardwired puffin

One-Trick Puppy

The breed's name, literally "puffin dog," attests to its high level of specialization. It evolved for one job in a tiny, isolated geographic area, the Norwegian coastal island of Vaeroy in the Arctic Circle. Descriptions of dogs with the breed's peculiar traits have been found in Norse and Danish writings dating to the 16th century, according to the Norwegian Lunde-hund Association of America (NLAA).

Sharon Pederson, a longtime fancier, NLAA vice president, and the club's judges' education chair, believes that their unusual characteristics developed naturally, over centuries, and with little guidance from a human hand.

"If you go to Vaeroy and see the terrain, and look at the physical anomalies, you see they go hand-in-hand," she says. "Something like that doesn't just pop up out of a breeding program."

Fishing was the primary occupation on the island, but it was a



hunting is about 20 years ago when a filmmaker preparing a documentary wanted to see how these dogs work and took one of Lang's Lundehunds to Vaeroy.

Lang had doubts about the hunting prowess of his 8-year-old pet. The dog had been born in Oslo and had never seen a puffin—or a cliff, for that matter.

“He went straight into the cave, and did a perfect job and returned with a puffin in his mouth,” Lang recalls, noting that a permit was required for the one-time visit.

Letty Afong, an AKC judge who has owned Lundehunds for five years, says she witnessed this hunting instinct spring to life last summer. “Flora, my first Lundehund, weighing only 15 pounds, sounded an alarm to us and then caught and broke the back of a four- or five-foot-long cottonmouth water moccasin snake in our backyard this summer, and then stood by and watched my husband remove it from the area.”

Back from the Brink

Lang discovered the breed in the 1960s, when he met a woman with two bright little foxlike dogs with odd-looking paws. “I was amazed. They had a natural beauty,” he recalls. “I fell completely in love with them.”

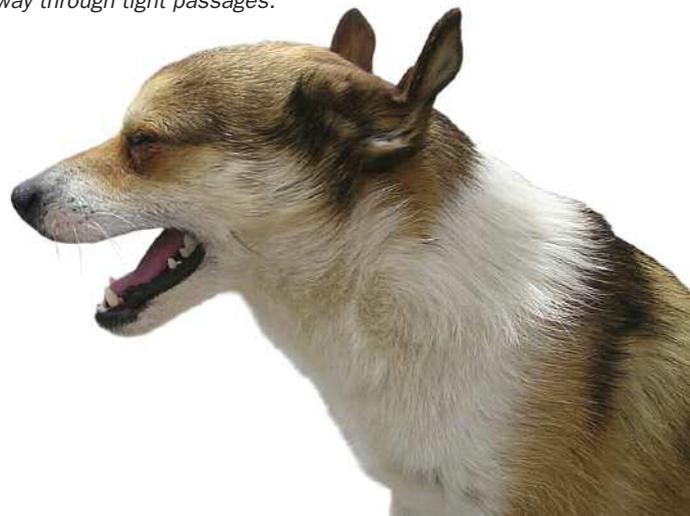
His search for a Lundehund of his own led him to Eleanor Christie, a Norwegian woman who had taken an interest in them in 1930s and started a breeding program in Hamar, on the mainland.

It was lucky she did, because distemper swept through the Vaeroy population during World War II, wiping out all the island dogs. Christie's kennel was the only thing that saved the breed from oblivion.

They were almost wiped out again in 1960, when there were only six left in the world, and five had the same mother. “There was a tremendous genetic bottleneck,” says Pederson.



Elastic necks and folding ears ease the way through tight passages.





“A PUREBRED LINK TO ANTIQUITY”

high-tech field of genome research. They believe that the unique DNA profile of this ancient breed may make important contributions to their cutting-edge science. “The Lundehund is a fascinating breed with a fascinating history,” says Mark Neff, founding director of the Center for Canine Health & Performance, jointly supported by the Translational Genomics Research Institute in Phoenix and the Van Andel Research Institute of Grand Rapids, Michigan.

Neff is one of a group of researchers working on the development of a complete canine-gene sequence—or reference genome—that will help speed research into diseases of both dogs and humans. “The reference genome,” he explains, “is the foundation we go back to time and again to make sense of the latest data we’re generating in the lab.” So far, the team has sequenced the genes of more than 15 purebreds, including the Lundehund.

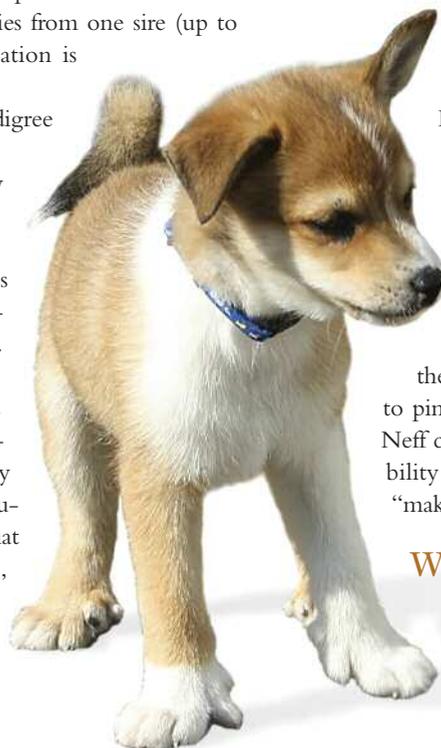
The Lundehund’s genetic uniformity, Neff says, will make it easier to piece the model genome together.

Neff first saw a Lundehund in 1993 when he switched from his original specialty, yeast genetics, to dogs, and purchased a breed encyclopedia. As he paged through it, the odd little spitz with the funny feet caught his eye. “The Lundehund stood out from the other breeds,” he recalls. Later, in 2004, he visited a Lundiefest, held at Pederson’s Cliffhanger Kennels, in Tomales, California, and gathered cheek swabs for his research. As he analyzed the samples, he recalls, “We were blown away by how homogeneous the gene pool was.”

An accurate canine genome will help identify disease-causing genes, and may improve breeding strategies, especially where there are small gene pools. But will scientists be able to pin down the DNA for the Lundehund’s odd paw? Neff can’t say for sure, but he doesn’t rule out the possibility of finding the genetic blueprint for traits that “make a Lundehund a Lundehund.”

Weird, but Wonderful

When meeting a Lundehund for the first time, most people are immediately struck by the breed’s more ordinary attractions—their cute,



Lang contacted Christie seven years later, and, with the older woman as his mentor, he began a breeding program. In the 1970s, Swedish geneticist Per Erik Sundgren helped the Norwegian Lundehund Club establish guidelines to carefully expand the limited gene pool. These principles were:

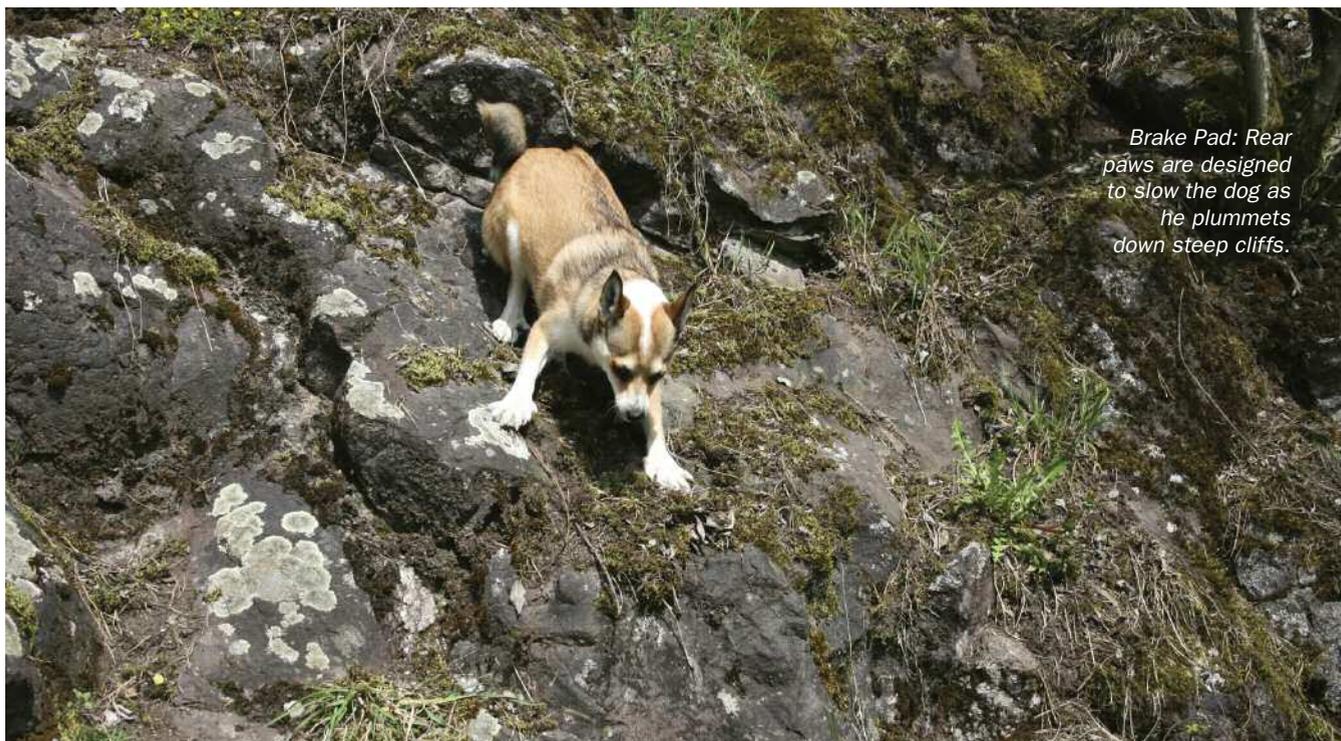
- ★ Produce no more than 15–18 puppies from one sire (up to 20 now because the Lundehund population is bigger),

- ★ Allow no common ancestors in a pedigree of three generations,

- ★ Breed one litter from every Lundehund, even pets, to widen the gene pool.

Today, the lack of genetic diversity is the biggest challenge, and one that breeders are carefully working to correct. Although basically a sturdy breed, the Lundehund’s most serious health issue is an inherited tendency to develop gastrointestinal disorders, ranging in severity from mild to deadly. Some fanciers speculate that all Lundehunds carry a gene that makes them prone to such conditions, even if they show no signs of disease.

But this bottlenecked gene profile has its fans—among scientists in the



Brake Pad: Rear paws are designed to slow the dog as he plummets down steep cliffs.

foxlike appearance and alert faces.

Then they look closer, and notice the paws and the strange way they walk. Those who become fanciers are the ones smitten by these peculiarities. Lundehund enthusiasts, says Pederson, tend to be “accepting of oddity.”

Especially endearing are the feet. NLAA recently ran a contest to pick a club motto. It came down to a tie between *The Paws That Give You Pause* and *Six Toes Is the Way to Go*.

Lundehund people also have a deep appreciation of history, and view the preservation of this strange little dog as a sacred trust. The NLAA’s mission statement talks of allowing the Lundehund to “flourish and remain the purebred link to antiquity that it is.”

Also essential: a sense of humor. There’s something comical about how these dogs are put together.

For starters, the forefeet, according to the standard, have *at least* six fully developed toes, five of which should reach the ground, and there are eight pads on each foot. The additional toes consist of one three-jointed toe, like a thumb, and one two-jointed toe.

The hind feet also have six toes. There are seven pads, and the center pad is elongated. Pederson explains that this pad functions as a brake when the dogs slide down vertical rock walls.

Moving up, there is an “elastic neck” that can crane backward so the head can touch the spine and ears that can fold shut to protect against dirt and water. These attributes proved useful when wriggling through the tight puffin caves.

The shoulders are flexible enough to allow the front legs to extend to the side, perpendicular to the body. This shoulder structure allows them to hug cliffs, but it produces a peculiar rotary movement when they walk. Even Lang, when describing his beloved breed, admits that “in the field or ring, they look a bit ridiculous.”

Afong, an AKC judge as well as Lundehund fancier, says an intelligent evaluation will require a thorough understanding of the

dog’s unique features, as well as an idea of why and how they developed.

“I’ll never forget bringing my first Lundehund to Louisville to show to Julie Parker, an experienced dog person and handler. I gaited my Lundehund for Julie to observe and waited for her response ... which was much silence,” Afong says. “I guessed she wondered why I would have chosen this dog. I quickly described the correct rotary action in the front. Julie then smiled and said she had been speechless watching my Lundehund gait but finally understood why the dog moved like none she had ever seen.”

Pederson, who got her first Lundehunds in the mid-1990s, admits that she was drawn to them because of a friend, Frank Bays, who had a fascination with all things strange and rare. With Bays, she founded Cliffhanger Kennels, produced 90 puppies, and helped set the breed on the road to AKC recognition.

As she lived with them, Pederson came to realize that there was much more to this breed than a sixth toe or odd assembly. Their personalities are so bright and funny, prone to “creative mischief,” and it makes them a joy to have around. They can be aloof with strangers, but they develop a powerful bond with their owners.

“They love to do whatever their people are doing,” Pederson says. They’ll adapt to any situation, whether it’s apartment dwelling, climbing up mountains, or living on a ranch, whatever their humans ask them to do. “They love their people more than anything.”

So at least in one way, perhaps the most important way, it can be said that this most unusual canine is just like any other dog. **Q2**

For more information, and to read the standard, visit nlaainc.com.