

# THE KHAO MANEE

*The White Gem of Thailand*



Photo by Amyworks

by  
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and  
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**Pictured: 'FFF. SNW. AreeSiam Mintra of ThaiWila' bred by Pairat Kumsawang.**  
Registered in TIMBA, CFA & FFF.Owned by Mattaneeya Pattaragamol (ThaiWila Cattery)  
Photo: by Amyworks



# THE KHAO MANEE

## THE WHITE GEM OF THAILAND

BY OUR COLUMNIST LORRAINE SHELTON & JANET POULSEN

The first time the Royal Cat of Siam was exhibited in England, at the Crystal Palace Show in 1871, they were described as "nightmare" cats, "ugly" and "frightening".

They were certainly different from the cats exhibited at the time. Western cats were substantial, broad of head and chest with dense coats, while these new cats from the East were the opposite in every way.

Form follows function, and students of anatomy can understand why the cold British winters lead to the development of conformation to conserve heat, while the cats of Thailand developed sparser coats on bodies with elongated torsos, ears, and nasal passages to dissipate heat. Even the temperaments of these cats was different: loud, boisterous, and naughty. But it is their devotion to their owners that won over the hearts of all who brought them into their homes.

However, these blue-eyed cats with their striking masks and gauntlets were not the only feline treasures the Thai people cherished. The famous Tamra Maew (Siamese Cat Poems) of Thailand are thought to have been created about 700 years ago, kept alive by oral tradition, and finally published.

There are currently 15 different Tamra Maew manuscripts preserved in the National Library of Thailand. Martin Clutterbuck has studied these manuscripts in great detail and published an in-depth analysis of these poems in his book "Siamese Cats: Legends and Reality".

Some believe that that these manuscripts are from the Ayutthaya Period (1351 - 1767), while other researchers date them to the early 1800s. A recently discovered manuscript provides some evidence that these poems (although not the manuscripts themselves) may date back to the 12th century during the Khmer (Cambodian) empire.

The poems described the "good cats" deemed worthy of breeding and preservation, not only the Wichien-maat (the pointed cats), but also the Suphalak (brown cats), Konja (black cats), and the Si-Sawat (blue cats).

When Westerners visited Thailand they brought these cats back with them and the cat fancy embraced them as the Siamese (and, more recently, Thai), Burmese, and Korat breeds. Dennis Ganoe, CFA Allbreed Judge and Korat breeder notes, "Korats came to the United States via Jean Johnson in 1959. She knew about the Copper (Suphalak) and other colored cats, but liked the blue ones better."

Another "good cat" of these poems was the Khao Plort, a white cat with "mercury-colored" eyes, which we would describe as greyish-blue, in contrast to the deep blue of the Siamese.



**Another view of 'FFF. SNW. AreeSiam Mintra of ThaiWila' bred by Pairat Kumsawang.**  
Registered in TIMBA, CFA & FFF.Owned by Mattaneeya Pattaragamol (ThaiWila Cattery)  
Photo: by Amyworks

There are temple paintings featuring these white cats dating to the time of King Nangklao (1824-1851 AD.). These cats were said to be kept and bred initially by Siam royals, as was the Wichien-maat.

It is believed that the name of the cat referred to in the poems as the 'Khao Plort' may have been changed to Khao Manee during the reign of King Chulalongkorn (1868-1910 AD.), who was said to favor them. **In Thai, 'khao manee' means "white gem."**

In recent years, visitors to Thailand have fallen in love with this ancient breed as well and breeding programs have commenced in the US, the UK, and continental Europe, especially in France.

The first Khao Manee cat was imported to the United States in 1999 by Colleen Freymuth, a blue-eyed male by the name of Sripia. Breeders in the west are currently working to promote and establish foundation lines for the Khao Manee, and, to acquire registration acceptance through ***all the members of the World Cat Congress.***

Like all cats native to Thailand, Khao Manees are shorthaired, more lithe in build than cats of Western origin, and in personality they are lively, highly intelligent, communicative, and people-loving. The Khao Manee may have any eye color, but the variety most highly cherished in recent years is the odd-eyed.

The Khao Manee is a natural breed, and selective breeding for extreme type is discouraged. Preserving the resemblance to the native cats includes, for example, preserving their natural sexual dimorphism.

Males are typically 8 to 12 pounds and may have slightly heavier boning than females. Females are typically 6 to 8 pounds. Characteristics common to Western breeds, such as round heads, heavy boning, or dense coats, are to be avoided.





**From left to right: WhiteGem Kasem, (Yellow eyed) WhiteGem Froggy (Blue-eyed) and WhiteGem George (Odd-Eyed). Khao Manee pets placed in forever homes bred by Lori Snook-Haas.**

Photo: Lori Snook-Haas

The personality of the Khao Manee, like that of all the native cats of Thailand, is highly communicative, though not necessarily noisy. They are active, playful, curious cats.

They love to interact with people and hate to be left alone and ignored. The Khao Manee is highly intelligent. This is not a reserved, self-sufficient, independent breed, but a breed for those who are looking for a family member that is almost human in their personalities and needs.

### **STATUS AS A NATURAL BREED**

The collective term Maew Boran has been adopted by Thai breeders to describe the naturally occurring breed of cats found living in Thailand.

In the west, we separate them into the Siamese, Burmese, Tonkinese, Korat, Thai, and Khao Manee cats. Through isolation of foundation cats following their export from Thailand and selective breeding for agreed upon traits, each of these breeds have been developed into distinctly different phenotypes. However, in Thailand they are one breed, with different colors to which the Thai people assign historically meaningful names.

A natural breed of cat can be defined as one that develops without human intervention in a specific, often isolated, geographic region. Natural breeds have a characteristic physical appearance, and the unique look of the natural breeds often develop for adaptive reasons.

As an example, the Turkish Van developed a long coat to survive the cold winters of Mountainous Turkey; whereas the Thai cats developed short coats and lighter coat colors to survive the brutal heat of Thailand.

Variants of the tyrosinase gene (in Siamese, Burmese and Tonkinese) and of the melanophilin gene (in Korats) cause a reduction in pigment expressed in the coat.



**Left: A Thai stamp, featuring the Khao Manee.** Photo: Lorraine Shelton.

**Right: WhiteGem Sweet Daisy (below), with her son ‘Taco’ who became SGC WhiteGem Taco, bred by Lori Snook-Haas and owned by Nancy Schuman.** Photo: Lori Snook-Haas.

Experts believe that these lightening mutations may be adaptive in response to the extreme heat in Thailand.

Recent genetic research has determined that Maew Boran are distinct from cats from other parts of the world, to which anyone who has had one of these cats can attest. This can explain the difference in not only their appearance, but also their temperament, from the European or Middle Eastern cats.

Thai breeders, including those associated with TIMBA (The International Maew Boran Association), are working to keep this natural breed alive in Thailand. TIMBA provides education and resources to breeders wishing to contact Thai breeders in order to establish breeding programs in the West.

Efforts to preserve this natural breed in its native country include a registration program for cats in Thailand, the development of a breeding management plan, and study of the breed. Many of the foundation cats registered in TICA and CFA have been registered in Thailand by this association.

### **GENETICS, NOMENCLATURE, AND HEALTH**

A Khao Manee cat is, by definition, white in color. However, due to the dominant nature of the mutation, non-white kittens may be born to Khao Manee breeding programs. The same issue was discussed with the board of the Cat Fanciers’ Association in the 1960’s when the Korat was presented for acceptance.

The recessive pointed mutation was known to exist in the breed, causing occasional pointed kittens to be born. Korat breeders pledged with the people of Thailand not to describe the pointed cats as “Korat”. The Khao Manee breeders make a similar pledge today.

The majority of Khao Manee breeders mate white cats to white cats. Because blue and odd eyes tend to be favored over gold eyes, these breedings are likely to include cats that are



**Cropped header, from the website of The International Maew Boran Association, the official cat registry dedicated to preservation and registration of original Thai breeds.**

Reproduced with permission of TIMBA. (Panarat Kamchat)

homozygous for the white allele (two copies of the white mutation, one from each parent), resulting in litters of all white kittens.

In fact, the recent availability of a genetic test for this allele allows breeders to choose whether they wish to breed with homozygous or heterozygous white cats (cats carrying the non-white allele recessively).

Creating a population of all homozygous white cats has an unfortunate consequence however. Dominant white color results from the insertion of a feline endogenous retrovirus in the KIT gene. One or two copies of the affected allele results in white phenotype, regardless of the other allele.

Dominant white is distinct from albinism which results from a mutation in a different gene (TYR). The KIT mutation is not completely benign; varying degrees of hearing impairment is associated with this allele. Although the population of tested cats is limited thus far (a University of Baltimore breeding colony), approximately 75% of cats with two copies of the mutation have been found to be deaf and the remaining 25% appear to have at least partial hearing impairment.

In contrast, of cats with only a single copy of the allele, approximately 60% had normal hearing, 21% were deaf and 17% had hearing impairment.

For this reason, some breeders prefer to avoid breeding two white cats together in an attempt to avoid creating homozygous kittens. In addition, some cat clubs, registries, and countries prohibit the breeding of two white cats and require that only cats demonstrated to be sound of hearing through a neurological exam called a brainstem auditory evoked response (BAER) test are used for breeding.

Khao Manee breeders around the world continue to submit DNA samples and BAER test results to Dr. Leslie Lyons at the University of Missouri, in order to better understand this phenomenon and to determine the incidence level of deafness in our breed. It is unlikely, however, that the incidence of deafness in this breed can be completely eliminated, as the attempt to accomplish this with a similar genetic phenomenon (i.e. spotting in Dalmation dogs) has been unsuccessful, despite many years of breeding restrictions based on BAER testing.





**The high-flying Thailand bred Khao Manee male, - 'A Wei (อาเหวย)'**  
**A Best in Show winning Kitten at the KU Thai International Show.**  
 Owned by Suthiwat Siritanayothin  
 Photos: by Juriwan Anantayanon





**Official Photo of Winning Exhibit at the KU Thai International Show. ‘A Wei’ – with owners.**

In order to allow breeders the means to attempt to minimize deafness in their breeding programs, non-white cats from a Khao Manee breeding program may be registered for breeding purposes in both CFA and TICA. However, the breed standard includes a prohibition against exhibiting these non-white cats in the Khao Manee class.

Other than deafness, which Khao Manee breeders do not consider a highly impactful condition in indoor cats, no other health problems appear to be evident in this breed thus far. Breeders are advised that testing for lysosomal storage diseases known to be present in the Siamese, Oriental, and Korat breeds would be prudent.

### **OUTCROSSES AND RULES FOR REGISTRATION**

As a natural breed, imported white cats from Thailand, Malaysia, Vietnam, Laos, Cambodia, or Burma/Myanmar may be currently registered with unknown or unregistered parents in CFA and TICA. The Korat is an outcross for the Khao Manee in The International Cat Association (TICA).

However, due to our large foundation gene pool and continued availability of Thai imports, the CFA breeders do not feel the need to outcross to the Korat breed. The desired type of the Khao Manee does not make the modern CFA style Korat an appropriate outcross.

Foreign pedigrees, in particular those from Southeast Asia, including from the Thailand Cat Fanciers (TCF) or The International Maew Boran Association (TIMBA), may include references to other natural breeds of Thailand not currently recognized by some cat registries in the pedigree of Khao Manee cats (e.g. Suphalak, Maew Boran, Konja, Wichienmaat, or Si Sawat). This is acceptable, as these cats are of the correct type for our breed.

A new color in the native Thai breed population has been identified, known as the “mocha” variant of the tyrosinase gene, allelic with the pointed ( $c^s$ ) and sepia ( $c^b$ ) variants. This variant, in its homozygous form, results in unique pigmentation lighter than the sepia shade. In its heterozygous form with the other tyrosinase alleles, it can result in expanding



**Above: The French were extremely active in the late 19<sup>th</sup> and early 20<sup>th</sup> century in procuring Siamese or Thai breeds into France. This unique Press Photograph was taken at a Paris Cat Show in 1932, where there was an exhibition of 'Siamese' cats. It is interesting to note the Seal-pointed adult and kitten held by this young lady, while at her side, is a blue-eyed white shorthair...could this be an early 'Khao Plort' (Khao Manee) imported at the same time as the Sealpoint Siamese?**

**- Photo: Stella-Presse, Rue Mondetour, Paris. Image: courtesy of The Harrison Weir Collection.**

the spectrum of intermediate colors between pointed and sepia, beyond the "mink" color seen in Tonkinese. Some Khao Manee breeders are working with this newly identified mutation in their Maew Boran breeding programs.



June 29, 1988.

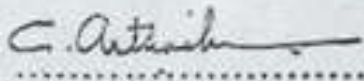
Mrs. Richard Negus  
Secretary,  
Korat Cat Fancier Association  
1525 3/8 North Bohem Drive,  
Los Angeles, California 90069

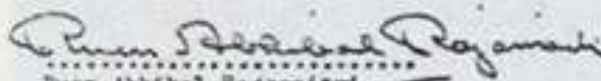
Dear Mrs. Negus:

May we congratulate you for succeeding in forming a Korat or Si Sawat Cat Association in California. We sincerely hope though, that you will retain the physical features of the Siamese cat and be firm in stressing the fact that the Korat or Si Sawat is born silver blue and is this colour from birth to old age. If the body is not entirely silver blue > it is not a Korat. The eyes of the kittens are greyish blue when young changing to amber green - the greener the better -- when full grown -- not yellow or golden and certainly not blue.

Wishing the Association every future success,

Yours most sincerely,

  
.....  
Chompoo Arthachinda  
248 Soi Sathabut  
Si Sakunvit Road,  
Bangkok, Thailand.

  
.....  
Ruen Abhibal Rajanaitri  
285 Silom Road,  
Bangkok, Thailand.

**Letter from Thai officials to Daphne Negus dated June 29, 1988 – congratulating her on having successfully established a Si Sawat (Korat) Cat Association in California.**

Image courtesy of The CFA Foundation, Inc.

## THE BREED STANDARD

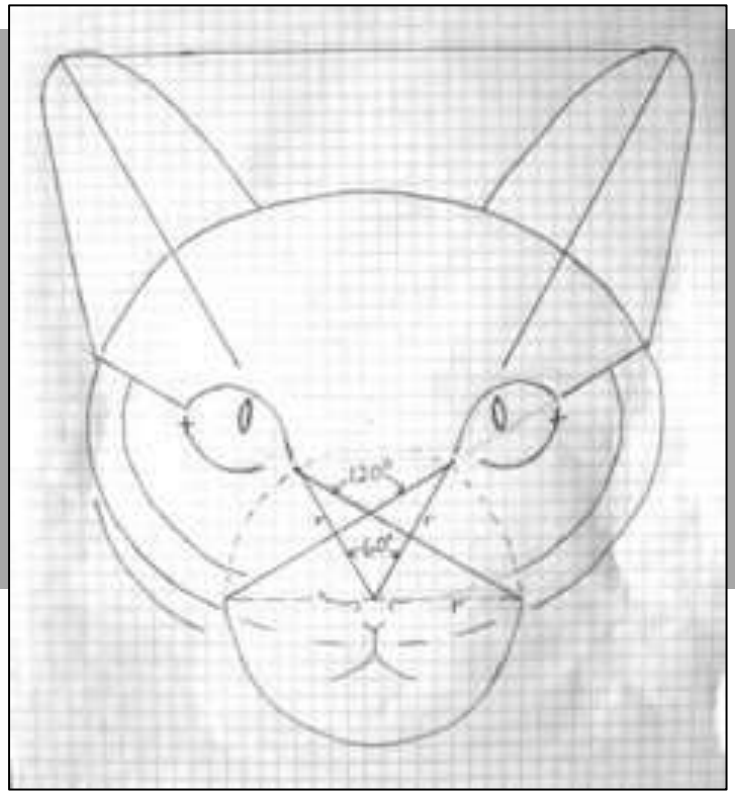
While drafting the standard for CFA, there was a great deal of debate as to how many points should be allocated to the head, and in particular the eyes. About half the breeders wanted 90 points assigned the head, eyes, and eye color. The other half wanted more. Obviously, this would unacceptable to any association, so a more balanced compromise was reached.

Some breed standards refer to circles, hearts, rectangles or triangles. In order to understand the Khao Manee standard, you must become acquainted with the geometric shape called the ellipse. The shape "oval" is in the form of an ellipse.

The head is a modified, but not exaggerated, wedge, medium in width and length. Viewed from the front, the face appears elliptical, with focus points just below the outer corners of the eyes. The fairly prominent cheek bones lie along an inner ellipse with the same focus points. The tip of the nose and tips of the ears form the points of an equilateral triangle. The profile is long, with a very slightly convex forehead. The profile should be nearly straight, but with a slight downhill slope from the brow to just below the eyes. The nose may be slightly convex. The muzzle is medium in length and width. The muzzle break forms the boundaries of the hemispheric, rounded muzzle. The chin is moderate and proportional to the nose, neither receding nor overly prominent. A short, blunt muzzle or long, pointed muzzle should be penalized. In addition, a straight profile or narrow upper head are considered undesirable.

Slightly large, wide at the base, oval tipped ears form the top of the triangle. The ears should point toward 11 and 1 o'clock, well separated from each other, and a bit less than an ear base width apart. Light furnishings are allowed. Penalize for narrow space between the ears; small ears, very large pointed ears, or ears set low or high (significantly above or below 11 and 1 o'clock).





**Evaluating the geometry of the Khao Manee head. The drawing at right represents the theoretical perfect proportions. Sketches by Janet Poulsen.**

Eyes are slightly to moderately large and luminous. Oversized, “buggy” eyes out of proportion to the face would not be desirable.

The eyes should have an open almond shape, but they may be somewhat rounded when fully open or if the cat is startled with a teaser, however they should return to a noticeable Asian slant when the cat is relaxed. Fully round eyes with no indication of an Asian slant should be penalized, as should small or dull looking eyes.

The eyes should be set a bit more than an eye width apart. Any eye color permissible, but the color must be clear, vivid, and jewel-like in tone. Jewellers refer to good color in faceted stones or rough as “gemmy” and we are looking for similar saturation of tone.

Crossed eyes are a disqualifying fault; keep in mind that blue-eyed Khao Manee may be masking a pointed genotype.

The ideal Khao Manee has a medium torso with very firm musculature, however the cat should look agile and feel flexible and springy, not meaty or heavy. Males should have more muscle than females, but should never appear cobby or thick-necked.

The underbelly is mostly firm, level and parallel to the ground, but some loose skin on the underbelly is permissible, consistent with providing room for flexibility and agility for this active, athletic breed.

The legs are medium to slightly long, and should be well-proportioned to the body. The front legs appear slightly shorter than the back legs. The boning should be medium to slightly refined in females, but may be slightly heavier in males. The paws are oval in shape and medium in size.

The tail should be proportional to the body, tapering gradually to the tip.

Tail abnormalities are extremely common in the native Thai breeds and we accept even significant kinks as a reflection of this well-known characteristic. However, the ideal exhibit has a visibly straight tail that is not shortened by excessive kinks. This is possibly the most challenging characteristic to attain in a Khao Manee breeding program.



**Left: A drawing depicting a stylised profile that fits the Khao Manee Standard.**

**Right: The blue-eyed breeding queen 'WhiteGem Sunny' Photo: Lori Snook-Haas,**

The coat is medium short in length, fine, and slightly open. The coat should be smooth enough to reveal the underlying musculature of the cat, with a sparse to moderate undercoat. It should never have the density or sharp resilience of a Western breed. The coat should not feel coarse nor appear to be fluffy.



**Grand Champion Alter, WhiteGem Elliott, now a much-loved family pet**  
**Note his gem-like eye color saturation and the shadow cast by his correct profile.**  
 Bred, owned, and photo by Lori Snook-Haas.





**Above left: WhiteGem Max, a Khao Manee, working stud male.  
 Above right: Close-up beauty shot of the Blue-eyed breeding queen, WhiteGem Sunny.  
 Bottom left: WhiteGem George (standing) and WhiteGem Pete (A Khao Manee Stud male).  
 Bottom right: In the forefront, former odd-eyed breeding queen WhiteGem Spirit, with  
 in the basket, her daughter WhiteGem Sweetie, (left) and WhiteGem George (right).**

Photo set: by Lori Snook-Haas.





**Above left: WhiteGem George and WhiteGem Mahidol. Above right: Blended litters, at rear, WhiteGem George, Kasem & Pete. Front row: WhiteGem Froggy, Minky Mouse & Goldie. Below: A fine litter of Khao Manee pets, sired by WhiteGem Xander, out of WhiteGem Goldie.**

Photo set: Lori Snook-Haas

## WHY THE KHAO MANEE?

When a group of breeders was asked why they have these cats in their lives, most mentioned their amazing personalities first and their beauty second. Khao Manee owner Alyssa Dewi calls her girl, "Super loyal, majestic, and intelligent." Ger McKerlie added that hers are "loving and friendly with humans and other cats." Longtime breeder Janet Poulsen of Vinlands cattery describes them as feeling "like cashmere and they melt in your arms when you hold one." Pet owner Victoria McCallums calls hers "intelligent, playful, perceptive, and like no other cat I have ever been owned by."



**TWO exceptional Khao Manee females. Left: RW. BW. QGC. ROCKINASHI VARANA, the highest scoring Khao Manee in Championship. Right: RW. BW. QGC. ROCKINASHI EYUPADEE YINDEE both bred by Nikki Crandall-Seibert.DVM. Photos by Larry Johnson**

Robin Austin of Leotie cattery states:

"Years ago I saw my first Khao Manee and was blown away by its beauty. I was astounded learning of the history of the breed and surprised that it was virtually unknown. I could not get the breed out of my mind and I eventually joined the efforts to get the breed official recognition in TICA. I never thought I would start with a second breed. I absolutely love these cats. They are smart, active, opinionated, and loyal to their people. I love watching the moms with their babies, so concerned and gentle. They are great companions."

Joe and Lori Haas of WhiteGem cattery explain: "We are an Ohio couple that have been fortunate to become a breeder of the ancient Thailand cats through our introduction to a Khao Manee kitten.

We were so impressed with the friendliness, sleek, athletic, almost panther-like appearance, compared to any other cat that we have had before. Thailand cats are thought to bring good luck. We sold two Suphalaks to the President of the Cleveland Indians and they were American League Champions the following year!

What we enjoy is the thrill of helping preserve the ancient Thailand breeds that are so rare. We send money from our kitten sales to Thailand for their help with the Temple cats and street cats."

The sparkling white cat with the jewel-like eyes has won its way into hearts around the world. With the acceptance of the breed for championship competition in TICA and the Miscellaneous evaluation class in CFA, we hope that others will be inspired to preserve this unique breed.



**TICA RW SGC LEOTIE KHALEESI OF ROCKINASHI – Bred by Janet Poulsen & Robin Austin**  
**First TICA Supreme Grand Champion in the Khao Manee breed.**  
**Owned by Nikki/Cory Crandall-Siebert. Photo: Preston Smith Photography**