History of Domestic Cats and Cat Breeds

J. Wastlhuber

Domestic cats have intrigued people throughout the world for centuries. Though in some cultures they have been treated as revered creatures, they have at times been considered objects of fear and superstition. Cats still remain mysterious animals, slightly beyond our total understanding. They live somewhat apart from people despite a long history of association and acceptance. Cats have been able to maintain their wild ancestral characteristics and dignity even though they comfortably adapt to the households and conditions of our modern life.

In an age when human individuality is consistently threatened, when the pressures of overcrowding, noise and visual uniformity have become inherent to our daily existence, people are almost envious of cats' autonomous spirit. Cats are used by the advertising industry as familiar symbols of independence, power, graceful elegance and soft luxury. The cat's admired self-sufficiency, combined with an ability to offer affectionate, playful companionship, allows many people to experience natural animal behavior within their own homes.

At one time in America and elsewhere, cats were mostly appreciated for their hunting ability on farms in rural areas. Now urban families show an interest in cats solely for their beauty and personality. Humane organizations and cat fanciers are increasingly successful in their efforts to educate people. Careless breeding of unwanted

and stray cats may some day be eliminated, giving hope for a future in which all cats will be valued and protected.

Purposeful and responsible breeding of pedigreed cats has been a peripheral activity for some time in many parts of the world, and began in the late nineteenth century in England. A growing curiosity about the origins and characteristics of the various pedigreed cats is evidenced by the public's enthusiastic response to cat shows and the numerous books in recent years about the different breeds. Understanding the concept of selective breeding of cats begins with an exploration of their early domestication, and the origins and genetic development of the breeds we know today.

Domestication

Human culture evolved thousands of years ago from a nomadic hunter-gatherer type of existence into an agriculture-based civilization. This is when domestication of animals began. Ancient domesticated animals included cattle, dogs, goats, pigs and sheep. The earliest remains of these species are found in the Middle East, along the eastern shores of the Mediterranean and extending to the Caspian Sea and Persian Gulf. The most primitive motive for breeding animals was for provision of meat. Later many other uses for live animals were recognized, and deliberate animal breeding is said to have begun around 3000 BC.

The earliest reproductions of the cat have been found by archaeologists in ancient Egypt, on the island of Crete, in Cyprus, the Orient and among pre-Columbian cultures in the New World. Ancient art of India shows cats in sculptures. When farming and stock rearing began, granaries and barns most likely encouraged multiplication of mice, who were happily protected from their usual predators and provided with an abundance of easy food. Wild and, later, semi-wild cats were probably enthusiastically welcomed by early farmers as the great agricultural civilization of Egypt began to develop in the Nile Valley. The cat's introduction into Egypt is usually credited to the Ethiopians, who brought a few cats into Egypt after their conquest of

The Egyptians were prolific artists and they depicted cats in unsurpassed statues, paintings, bas-reliefs, friezes and ornaments. They were sharp observers and skilled with detail, giving us an opportunity today to see these early cats. It is obvious that these people readily accepted cats and loved them with a passion for many of the same reasons as we do today. Through Egyptian art, we can understand their aesthetic appreciation for the beauty and grace of these animals, which go beyond their utilitarian purposes. Evidence that cats became part of Egyptian family life is apparent in paintings that show them to be as pampered as those of today. Cats were embellished with jewelry and often were mummified after death and buried in a special cat cemetary.

At what point the Egyptian cats could be considered domesticated, and how this came about, is not clear. One theory is that wild kittens may have been raised in captivity, with the tamer ones staying to catch mice and reproduce, while the more wild kittens left. Later, some attempt to breed cats, selecting those with rodent-hunting ability and a docile temperament, may have led to gradual domestication. Other speculation is that genetic mutation, abruptly or gradually, may have inhibited certain types of behavior. While wild cats remain essentially solitary except when mating, mothering and being part of a litter, domesticated cats accept people and usually other cats, as well as other animals, in a way that suggests a "litter-like" belonging. The domestic cat, therefore, never matures to a "normal" adult.⁴⁴

Domestic cats as with other domesticated animal species, have a smaller brain than wild cats. This not only reduces aggressiveness but also impairs sensitivity to some degree. Domestic cats may also have a modified hormone balance, associated mainly with a smaller adrenal gland and reduced adrenal secretions. Probably many factors, including genetics and selective breeding, played a part in creating the modern household cat. In any event, cats were semidomesticated around 2000 BC and fully domesticated in Egypt by about 1000 BC, which is almost 3000 years ago.

Cult of the Cat

No one knows how the simple appreciation for a beautiful and useful animal gradually evolved into deification. The cult of the cat in Egypt eventually reached such an intensity that the penalty for taking a cat's life was death.

It may have originated from the Egyptian fear of darkness. It was noticed that cats had what Egyptians believed was a magical ability to see at night. The Egyptian word for "cat" is "mau," which means to see. The widening and narrowing of the pupils of their eyes showed a relationship between the cat and the sun and moon. Death was considered the ultimate darkness; therefore, cats were thought to have the power to overcome even death. Every year the Nile flooded, destroying crops of grain, but the sun brought new abundant crop growth. The power of the sun and worship of the sun god, Ra, became merged with the cat. The circular form of a sleeping cat became a symbol for the cycles of nature, eternity and many lives.

Another early association with cats was to motherhood and fertility. The cat thus came to represent Bastet, the goddess of sexuality and fertility. Worship of the cat finally peaked around 950 BC, with a yearly festival in honor of Bastet. More than 700,000 people travelled to Bubastis for each annual festival. Historians agree that there was a good deal more intoxication than religious zeal at these gatherings. Some describe the ceremonies as a giant

he domestic a "normal"

omesticated brain than aggressive-to some deave a modited mainly and reduced many factive breedthe modern were semind fully dot 1000 BC,

ole appreciamimal grad-The cult of thed such an aking a cat's

a the Egypnoticed that eved was a The Egypvhich means wing of the relationship and moon. imate darkght to have eath. Every ng crops of w abundant un and worime merged of a sleeping ycles of na-

th cats was the cat thus goddess of of the cat firith a yearly More than Subastis for a agree that intoxication gatherings. as a giant

orgy of drinking, music and general frenzy. This was approved, as it seemed to increase fertility, not only for the crops but Egyptian women as well.⁴

The association of cats with pleasure, the fascination with their graceful body movement and eyes that seem to penetrate the soul and mind, and their self-sufficiency despite domestication are to a great extent the underlying reasons for many people's attraction to cats today.

Migration

Cats were jealously kept from outsiders by the Egyptians, but Phoenician traders eventually exported them to Europe, where they were needed to combat the increasing rat problem. Travelling monks took them east to the Orient and Roman armies smuggled them out of Egypt. Romans especially valued their cats, as they did everything Egyptian. Wherever their armies marched they took their animals, including cats. The Romans also probably took cats to England, though cats were first introduced to the British Isles by the Phoenicians in exchange for tin.

Once cats became common in other parts of the world and their role was diminished to primarily that of a working animal, the cat cult began to decline, beginning about 350-100 BC. Eventually, because the Hebrews associated cats with pagan idolatry and with the rise of Christianity, cats became creatures of the devil and were connected with witchcraft throughout medieval Europe.

Several centuries after Christ, some Asian countries began to import more cats. India was the first to introduce them into religion and Hindu rites, and for a long time obliged each of the faithful to feed at least one cat under his roof. ¹⁸ In China, cats were popular pets since the beginning of the Christian era and were considered bearers of good fortune.

In Japan, domestic cats were introduced probably in the 6th century AD, at the same time as Buddhism. Because it was the custom to keep 2 cats in each temple to protect the manuscripts against mice, the role of the earliest Japanese cats was that of guardian. Eventually replicas were placed at entrance doors to protect village homes

and to repel disease-carrying rodents. Cats were cherished and kept indoors or on leashes until the Japanese government passed a law in 1602 that ordered all cats released so they would be free to catch the vermin destroying the silkworm industry of the country. The cats of Japan then fell from their aristocratic level to that of a working animal.

Two factors figured strongly in the worldwide migration of domestic cats. Barbarian invasions swept across Europe, bringing with them rats and the plague. The cat's value as a rat catcher brought cats to all corners of the world and helped counteract in Europe the backlash of the church. Second, from earliest times cats have always inspired symbolic connections and superstition. The tradition of bringing cats on board ships was, in addition to the need for combatting vermin, a result of the belief that they brought good luck and could foresee storms. Therefore, oceans did not hinder the spread of cats, as they did the migration of other land animals. Cats were able to enter the New World and Australia because of their compatibility with ships and human explorers. In every port, kittens born on the ships left to settle in new areas. The first cats in America were undoubtedly brought by the pilgrims and were European domestic cats.

Origins from Wild Cats

The exact origin of domestic cats from wild cats is another unanswered question. Cats are divided into 3 main genera: the great cats (lions, leopards, jaguars, tigers); the cheetah; and the small cats, consisting of over 30 varieties, all in the Felis genus. All housecats worldwide belong to this genus, known as Felis catus. The largest of the Felis genus are the puma (100-130 lb) and the caracal (30-50 lb). The smallest is the black-footed cat of southern Africa and the Kalahari Desert (2.5-4.5 lb).

Within the Felis genus are various species and subspecies. A fundamental criterion for determining the ancestors of Felis catus would be its ability to mate with one of the other Felis species and produce fertile offspring. Though domestic cats have successfully mated with many other small cats in the Felis genus, including the Geoffroy's

cat, which has a different number of chromosomes, the offspring are not fertile.

Domestic cats can produce fertile offspring after mating with several of the small wild cat species. The wild ancestor of the domestic cat originated in the Middle East, and authorities generally speculate that it is Felis libyca, called the African wild cat, of the Felis sylvestris species complex. 28 These moderate-sized cats (10-18 lb) are found in Africa and Asia, from the Middle East to India, and also on Corsica, Sardinia and Majorca. They have a lithe body and tawny brown coat, with light stripes on hare-like ticked fur. The legs and tail are ringed with stripes. Unfortunately, these wild cats are rare today and genetically pure examples are almost extinct. They can be interbred with housecats to produce fertile hybrids and they have an identical chromosome structure and number. Mummified Egyptian cats examined in the British Museum had a brain size identical to that of Felis libyca.28

At one time it was thought that domestic cats descended from the European wild cat, Felis sylvestris. This ferocious and intractable cat is found in many regions of Britain, France, Spain, Italy, Germany and central Europe, but is unknown in Scandinavia. It is massively built and muscular, and weighs 10-24 lb or more. The head is broad, with a wide skull and clearly convex profile. It has a heavy jowled appearance, thick fur and a short, thick, heavily ringed bushy tail. The coat is yellowish gray, with vertical mackerel-patterned stripes.

It is believed that Felis libyca and Felis sylvestris are varieties of the same species. They have identical karyotypes, and mate with each other as well as with domestic cats to produce fertile offspring. Felis sylvestris may have played a part in the domestic cat's evolution by interbreeding with domestic cats brought into Europe, possibly introducing the genes for a darker tabby pattern, stocky body type, and smaller, more rounded and wide-set ears. The European wild cat has the largest brain of the Felis sylvestris species, considerably larger than that of domestic cats, making it unlikely as a prime ancestor.

Other wild cat species have been suggested as contributing to the evolution of

domestic cats. One often mentioned because of its similarity to the Abyssinian breed is Felis chaus. These cats are found in Egypt and throughout southern Asia. In the examination of mummified cats from 600-200 BC by Morrison-Scott of the British Museum, there was a small percentage of Felis chaus cats; however, these may have been wild rather than domestic cats, and probably were rare. Also the lack of the Abyssinian tabby gene in modern Egypt and Sudan, as reported by the Carnivore Genetics Center, indicates this was not the area of origin.

Evolution of Breeds

The original Egyptian cats were fairly uniform in appearance. Judging from artwork and examined mummified cats, their coat seems to have been short and reddish or yellowish, with only vestigial tabby-like markings or light spotting. These characteristics suited the cats for a desert environment. The body was lithe and muscular, with long elegant bones. The head was moderately large, with large jaws. This body type was adapted to hunting and travelling over large unprotected areas.

Environmental Adaptation

As these cats began to spread around the world, they gradually changed to adapt to their new environments. One of the earliest and most important changes in the cats of Europe was the development of a definite tabby pattern and different body and head type. These variations could be attributed to evolutionary adjustment to a cold environment, favoring a "cold climate compact conformation" as opposed to the "warm climate sinuous form," described by geneticist Roy Robinson as the 2 main domestic cat structural types.²⁸ However, the influence of possible matings with Felis sylvestris, the European wild cat, cannot be ruled out. These cats are sturdily built, with a broad head and blunt nose. They also have far more defined mackerel tabby markings than those seen on the Egyptian cats and may have introduced this important pattern to domestic cats, providing better camouflage in a wooded landscape.

Mutations

Once domestic cats acquired a mackerel tabby pattern and sandy gray color with

oned because nan breed is and in Egypt In the exammom 600-200 British Muntage of Felis ay have been and probathe Abyssint and Sudan, renetics Cenrea of origin.

eds

s were fairly ng from arted cats, their and reddish ial tabby-like se charactersert environid muscular, ead was mods. This body nd travelling

id around the I to adapt to of the earliest n the cats of of a definite ody and head attributed to cold environcompact cone "warm cliby geneticist domestic cat the influence *sylvestris*, the me ruled out. with a broad ılso have far by markings ian cats and rtant pattern etter camou-

d a mackerel y color with black markings, several "ancient mutations" occurred. Recessive mutation on the original or "wild" mackerel tabby allele, which created the classic tabby pattern; nonagouti (solid coat color), which does not allow the tabby pattern gene (carried by all cats) to be manifested; sex-linked orange color; dilution factor; piebald white spotting factor; dominant white; and long hair.

Though many main genes of domestic cats play a part in the genetic variation needed to create different breeds, there are fewer mutant genes in cats than in other animal species. All cats are black or sexlinked red or, in females, a combination of both colors. These colors are seen in various forms and patterns according to the influence of other genetic factors. The dilution factor, for example, acts on colors to produce a lighter tone, turning black to blue or red to cream. Red Abyssinians look red but are not. This is the result of a recessive gene in the black series, called the light brown or cinnamon gene. The concurrent actions of rufous polygenes, which intensify yellow ground color, result in a rich reddish tone. Other important later mutations were the Abyssinian ticked tabby pattern, the albino series (Siamese, Burmese, etc), inhibitor series (chinchilla, shaded and smokes), Manx, bobtail, Rex (Cornish, Devon), hairless Sphynx and, more recently, the wirehair and curled ear.47

Geneticists have shown with "cline maps" the probable origin of many of the original colors and patterns. For instance, it seems most likely that the mutation for the Abyssinian ticked tabby pattern originated where the highest concentrations of the gene may be found today. This is centered around Calcutta (37% of cats are ticked). The island of Ceylon has 30% of cats ticked. Other concentrations of the gene include Singapore (24%), Hong Kong (19%) and into Russia.

Though the original breed based on this gene was refined in England, its introduction to that country and others would probably have been the result of colonists and merchants stopping in Calcutta, the major port of disembarkment for the Indian Ocean. A 150-year-old stuffed Abyssinian of Indian origin, purchased and documented by the Leiden Museum, Holland, about 1834, is a unique early example of a modern

breed and reinforces the Far East origin of the Abyssinian (Ta) gene.³³ The same gene is also responsible for another ticked breed found in southeast Asia, the Singapura.

A particularly interesting mutation occurred somewhere in the Far East, resulting in the temperature-sensitive albino series of alleles. This gave us the Siamese, Burmese (called Copper Cats in early times) and Tonkinese, a hybrid combining both varieties. These cats are described and pictured in manuscripts from the ancient Thai city of Ayudha (existing from 1350 to 1767). Blue-eyed solid whites and albino pink-eyed whites also were produced by this series.

Geographic Restriction

Another major reason for perpetuation of mutant genes, along with environmental adaptation, was geographic restriction. A mutant of ancient origin is the recessive longhair gene. This gene was probably of spontaneous origin and then became fixed through inbreeding in an isolated cold climate. Speculation is that this happened in Turkey, possibly in Iran and also in Russia.

A letter written in 1856 by M. Lottin de la Val refers to his encounter with a "beautiful species of cat on the great Armenian plateau at Erzeroum," and that these longhaired Angora cats were the dominant variety in Kurdistan. He described whites, grays (blues) and orange-spotted (Turkish Van) cats. Kurdistan is a mountaineous plateau in eastern Turkey, adjacent to Iran (Persia). It seems to be the logical place for development of the longhair gene, providing isolation and a cold climate. The early inhabitants were primitive, nomadic people, not likely to have valued unusual cats as trade items from elsewhere. Angora and Persian cats eventually reached Europe by caravans over the mountains by the late 16th century. 12 Longhaired cats were also imported directly from Russia into England. But instead of the solid colors found in Persia and Turkey, all of these were brown tabbies, with the exception of 2 that were black.

The British eventually began to make a distinction between the longer-bodied, large-eared and mostly blue-eyed white cats from Turkey and the more compact, large-boned, shorter-headed golden-eyed cats

from Iran. They preferred Persian-type cats, mainly because of the deafness in Turkish white cats, which decreased the popularity of what we now know as Turkish Angora cats. Had it not been for the Turkish Angora colony established at the zoo in Ankara, this beautiful breed might have become extinct. It is now accepted in many colors other than white, and deafness is no more of a problem than in any other white cat.

Another early longhaired cat was described in the book, *Histoire Generale des Voyages*, published in the early 18th century. The Sumxu was from the area around Peking in China and had pendulous ears, and black or yellow extremely glossy long fur. It is interesting to note that mutations in cats very often have repeated themselves. An American painting by Joseph Stock, a portrait of "Mary Jane" with her cat in 1838, shows a young girl with a folded-eared cat. This was 123 years before the discovery of the mutation in Scotland in 1961, which led to development of the Scottish Fold breed.

American domestic longhaired cats were most likely descendants of European shorthairs who arrived in this country with the early settlers of New England. Cats carrying the recessive longhair gene were better able to thrive in the harsh climate of northern New England. Through geographic isolation and survival of the fittest, they became the basis of the Maine Coon breed.

Other well-known breeds probably originated as a result of geographic restriction. The Manx is one of the oldest examples of a spontaneous mutation that existed in isolation on the Isle of Man in the Irish Sea off the west coast of England for many centuries. The Korat was believed to have originated in a high remote region in northeastern Thailand, known as the Korat Plateau.

Superstition

In addition to evolutionary adjustment and geographic restriction, a third factor in establishment of breeds is myth and superstition. Korats, like other Oriental cats, were considered to bring good luck by the Thai people and could only be obtained as a gift. A pair of Korats was a traditional wedding present, symbolizing a gift of silver, which would bring prosperity and ensure a long, happy marriage. The blue color, which is a result of recessive dilution of solid black, and silvery tipping were perpetuated for this reason.

Occasionally these cats were given as a token of great esteem. Cats in the Far East were sometimes kept as sacred animals in temples because of the belief that the soul of a very spiritually advanced person entered the body of a cat when that holy person died. Following the cat's death, the holy person's soul would finally reach Paradise. Oriental cats were therefore often confined and bred by monks in isolated monasteries keeping gene pools separated and helping to firmly establish breeds.

Human Preference

Another important factor, human preference, affected migration of cats with various patterns and colors. For example, the highest frequency of the sex-linked orange allele occurs in India, southeast Asia and Japan, and has diffused westward.²⁸ The bright color may have been appealing, causing people to import cats into Europe and England for their beauty as well as for their hunting ability.

Breeds and Cat Shows

Distinction between cats based on appearance began to interest some people by the 18th century, if not earlier. In 1756, cats were featured in Histoire Naturelle by Comte de Buffon, indicating recognition of breeds. By the mid-19th century, the concept of cat breeds was established in England. People began to take notice of some of the more exotic-looking cats, which the British took home from their trading and colonization travels. Cats imported from the Far East were startling in comparison to the more familiar stocky homegrown British shorthaired cats. The longhairs from Turkey and Persia were equally sensational, and the Russian Blues from the Archangel seaport area were also different.

With the work of Louis Pasteur in the mid-19th century, the cat's position in society changed drastically. Suddenly most ani-

iditional wedgift of silver, and ensure a e color, which tion of solid e perpetuated

re given as a the Far East animals in the soul of erson entered; holy person ath, the holy ach Paradise. often confined I monasteries and helping to

tuman preferats with variexample, the linked orange ast Asia and stward.²⁸ The pealing, causo Europe and ell as for their

hows

based on apme people by lier. In 1756. ? Naturelle by recognition of cury, the conlished in Enotice of some ts, which the trading and aported from n comparison homegrown onghairs from v sensational. he Archangel

asteur in the sition in socinly most animals were dreaded as potential disease carriers. But cats, known to be a model of cleanliness, were acceptable and once again were welcomed into European and British homes to be appreciated for their beauty and personality. Cat breeds became even more respectable because Queen Victoria owned 2 blue Persians.

Cat Shows

The first National Cat Show at the Crystal Palace in London in 1871 marked a revolution in attitude and the true beginning of cat breeding for exhibition. The show drew an entry of 170 cats and kittens, but not everyone approved of the unusual cats. A contemporary journal described one of the cats as "an unnatural, nightmare kind of cat." This was a sealpoint Siamese. The National Cat Club was founded in 1884, and the British began to refine and develop most of the breeds that eventually were exported to America. By 1889, the Crystal Palace show entry was 600 cats, and more than 20,000 people crowded in the huge hall to see the pedigreed cats.

The first cat in America to have pedigree records established was the homegrown Maine Coon. People in Maine were proud of their handsome longhaired cats and kept track of parentage long before official cat registries were begun. A black and white, known as Captain Jenks of the Horse Marines, was mentioned in cat literature as early as 1861. When the first large American cat show was held in New York in 1895, a Maine Coon was best cat. They declined in popularity as the more flamboyant Persians came into the country from England.

The Cat Fanciers' Association

The beginning of the American Shorthair breed started with a pedigreed red tabby British Shorthair imported in 1900 or 1901. This animal eventually was the first shorthaired cat registered by The Cat Fanciers' Association (CFA). Other British Shorthairs were later imported and bred to domestic shorthairs in America. These American cats still retained the powerful muscular body type of the cats brought over by early settlers because there had been no opportunity to crossbreed with the more slender Oriental cats. The breed was called Domestic

Shorthair until 1966, when it was renamed the American Shorthair. Until recent years, this breed maintained an "open registry," allowing outcrossing to mixed-breed domestic cats to enlarge the gene pool and keep the breed healthy and vigorous.

In addition to natural breeds and established breeds, which have been continuously bred to maintain their original appearance or modified to the arbitrary preferences of breeders, certain breeds are considered hybrids. Some examples are the Oriental Shorthair, Colorpoint Shorthair, Bombay, Tonkinese and Ocicat. These cats have been created by mating 2 or more breeds to create a distinctive type of animal.

Other breeds have come about as the result of spontaneous mutation. A mutation, or hybrid, by CFA rules, may be bred back to the breed from which it originated for a specified length of time to ensure a large gene pool. CFA rules generally require 5 generations of CFA-registered cats behind any imports or cats from another association; however, there are many exceptions to this requirement.

With the organization of CFA in 1906, registration of cats and kittens, promotion of cat shows, and the goal of improving the general welfare of cats became firmly established in America. An orange and white male longhaired cat, named Peter, who was born May 2, 1906, was the first cat to be registered with CFA. Today this organization is the largest pedigreed cat registry in the world, and licenses over 350 shows each year in North America and Japan. History was made for the CFA in 1988 when the organization's constitution was modified to allow foreign club memberships. This is the beginning of CFA shows throughout the world.

Other registry groups include several smaller associations in America, the Governing Council of the Cat Fancy (GCCF) in England, the Canadian Cat Association; the Federation Internationale Feline (FIFe) in Europe and its affiliated clubs in various parts of the world, and independent cat-registering organizations in Europe and Australia. Each organization has its own rules for shows, breed recognition or acceptance, and written standards for breeds. There is increasing communication among breeders

throughout the world and exchange of cats for breeding purposes. In 1987, the first cat show ever held in Russia drew about 30,000 visitors to Moscow.

New breeds are occasionally introduced, through discovery in their native land or as a result of hybrid matings. The latest mutation to be recognized is the curled-back ear, which occurred in 1981, leading to the American Curl as a new breed. All of the registering associations have their own rules on accepting new breeds and colors. CFA is conservative and difficult concerning new varieties.

The purpose for rigid requirements is to allow time to fully evaluate whether a new addition will really enhance the cat fancy. A new breed should be distinctive and not infringe on the appearance of an existing breed. Rather than the whim of one individual, there should be sufficient breeders interested in a planned breeding program and reason to believe that the public will respond in a positive way to the new cats as desirable pets. Matings must demonstrate that the appearance of offspring is predictable, and a proposed standard must be developed once there is some experience with resulting offspring. Most of all, it is important to determine that the new bred is free from any harmful genetic traits and will be an asset to the world of pedigreed cats.

It takes a minimum of 10 breeders working with a new breed and documentation of at least 50 specimens to formally apply for CFA registration, which is the first step in recognition. Once registration is achieved, the cats may be presented at shows in the "Miscellaneous Class," which is noncompetitive, so that judges, other breeders and the public become familiar with the new cats' traits. A 5-year minimum is required before the breed may apply for the next step.

"Provisional breed" status requires 100 or more specimens and, among several other requirements, a breed standard proposal. The breed must then be extensively shown in all areas of the country, reports submitted by judges, and information presented to the CFA Board regarding every aspect of the breed. Finally, with proof that 25 different cats have been shown in all 7 American Regions, a standard agreed upon by the breeders, and an outline of all accept-

able colors and patterns developed, the new breed may be presented to the CFA Board for "Championship" status, allowing full competition with the other breeds.

Acceptance at preliminary levels carries no guarantee for automatic eventual Championship approval. Often many years go by, along with a great deal of expense, hard work and devotion, to achieve full CFA acceptance of a breed. Recognition of new colors within existing breeds involves similar requirements and sometimes evokes strong resistance from established breeders.

The CFA presently recognizes 31 pedigreed breeds of cats (Table 1). Four additional breeds have been accepted by CFA for registration. Divisions have been created within 2 of the breeds, Persian and Burmese. Among the almost 60,000,000 cats in homes in the United States, it has been estimated that less than 10% are pedigreed. The popularity of the various breeds, as determined by breed registration figures, is given in Table 2. Almost two-thirds of pedigreed cats registered by CFA in 1988 and 1989 are of the Persian breed.

Philosophy of Breeding

One of the prime reasons for the continuing growth of the cat fancy is the competitive and social contact of a variety of different people bound together by their interest in cats. Cat shows are the focus of this contact, and allow breeders to assess their breeding programs and promote the various breeds to the public. Mixed-breed "household pets" are also included for competition in their own class. Cat shows serve as a major means to educate the public about cats in general and to elevate the status of cats in society.

Most people who breed cats are idealists who work hard to produce large litters of beautiful kittens, anticipating all to be excellent, desirable examples of their breed. Hardy, healthy kittens and cats with good maternal abilities are taken for granted by novices. Breeding cats is challenging, and those who stay involved over a long period find they need some knowledge of veterinary medicine and genetic principle; hence the need for books on feline husbandry.

People who breed cats believe they benefit society in several ways. There is great

ped, the new : CFA Board allowing full ds.

evels carries ntual Chamyears go by, rpense, hard full CFA acn of new cololves similar vokes strong eders.

zes 31 pedi-). Four addid by CFA for been created n and Burm-),000 cats in nas been estire pedigreed. reeds, as den figures, is hirds of pediin 1988 and

eding

the continuthe competiiety of differtheir interest s of this conassess their e the various reed "housecompetition s serve as a public about the status of

are idealists rge litters of all to be extheir breed. ts with good or granted by lenging, and a long period ge of veterinciple; hence sbandry.

re they beneiere is great Table 1. Breeds recognized by CFA for championship competition, 1990.

Abyssinian Korat American Shorthair Maine Coon American Wirehair Manx Balinese Ocidat Birman Oriental Shorthair Bombay Persian British Shorthair Solid Division Burmese Shaded Division Sable Division Smoke Division Dilute Division Tabby Division Chartreux Parti-Color Division Colorpoint Shorthair Bi-Color Dvision Cornish Rex Himalayan Division Cymric Russian Blue **Devon Rex** Scottish Fold Egyptian Mau Siamese **Exotic Shorthair** Singapura Havana Brown Somali Japanese Bobtail Tonkinese Javanese Turkish Angora

Breeds Accepted for Registration

American Curl (Longhair and Shorthair) Turkish Van Norwegian Forest Cat

Oriental Longhair

historic value for all of those breeds, which would become extinct without the continuing interest of a relatively small number of people. Another factor is the tendency throughout history for the public to want both unusual as well as predictable appearance and personality in cats. The desire for something out of the ordinary is characteristic of every culture as it becomes more affluent. Some people are attracted to cats with the "wild cat" look of an Abyssinian, Somali, Ocicat or Egyptian Mau. Others like the exquisite, racy style of a Cornish Rex, the dependent and highly vocal Siamese, or the placid sophistication of a Persian. To emphasize and maintain the visual distinction among the various breeds, as well as the associated temperament, are constant goals of breeders.

Because the range in size among breeds is relatively slight, breeders have manipulated polygenes to emphasize subtle differences in coat texture, colors and patterns, as well as body and head type, always battling the temptation to push them to the extreme. The smallest of the breeds is the Singapura, which weighs 4-7 lb, and among the largest of breeds are the Maine Coons and Ocicats, with males at 15-18 lb.

The less than 10% of pedigreed cats estimated to be in American households compares to more than 50% of purebred dogs in pet-owning households. Interest in pedigreed cats as pets appears to be rapidly increasing throughout the world, and cat breeders want to respond to this growing demand without jeopardizing the vigor and quality of their breeds. Breeders do not believe that their activities worsen the mixedbreed cat overpopulation problem, because if all recognized breeds were to disappear, it would not only be a great loss but would not begin to affect the circumstances created by a lack of caring and knowledge on the part of those who don't place significant value on cats.

In understanding the philosophy of cat breeding, it is important to realize that breeding is not based solely on genetics. A cat is a combination of genes, but a breed is a combination of qualities as determined by breeders. Unlike the situation with animals bred for food production, speed or other performance, the whole purpose for maintaining cat breeds is to increase their appeal by enhancing distinction in appearance and personality. The science of genetics is used to help in breed classification and to ensure that cats will breed true to given expectation; however, many breeding decisions and classifications are arbitrary and inconsistent. If breeders were only concerned with producing strong, healthy, beautiful cats, then mixed-breeds would suffice. Without the desire and effort to achieve distinct breed identity, the cat fancy would not

Producing homozygous animals of the most uniform appearance and personality should not be the goal of cat breeders, as this can reduce resistance to disease. Some variety within the scope of breed standards is necessary to keep the breeds healthy. Fortunately, in most breeds there is strong demand from the public for pet kittens that may vary somewhat from the ideal standard. Ethical breeders always sell these with written agreements stipulating that these pet quality animals will be altered and not used for breeding.

Table 2. Numbers of the various breeds registered with the Cat Fanciers' Association in the United States, 1988 and 1989.

Breed Name	Male	Female	•	1989 Total	1988 Total
Persian					
Traditional	9,485	14,148	23,633		
Pointed Pattern	8,885	12,636	21,521		
Colorpoint Carrier	4,659	7,034	11,693		
Total Persian				56,847	53,121
Siamese	1,544	2,199		3,743	3,710
Abyssinian	1,158	1,511		2,669	2,387
Maine Coon	1,144	1,305		2,449	2,001
Burmese	468	738		1,206	1,080
Oriental Shorthair	521	658		1,179	1,054
Exotic Shorthair	417	707		1,124	950
American Shorthair	492	612		1,104	1,002
Scottish Fold	421	562		983	844
Birman	372	546		918	731
Colorpoint Shorthair	318	465		783	715
Ocicat	321	401		722	519
Cornish Rex	316	390		706	660
Manx	220	332		552	569
Tonkinese	223	326		549	399
Balinese	211	286		497	484
Russian Blue	216	276		492	472
Somali	225	254		479	444
Devon Rex	137	173		310	239
British Shorthair	133	155		288	275
Japanese Bobtail	76	150		226	188
Javanese	70	121		191	191
Egyptian Mau	89	96		185	180
Norwegian Forest Cat	58	76		134	185
Chartreux	57	62		119	87
Bombay	52	62		114	83
Turkish Angora	49	55		104	151
Korat	47	51		98	124
Havana Brown	45	42		87	102
Singapura	28	36		64	59
American Curl	34	26		60	47
Cymric	23	34		57	39
Turkish Van	243	33		57	63
American Wirehair	24	33		57	63
Oriental Longhair	5	9		14	86
Total Cats Registered	32,558	46,587		79,145	73,254

In recent years breeders have become increasingly concerned about the detrimental effects of selective breeding on the health of pedigreed cats, as well as the difficulty in finding outcrosses within the breeds without common ancestry. Problems occasionally surface, and sometimes they are not

recognized until they are widespread and it is almost impossible to rectify the situation.

When problems arise from intensively breeding certain bloodlines, breeders have several options. They may consider outcrossing to imported cats or cats from other States, 1988 and

spread and it the situation.

m intensively preeders have consider outits from other associations of the same breed, using another breed, or requesting that CFA allow use of cats of unknown parentage, either from the country of origin or through use of mixed-breed cats. In February, 1989, the CFA Board of Directors ruled to allow Japanese Bobtail breeders to register bobtailed cats of unknown parentage from Japan. Undoubtedly this will set a precedent.

In some instances, enlarging the gene pool helps solve problems of general health, and replaces cats lost to defects that cause death or have been culled from breeding because they carry defects. However, outcrossing, in itself, does not solve specific genetic health problems if they are caused by a recessive gene or by a dominant gene with incomplete penetrance or other complicating factors, such as polygenic heredity. Outcrossing can actually spread a lethal or harmful genetic factor that may remain undetected for several generations. With inevitable linebreeding to recapture the lost phenotype, the harmful genes eventually reappear. Outcrossing would have to be continuous to be effective. As soon as carrier cats appear on both sides of the pedigree, there is a chance of recurrence.

Some fanciers have begun to use test breedings to establish "clear" cats, which can then be used in outcross matings to bring new genes into the breed. Methods for test breeding have been established by Roy Robinson in the book, *Genetics for Cat Breeders*.²⁷ Test breeding, however, is often highly impractical for a breeder. Rigorous selection, requiring removal of not only affected cats but both parents producing a litter with one affected kitten, is still the most successful solution for breeding problems at this time.

Another alternative is being explored. Through the use of molecular biology in pilot studies funded by the Robert H. Winn Foundation (established by CFA to provide funds for feline health studies), scientists are using DNA hybridization patterns to identify undesirable genes in cats. In the future it may be possible to diagnose genetic weaknesses through a simple blood test before cats are bred. Kittens or cats appearing normal but carrying genes for health defects could be sold as pets and thus eliminated from breeding programs.

Chapter 2 contains a detailed discussion on feline genetics.

Cat Breeds

British Shorthair

The British attitude toward cats in the 1800s was that they were primarily skillful ratters. This view began to change around the time of the first important cat show, the Crystal Palace Exhibition of 1871 in London. The British Shorthair was prominently represented at this show, which was organized by Harrison Weir, a well-known painter and illustrator.

Weir was also the author of the first comprehensive book on cats, Our Cats and All About Them, published in Britain in 1889. The book included general information about cat care and breed standards, and the British Shorthair was prominently featured. At the same time, English children were being exposed to the delightful mischievous antics of the cats drawn by Louis Wain, who, for 60 years from 1880 to the beginning of World War II, illustrated domestic cats and rare breeds in hundreds of books. magazines and newspapers. Wain's cats were depicted fondly as close family companions that did much to popularize them as esteemed pets with unique beauty and character. By the end of the 19th century in England, cats had evolved into a highly fashionable status symbol, and British Shorthairs were very much respected.

The early British Shorthairs were the result of free breeding among feral stock and therefore varied in appearance. In the late 1800s, breeders gradually began selecting cats that most clearly displayed the type they most desired. The body of a fine British Shorthair reflects the hardiness and powerful build needed by a working cat that has survived through self-reliance. Today's standard describes a medium to large cat. The body is compact, with good depth and a full broad chest, short to medium strong legs, and rounded paws (Fig 1).

The British Shorthair head is the first noticeable difference between this and other breeds derived from domestic shorthairs. The head is round and massive, with very wide-set rounded ears and large round eyes. The profile has a gentle dip to the nose and

the muzzle is distinctive because of large round whisker pads, all giving a soft appealing expression to the face. Eye color is a stunning deep gold or copper, except in the whites, which may also have blue eyes or odd eyes (one blue and one gold).

After World War II, all of the breeds suffered and the British Shorthairs were almost extinct. The few left were bred to cats of more foreign type, and later breeders had to work hard to restore the breed. Persian outcrosses were used to recapture the massive bone and stocky body type. This however, produced a different coat texture, which was often soft, and fluffy and sometimes too long. The original British Shorthair coat was short, dense and resilient, with a "crisp" firmness rather than a soft feel. Because today a long or fluffy coat is cause for disqualification, much work has been concentrated on preserving the original coat. In the early days, the most popular colors were the solids, especially blue; however, today, cats of many colors and patterns are bred.

Interest in the breed grew slowly in America during the 1960s and 1970s. American associations resisted recognition of the British Shorthair because of the Persian blood in their background. It was thought that there was a genetic similarity to the American hybrid breed, the Exotic

Shorthair, which is a cross between the American Shorthair and Persian. The British Shorthairs finally achieved CFA Championship status in 1980.

The temperament of these cats is often compared to that of their ancestral English owners: dignified and reserved. British Shorthairs are gentle and not disturbed by noisy household activity. They enjoy attention but are not pushy. In contrast to their imposing appearance, their tiny voices can hardly be heard. They are generally hardy and easy to groom.

Scottish Fold

The story of the Scottish Fold breed begins in the rugged Perthshire region of Scotland in 1961. William Ross, a shepherd, happened to notice an unusual pure white cat with forward-folded ears on a neighbor's farm. He and his wife, Mary, were intrigued and were told that the mother had normal ears and the father was unknown. They were promised a kitten from this cat, named Susie, if she ever produced another with folded ears. The following year Snooks, who was white like her mother, was born with folded ears, and the Rosses began to develop this unique breed that evolved from a spontaneous natural mutation. It was later discovered that the gene responsible is a simple dominant one, and all registered

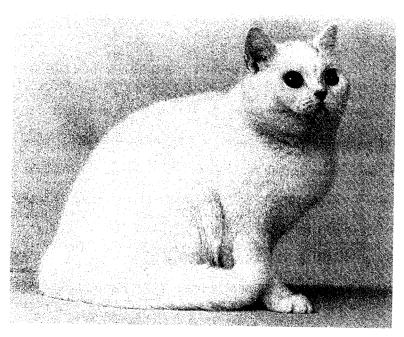


Figure 1. A female British Shorthair. (Photograph by Jane Howard)

petween the in. The Brit-CFA Cham-

cats is often stral English ved. British disturbed by enjoy attenrast to their y voices can erally hardy

old breed bere region of , a shepherd, 1 pure white a neighbor's ere intrigued had normal nown. They m this cat, uced another year Snooks, er, was born ses began to evolved from tion. It was responsible is all registered

ale British Shortaph by Jane Scottish Folds today trace their heritage to Susie and Snooks.

Snooks was bred to local farm cats and British Shorthairs in Scotland to produce the foundation stock. Photographs of these early cats indicate that the body, head and coat qualities, characteristics of modern Folds, were firmly established from the beginning. The sturdy, well-padded, moderate body, short neck, round and full-cheeked head, and extremely dense and resilient short coat all helped these cats withstand the harsh Scottish climate and the condition that were part of their lives as working farm cats.

By 1966 the Ross's cats were registered with the British GCCF (Governing Council of the Cat Fancy). Dr. Niel Todd, a New England geneticist and a founder of the Carnivore Genetics Research Center in Massachusetts, became interested in the breed and brought 3 Folds to America in 1970. Though several litters were born through Dr. Todd's efforts, it was not until Salle Wolf Peters acquired Hester, one of the original 3 imports, as well as a daughter of Snooks, that the first Scottish Fold was registered in America in 1972. By 1973 Folds were accepted for experimental registration by all of the American associations. CFA Championship status followed in 1978.

The early breedings of Folds in America were to the various breeds then available: American Shorthairs, Persians, Exotic Shorthairs and mixed-breeds. This outcrossing created hybrid vigor and helped maintain the breed's sweet easy-going temperament. Outcrossing to American Shorthairs and British Shorthairs is still allowed by CFA. Despite the efforts to maintain a large gene pool, for many years, the breed has been besieged with denouncements of defects related to the folded-ear mutation.

In 1974 the breed was banned in England by the GCCF. The official reason given was that there were problems of ear mite infestation and that many Folds were born deaf. Americans rejected this decision, arguing that cattery conditions were responsible for ear mites and not folded ears. Because most of the Ross's early stock was white, the Americans believed the incidences of deafness were connected to the genetics of blue-eyed whites, which some-

times cause kittens to be born deaf in both pedigreed and mixed-breed litters. As Americans continued to breed Folds in many other colors, the "deafness problem" was greatly reduced.

The most serious problem seemingly inherent in the breed actually was that of skeletal abnormalities. To increase the percentage of folded-eared kittens, breeders often crossed folded-eared cats. The resultant skeletal abnormalities were described as osteodystrophy by Dr. Oliphant F. Jackson, a British geneticist. When in the later 1960s the Rosses presented several of their cats to Dr. Jackson at the Royal Free Hospital Medical School in London, he began breeding Folds. His studies led to isolation of the mutated gene responsible for folded ears and a great deal of information about the effects of this condition. He wrote, "The skeletally affected cats have not only short, thick inflexible tails but gross deformity of the limb extremities." When he bred Fold to Fold, 1 of 3 folded-eared kittens developed lesions, even if neither parent showed evidence of the deformity. When a folded-eared cat with lesions was bred to a straight-eared cat, none of the folded-eared kittens had le-

Dr. Jackson's report was published in the Bulletin of the Feline Advisory Bureau in 1975. Though his work demonstrated that osteodystrophy could be avoided by not breeding Fold to Fold, breeding stopped in England. Breeders in America tested Jackson's findings and discovered the same results. The first sign of the problem in a Fold is a tail that is overly thick at its base, foreshortened and inflexible due to abnormally thick coccygeal vertebrae. This is cause for disqualification in the show ring by a CFA judge. Though some kittens show no radiographic (x-ray) signs of defects when they are young, problems become evident with age. Some breeders still question whether Jackson's findings may have been the result of early close inbreeding and hope that in the future, after years of constant outcrossing, it may be eventually possible to safely breed folded ear to folded-ear cats.

Currently, conscientious breeding practice requires keeping straight-eared Folds as well as several cats of the allowable outcross breeds to produce cats free of os-

teodystrophy. Though the breed is most distinguished by their tightly folded ears, other characteristics add to their special look. Large round eyes, a gentle nose curve, prominent cheeks and whisker pads all contribute to the sweet expression of surprise that is typical of the Scottish Fold face. Medium sized with a well-padded, rounded body, these cats give the impression of softness and cuddly appeal (Fig 2). With a sweet natured, quiet and friendly personality, they are as "laid back" as their early British domestic ancestors.

Manx

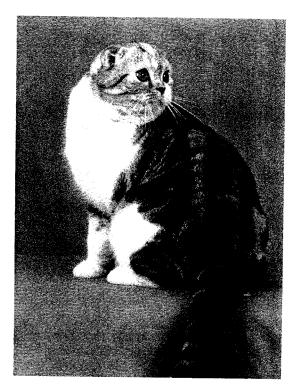
The origin of the Manx is surrounded by legend and mystery. Tailless ancestors lived on the Isle of Man in the Irish Sea off the west coast of England for many centuries. The best-known legend dates back to 1588, when one of the ships in the Spanish Armada was wrecked near the Isle of Man. and several tailless cats are said to have swum ashore and lived to perpetuate the breed. It was also speculated for many years that Manx cats evolved from the shorttailed and tailless cats taken from Japan to England by Phoenician traders in ancient times. Now it is known that, genetically, the bobtailed cats from the Orient and the Manx cats were entirely different.

Genetics experts today believe that the Manx is a result of a spontaneous mutation and that a dominant gene, along with modifying polygenes, is responsible for variable tail length. Records on the Isle of Man describe the cat as a mutation originating from resident domestic cats.

The various tail types are generally classified in 4 groups. The show-quality Manx is "rumpy," with no complete sacral vertebrae. The rump is completely rounded and there is a hollow at the base of the spine. Some associations, including CFA, allow the "rumpy-riser" without penalty as long as only a few flexible sacral vertebrae are present and the rump appears rounded. A "riser" with fixed vertebrae fused in a vertical position, so "it stops the judge's hand," as described in the CFA standard, is penalized.

A "stumpy" has a short tail, sometimes with curved or kinked coccygeal vertebrae. A "longy" is a tailed Manx with a normal-

Figure 2. The Scottish Fold. (Photograph by Jane Howard)



appearing tail. The stumpy and longy Manx, along with the genetically normal-tailed offspring, are valuable as breeding cats. Many Manx breeders think it is desirable to dock the tails of "longy" kittens shortly after birth to increase their acceptability as Manx pets to be altered and not shown.

It is surprising that the Manx, though one of the oldest known breeds, is still considered among the most difficult to breed. The primary characteristic, taillessness, has long been thought to be the result of the genetic defect that can cause associated weaknesses affecting the whole spinal column. This notion has been challenged in the last few years by American breeders who have greatly decreased incidences of weakness through careful use of sound cats.

Another factor in the breed is the lethal nature of the Manx gene. Homozygous kittens, inheriting the gene from both parents, die in the womb, thus reducing the breed's average litter size. However, because the Manx breed has few reproductive problems, the average litter size, according to CFA lit-

aph by Jane



and longy ally normalas breeding it is desirgy" kittens heir acceptred and not

inx, though is still conlt to breed. essness, has lt of the geassociated spinal colenged in the eeders who es of weakl cats.

s the lethal ozygous kitoth parents, the breed's ecause the e problems, to CFA litter application birth statistics for 1989, is higher than that of 6 other breeds and has increased since 1979.

Despite some drawbacks, the Manx has continued to thrive as a favored pet throughout the world since the earliest days of the cat fancy. A Manx club existed in England in 1901, and Manx were among the first cats registered in Europe. They arrived in America during the 1930s. A loyal group of followers and dedicated breeders remains determined to overcome any problems that may be inherent to the breed.

Taillessness is by no means the only quality to distinguish the Manx. The Manx is stout, of medium size and solidly muscled, with sturdy bone structure (Fig 3). Rounded shoulders, hindquarters and head describe the overall impression of these cats. Prominent cheeks and jowls, a well-developed muzzle with large round whisker pads, full round eyes and widely spaced medium-sized ears characterize the head, which is slightly longer than broad and sits on a short thick neck. The line from shoulders to rump should be a short smooth continuous arch. Broad chest development causes the forelegs to be set well apart.

Because the hind legs are relatively long, the rump is considerably higher than the shoulders. Muscular thighs and a deeper flank than that of any other breed add to the impression of great substance. The short dense coat also has a unique double texture, with a noticeable cottony undercoat and hard, glossy, open guard hairs. Almost all coat colors and patterns are allowed in the Manx except for those showing hybridization with the Siamese gene.

The Manx breed has maintained its popularity not only through its appearance but also because of a lively owner-oriented personality. Their reputation for being intelligent, clownish, affectionate and devoted companions helps ensure the strong, loyal following enjoyed by this breed.

Cymric

At one time, Manx were bred with British Shorthairs and American Shorthairs, when the stock from the Isle of Man became scarce; outcrossing is still practiced in England. In the late 1960s in North America, long-haired kittens began to appear, reflecting the recessive gene inherited from the tailed outcrosses. Longhaired and shorthaired cats were commingled on the Isle of Man and by the Isle of Man government cattery. A group of enthusiasts began to develop this variety and the long-haired Manx is now called a Cymric. These cats attained their "provisional" status as a separate breed in CFA and are also recognized by several other associations. Full Champion-

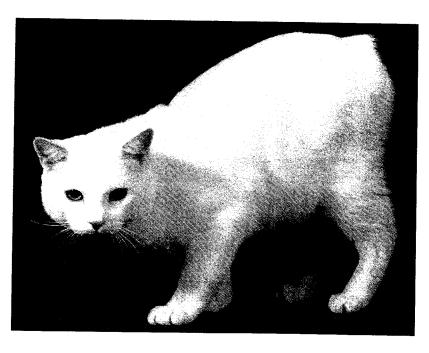


Figure 3. The Manx. (Photograph by Jane Howard

ship status was approved for the Cymric in 1989.

The standard is almost identical to that of the Manx, except for the coat, which is of medium length. The distinguishing look of the Cymric is accentuated by a coat gradually lengthening from the shoulders to the rump, with hair on the breeches, abdomen and neck ruff longer than on the trunk (Fig 4). The neck ruff is bib-like around the chest, and toe tufts and ear tufts are desirable. Cymrics appear to be Manx in full costume.

American Shorthair

The first domestic cats in North America arrived with the pilgrims from Europe. Domestic shorthairs are said to have been on board the Mayflower in 1620. It may be assumed that these ship cats would have been chosen for their skill in hunting as well as their hardiness and easy-going temperament. These cats intermated for generations in the New World, and their progeny gradually moved across the country with the pioneers, being used to control the rodent population in colonial settlements and as companions. The harsh weather, particularly in northern New England, favored strong healthy animals able to survive in the most severe conditions.

American domestic cats were free roaming and free breeding but remained of consistent appearance until the late 19th century, when the more exotic imports began

to come into the country. Originally the breed was known as the "Shorthair." The first shorthaired cat to be registered by CFA was actually an imported British Shorthair, a red tabby male sent in 1900 to Mrs. Jane Cathcart. Mrs. Cathcart was a cat lover who promoted the Shorthair breed in the early 20th century. Later a silver tabby male was imported from England. In 1904 Mrs. Cathcart registered the first American-born Shorthair, "Buster Brown," a male smoke of unknown domestic parentage.

Though for many years domestic short-haired cats were taken for granted and neglected in the show ring, several dedicated breeders worked to develop a variety of colors and perfect the tabby patterns while maintaining the hardy, muscular structure of the early "native" cats. By the late 1950s there were 50 Domestic Shorthairs, as they were then called, in the CFA Stud Book. Gradually breeders became anxious to distinguish their pedigreed cats from mixed-breed cats, who generally no longer displayed the original large-boned body conformation. The breed was renamed the American Shorthair in 1966.

The CFA show standard strongly emphasizes the character of the early true "working cat," with "no part of the anatomy so exaggerated as to foster weakness" and "conformation indicating power, endurance and agility." The coat should be thick, even and of hard texture, "dense enough to pro-

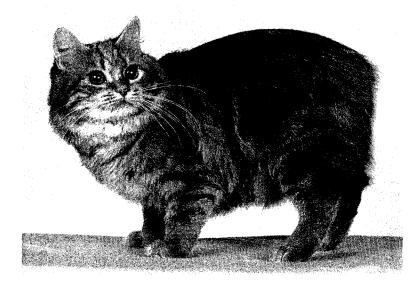


Figure 4. The Cymric. (Photograph by Richard Katris)

riginally the rthair." The ered by CFA h Shorthair, to Mrs. Jane a cat lover breed in the silver tabby and. In 1904 first Ameri-Brown," a stic parent-

nestic shortited and neal dedicated iriety of colterns while ar structure e late 1950s airs, as they Stud Book, tious to disrom mixedlonger disoned body enamed the

ngly emphatrue "workanatomy so kness" and , endurance thick, even ough to pro-

The Cymric. ph by Richard tect from moisture, cold and superficial skin injuries." The American Shorthair head is large, with jaws "strong and long enough to successfully grasp prey."

Today's American Shorthairs achieved the highest national awards in show competition. They reflect the athletic power, good health, intelligence and disposition of their ancestors, while displaying the rich color and refined pattern derived from selective breeding. The high contrast of dense black classic tabby markings on pale silver or the deep red tone of a red tabby American Shorthair coat is unknown in mixed-breed cats. Brilliant gold eye color and coppery brown ground color with striking black markings give the brown classic tabby American Shorthair a special dramatic presence (Fig 5). Over 30 solid colors and patterns, including shaded, smoke, calico and tortoiseshell, are recognized in this breed, which continues to gain popularity with exhibitors and the public.

The personality of an American Shorthair is best described as "laid back." These cats are usually not demanding, have soft voices and tolerate handling from gentle youngsters. They get along with other animals as long as the number is small, and fit comfortably and quietly into a busy household. An American Shorthair tends to be suspicious of the unknown, careful before jumping, and testing before trying, characteristics that probably originated from their need to survive.

Maine Coon Cat

Along with the American Shorthair, the Maine Coon Cat is one of the oldest breeds of North America, and was also considered a "working cat." These semi-long-haired cats were first recognized in the American state of Maine and were referred to as "shag cats." Many charming tales relate the origin of Maine Coons. The best known claims they resulted from the matings of the semi-wild cats to raccoons. The appearance of the earliest cats, dark gray-brown tabby with long bushy tails, led to this belief and the breed's name.

Some breeders today believe that the breed originated from crosses of early longhaired Angoras, brought to America by English seamen. These cats are said to have

Figure 5. The American Shorthair. (Photograph by Jane Howard)



mated with short-haired domestic cats already in New England. Considering how unlikely it would be for long-haired cats, which require periodic grooming, to be selected for sea journeys, the recessive longhair gene more likely was carried by some of the original short-haired cats accompanying European settlers to America. The few long-haired cats resulting from matings of these cats may have had the best chance for survival in the harsh winter climate of Maine and eastern Canada. With nature selecting the strongest, the cats eventually evolved into an exclusively long-haired breed. These hardy, handsome and large cats were undoubtedly adept at controlling mouse populations on farms and valued for their amiable disposition, which remains today.

Natives of Maine were proud of their big, beautiful cats and kept records and pedigree information for many years. The first Maine Coon mentioned in cat literature, in 1861, was known as Captain Jenks of the Horse Marines.

Maine Coons were often exhibited at early cat shows; a neutered brown tabby

male named "Gosie" won Best Cat at the 1895 Madison Square Garden show. Their popularity as show cats declined, however, by the end of the 19th century, when the fashionable Persians were introduced to North America from England.

Nevertheless, Maine Coon cats remained highly regarded as household pets. Because of the persistent dedication of a few cat fanciers, the breed once again achieved show recognition and appreciation in the late 1960s. With Championship status finally allowed by CFA in 1976, their admirers greatly increased throughout America and have now extended to Europe. Today Maine Coon classes in shows are large, and these cats once again place high in the finals.

The show standard reflects the breed's early background, and calls for a solid, rugged cat of medium to large size and a distinctly characteristic shaggy long coat (Fig 6). Though there is a myth depicting 37-lb Maine Coons, males are usually not more than 15 lb and females 12 lb. They tend to appear larger than other breeds because of their heavy coat texture and prominent long bushy tail.

Their body is long, muscular, broad chested and substantially boned. A fine Maine Coon head is medium long, with a squareness to the muzzle and high cheek bones emphasizing huge expressive eyes, along with large high-set, well-tufted pointed ears. Though tabby patterns are most common, Maine Coons come in a great variety of colors and patterns acceptable for show, including bi-color, smoke, shaded, tortoiseshell and solid.

Maine Coon cats are confident and easy going, and adapt equally well to a family environment or showhall situation. Often said to be "dog like," Maine Coons are outgoing and sociable companions.

American Wirehair

Another breed considered of "Yankee" origin is the American Wirehair. The first known mutation in the United States was recognized in 1966 when a litter of kittens was born on a farm in Vernon, New York. One kitten in the litter was a wiry-coated orange and white male. The owner contacted a local cat breeder, who acquired this kitten, later named Council Rock Farm

Figure 6. The Maine Coon Cat. (Photograph by Jane Howard)



Adam of Hi-Fi, and a normal-coated female littermate.

In conjunction with other breeders, a program was established to determine the pattern of inheritance for this unusual coat. Hair samples were sent to A.G. Searle and Roy Robinson in England, who confirmed that not only were the guard hairs bent in a hook-like way, but that the thickness of the hair shafts differed from that of all other cats.²³ It was determined that there was no connection with Rex cat coat mutations and that the coat contained all 3 hair types of normal cats (down hairs, awn hairs, guard hairs). The oddity represented a true spontaneous mutation.

Adam was first bred to his littermate sister, producing 2 Wirehair females and 2 normal-coated kittens. When one of the Wirehair females, "Hi-Fi Amy of Katzenreich," was mated to her father (Adam), they produced the first homozygous Wirehair cat in 1969. Adam was also mated to an unrelated white domestic shorthair, producing 3 Wirehair kittens and one normal-coated kitten. This indicated that the gene

raph by Jane



ated female

breeders, a zermine the nusual coat. Searle and confirmed rs bent in a cness of the of all other nere was no tations and air types of nairs, guard true spon-

cermate sisales and 2 one of the of Katzener (Adam), gous Wiresonated to orthair, propose normalat the gene

responsible was autosomal dominant rather than recessive.

With more breedings, the pattern of dominance continued; however, a great deal of variance became apparent in coat texture and length. Some coats were sparse, hard and tightly crimped. Others were thick and more protective, while retaining the wiriness. Breeders are still working today on standardizing the coat, which, according to the CFA standard, should be "very dense, resilient, crimped, and coarse." The effect is bouncy and delightful to touch. Even the whiskers and eyebrows are crimped. Long or fluffy fur is penalized.

The breed was granted Championship status by CFA in 1978 and is still rare in the United States. The unusual appearance of these cats has begun to attract attention from cat lovers throughout the world; examples are now found in Canada and Europe. Though Adam and Amy were of slim, agile conformation, with very tall ears, long legs and a long tail, 22 the CFA standard calls for a body type closer to that of the American Shorthair.

The body structure should be of medium proportion, with a well-rounded torso and legs of medium bone and length (Fig 7). The head shape, however, with prominent cheek bones and a slight whisker break, is closer to the original mutated cats. Wirehairs may

be of almost any color or pattern, except Siamese pattern and coloring. The American Shorthair may be used as an outcross.

The American Wirehair's personality is similar to that of the American Shorthair, but owners believe Wirehairs are a little more welcoming toward strangers. They are happy, gentle and loving.

American Curl Longhair, American Curl Shorthair

The most recent spontaneous mutation to be recognized in domestic cats is the curled ear. Grace and Joe Ruga, living in southern California, noticed the ears curving up and backward on a cat that arrived at their home in 1981. This black longhaired female, named "Shulamith," became the founding cat of the American Curl breed when, in her first litter and others to follow, she produced kittens with the same curved ears. Shulamith and her curl-eared offspring were mated to both long-haired and short-haired cats, and it was soon confirmed that the mutant was the result of a simple dominant gene. Crossing homozygous curled-eared cats, produced all curledeared kittens.

Dedicated breeders have been working to develop a consistent appearance for both the American Curl Longhair and American Curl Shorthair. A written standard has de-

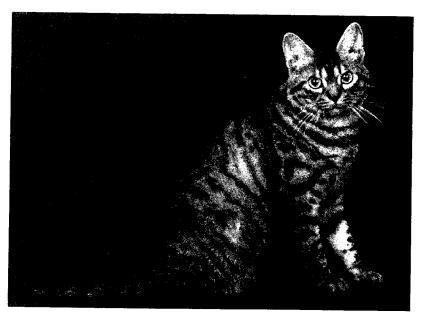


Figure 7. The American Wirehair. (Photograph by Jane Howard)

fined the cat as well balanced and medium sized, with a body slightly heavier than that of the foreign or Oriental breeds. The long-haired version should have a moderately long coat of silky texture, with a minimal undercoat, so it lays flat on the body. The tail fur is full and plumed. Shorthaired Curls have a short soft coat that lies flat but is not tight and close to the body (Fig 8). All colors and patterns are allowed, including the Siamese pointed pattern.

Critical factors in achieving distinguishing character for the breed relate to the facial expression and unique ear formation. Much of the point allotment in the proposed standard (52 pts), therefore, has been devoted to the head, ears and eyes.

The ears have firm cartilage from the base to about one-third of the height. There is a smooth curving arc toward the center of the back of the skull. Breeders believe it is important that the ears are wide at the base and flexible for easy cleaning. An extreme curl that causes the ear tip to touch the back of the ear or head, giving the appearance of no ear at all, is cause for disqualification.

The head is a modified wedge, with gentle contours and large expressive eyes. Any nonpedigreed domestic cat conforming to the standard description may be bred to a cat tracing its pedigree to Shulamith to be registered as an American Curl.

The breed has been accepted by several American associations and may be exhibited for Championship competition in The International Cat Association (TICA). CFA allowed registration of Curls in 1986 and the breed is evaluated in the noncompetitive Miscellaneous class. A wide genetic base has provided a healthy foundation, with no skeletal defects connected to the ear formation reported so far. Response from the general public has been very favorable.

Cornish Rex

Though genetic mutations given the term "rex" had occurred in other mammals, the first such mutation was noticed in cats on July 21, 1950. A tortoiseshell and white domestic shorthair, named "Serena," delivered 5 kittens on a farm in Bodmin Moor, Cornwall, England. One cream male kitten had a peculiar curly coat. "Kallibunker," as he was named by Mrs. Nina Ennismore, Serena's owner, became the foundation cat of the Cornish Rex breed. Mrs. Ennismore contacted the reknown British geneticist, A.C. Jude, who advised her on how best to attempt to develop these cats. Because of a strong resemblance to a mutant breed of rabbits commonly known as Astrex, the name "rex" was decided upon.

In 1957, a Rex female, pregnant by her Rex sire (out of Kallibunker and Serena), was exported to California. Two rex-coated

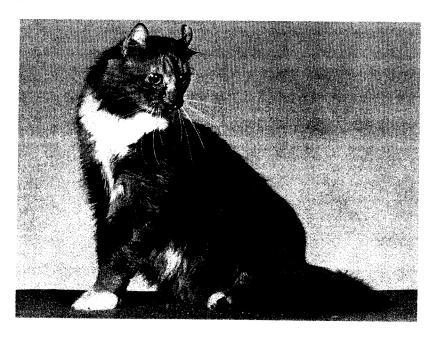


Figure 8. The American Curl. (Photograph by Richard Katris)

d by several be exhibited n The Inter-A). CFA al-986 and the icompetitive etic base has with no skelir formation the general

given the er mammals. ticed in cats ll and white rena," delivdmin Moor, male kitten ibunker," as Ennismore. indation cat Ennismore h geneticist, how best to Because of a int breed of Astrex, the

mant by her ind Serena), o rex-coated

3. The American Photograph by Katris) kittens out of this litter established the breed in America. The male, "Marmaduke," was the first Cornish Rex registered in the CFA. Because he was the only fertile Rex male in America, he was bred first to a Siamese and later to American Shorthair stock, thus creating the large variety of colors in the breed as it exists today.

At about the time the rex mutation occurred in England, another rex-coated cat was discovered by Dr. Rose Scheuer-Karpin in Germany in August, 1951.²⁹ A black adult female with short wavy hair was seen among the many feral cats of the Hufeland Hospital grounds at Berlin-Buch. The ancestry of the cat, "Laemmchen," was not known; however, several nurses believed she had been seen as early as 1947.

When Laemmchen was successfully mated to one of her sons in 1957, she produced a litter with one normal-coated and 3 wavy-coated kittens. One was sent to Mr. Jude in England, but unfortunately died while in quarantine. The German cat fancy showed no interest in the Rex kittens Laemmchen continued to produce. In America, however, several breeders were anxious to obtain these curly cats after press reports carried the news around the world of the first Rex shown in public at the Paris Cat Club exhibition in 1960. Two independent breeding experiments in America, mating Cornish Rex cats to German Rex cats, eventually proved that the varieties were the same mutation. Because of their genetic compatibility, CFA recognizes both strains as the same breed. The Cornish Rex received CFA Championship status in 1964.

The normal feline coat consists of 3 types of hair. Guard hairs, or the outercoat, provide a protective barrier to the elements. The undercoat consists of awn hairs, which are variable but thinner, as well as the down or wool hairs, which are near the skin, providing insulation. Coats of Cornish Rex cats appear to be lacking all guard hairs. Any present are modified so as to be identical with the awn hairs. The soft undercoat texture with its wavy growth pattern produces a distinct appearance and unique feel. Any obvious guard hairs on a Cornish Rex disqualify it in the show ring.

The marcel waved coat is not the only unusual quality of the Cornish Rex breed. These cats are the most gazelle-like of domestic cats, being described as of "racy" body type by the CFA standard and often compared to Whippet dogs. Cornish Rex are small to medium sized, and all contours are curved and slender (Fig 9). Their bones are fine and delicate, but the cats feel suprisingly heavy and muscular. When standing, a Cornish Rex's back is naturally arched, exaggerating the very long slim legs. The Cornish Rex head type is narrow, with a double-curved profile consisting of a rounded forehead and a Roman nose. Oval eyes and large high-set ears add to the alert and highly stylized appearance.

It is interesting that the autosomal recessive mutation that created the coat changes seems to have affected the body and head type as well. Breeders have noticed that in hybrid litters, rex-coated kittens look entirely different from their domestic-looking littermates. This was evident even with Kallibunker, who was unlike his mother.11 Though it is often said that the body temperature of a Cornish Rex is normally higher than that of other cats, this is not the case. Nevertheless, these cats do feel very warm to the touch. They tend to seek out cozy places and are especially good lap cats. Because they lack guard hairs, shedding and dander are minimized, making the breed sometimes acceptable to certain people with allergic reactions to cats.

The temperament of the Cornish Rex is active, talkative, inquisitive and highly affectionate. They are social with people and other animals, and considered by their devoted owners to have a keen sense of humor.

Devon Rex

After the discovery of the Cornish Rex, a number of other rex mutations were reported in America. These were incorporated into the Cornish breed, if compatible, or not pursued. A completely different rex mutant, however, was discovered in the county of Devon, England, in 1960. Miss Beryl Cox provided a home for a pregnant stray cat, who presented her with a litter of kittens containing one black kitten covered with curls. The sire was assumed to be a curly-

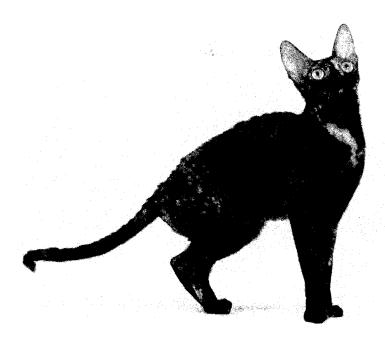


Figure 9. The Cornish Rex. (Photograph by Jane Howard)

coated feral cat who was observed living in a nearby abandoned tin mine.

Miss Cox read in the newspaper about the Cornish Rex cats and eventually allowed "Kirlee" to go to a breeder, Brian Stirling-Webb. Everyone assumed this cat would add a needed outcross to the breed. However, after Kirlee was mated to 9 Cornish Rex queens and produced 29 kittens, all normal coated, it was acknowledged that a new mutated gene had been discovered. Rex gene II, as it was named, proved to be autosomal recessive, and further interbreeding with the Cornish gene I was discontinued. 11

The Devon Rex was officially recognized as a separate breed by the Governing Council of the Cat Fancy in England in 1967. Shortly after this time they were exported to the United States and were soon accepted by several associations for registration and showing. CFA, however, remained insistent that all wavy-coated cats were to be considered Rex and would not distinguish between the 2 types. After years of considerable pressure from dedicated Devon Rex breeders, the breed was finally given separate registration in 1979 and Championship status in 1983.

Unlike the Cornish Rex, the coat of the Devon Rex has all 3 types of hair: guard, awn and down. The guard hairs are modified and reduced, and the awn hairs are irregular in thickness, all resulting in a soft, fine and densely rippled coat texture. The coat is not as close lying and uniform in wave as that of the Cornish Rex. The reduced keratin (protein) in the hair, combined with environmental, hormonal and other factors, contributes to hair breakage and bare patches, which are a problem in establishing coat reliability in the breed.¹¹

The body and head of today's Devon Rex cats worldwide are remarkably close to those of Kirlee, who had a distinct appearance aside from his coat mutation. The Devon head is described in the CFA standard as having an "elfin look" created by large eyes, a short muzzle, prominent cheekbones and huge low-set ears (Fig 10). These striking ears are often accentuated by ear-tip tufts and "earmuff" fur at the base. The Devon body is moderate and muscular, with medium-fine, long sturdy legs and a long tapered tail.

This breed is one of the most charming, with its irresistible impish face matched by an alert devilish personality. They are somewhat talkative but have quiet voices and are very responsive to people. They need a maximum of freedom within a home to express their playfulness and love of heights. They appeal to those who like an avant garde appearance combined with outgoing friendliness.

Egyptian Mau

The Cornish

ograph by Jane

ng in a soft,

exture. The

lex. The re-

rmonal and

ur breakage

problem in

Devon Rexoly close to inct appeartation. The CFA stander created by prominent ars (Fig 10), accentuated for at the

te and mus-

sturdy legs

t charming, matched by They are quiet voices eople. They thin a home and love of who like an ed with out-

e breed.11

uniform in

hair, com-

"Mau" is the Egyptian word for cat. The Egyptian Mau is not only one of the oldest known breeds, but also is considered to be the only naturally spotted breed. The spotted pattern of the Egyptian Mau is genetically a version of tabby marking and is the breed's most distinguishing feature. Some geneticists believe that domestic cats that appear spotted are in fact mackerel tabbies with broken, rather than continuous, vertical lines. A mackerel tabby carrying the allele for the recessive classic tabby pattern may show a modified mackerel striping, which is irregular and broken, sometimes to such an extent that the cat becomes a "spotted" tabby, such as those reported in England in the early 1900s.

If this were the mechanism responsible for the Egyptian Mau spotting, then breeders would expect to see a predictable 25% ratio of both mackerel- and classic tabby-patterned offspring. Because this is not the case, breeders believe it is more likely that the Egyptian Mau spotting is a separate mutated tabby pattern.

Though some Maus show the broken mackerel type of spotting, the proper pattern is randomly arranged spots of varying size and shape. The spots, whether small or large, must be distinct. If they are aligned at all, they tend to follow horizontal rows running the length of the body. It is very rare for Egyptian Maus to produce other than spotted offspring, adding strong evidence to the probability that Mau spotting is recessive to the other tabby alleles.³¹

The ancient forerunner of this breed is thought to be a domesticated spotted subspecies of the African wild cat, Felis libyca (ocreata), which was taken to Egypt from the Ethiopian highlands. This was the conclusion of Morrison Scott of the British Museum after examination of mummified cats from 600 BC to 200 BC.17 Numerous symbolic depictions of these cats clearly record their ancient background and importance in Egyptian mythology. One of the best known, in the Papyrus by Hu-Nefer (1100) BC), is the spotted cat Ra, beheading the serpent Apep, a symbol of the defeat of evil by the forces of good. Maus are often shown as working cats killing rats, mice and snakes, as well as valued household pets. A tomb painting found in Thebes, dating around 1400 BC, shows a spotted cat acting as a duck retriever for an Egyptian hunter.

From about 1580 BC, cats in Egypt became firmly identified with the goddess Bast. Their revered status as the focus of a religious cult ensured their protection and led to the practice of mummification after death. As a result, scholars have been able

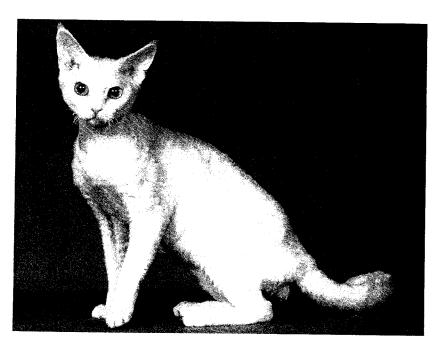


Figure 10. The Devon Rex. (Photograph by Jane Howard)

to compare the modern Egyptian Mau with the spotted cats of ancient Egypt.

Cats derived from breeding Siamese to British Shorthairs in the late 1960s were called Egyptian Maus in England; however, these are now more correctly known as Oriental Spotted Tabbies. In America, hybridization has not been considered an acceptable practice. The breed was established from 3 cats brought to the United States from Italy by the Russian princess, Nathalie Troubetskoy, in 1953.

Described in Marcel Reney's Mes Amis Les Chats (1940), Egyptian Maus had been bred and shown before World War II by Europeans who imported them from the Middle East. After the war, the exiled Princess Troubetskoy rescued some of the remaining Maus in Italy. Through her contacts among the foreign ambassadors to Italy, she was able to import several Egyptian Maus via the Syrian Embassy so that she could reduce the amount of inbreeding necessary to keep the breed pure. These Maus were registered with the Federation Feline Italienne and were exhibited before her move to the United States.¹⁷ One of the cats acquired through the Syrian Embassy was named "Baba of Fatima." This silver female later became the first American Champion of the breed.

CFA Championship status was achieved by the breed in 1977. There are 3 recognized colors: silver, bronze and smoke. Contrast between the lighter ground color and deeper markings is important to the dramatic effect. The eye color is a light "gooseberry" green, and the coat is medium short, with a silky, fine texture. The head and muzzle are moderately long and the profile gently contoured (Fig 11). The medium to large ears are erect, and the large, almond-shaped eyes are slanted slightly toward the ears.

The Egyptian Mau body is medium sized and graceful, with well-developed muscles. The hind legs are proportionately longer and there is a loose flap of skin extending from the flank to the hind leg knee. This is also a characteristic of wild cats and allows for long strides when running.

Maus are reported to be especially loyal and devoted to their owners, and adjust well to other pets and children. They are consid-

Figure 11. The Egyptian Mau. (Photograph by Jane Howard)



ered moderately active, alert, friendly and playful, with a quiet melodious voice.

Abyssinian

Though the Abyssinian is another of the oldest known breeds, there continues to be controversy concerning its history. Abyssinians resemble the ancient Egyptian cats, portrayed in paintings and sculptures as elegant animals with muscular bodies, beautiful arched necks, large ears and almond-shaped eyes. Abyssinians today still retain a "jungle look" similar to that of Felis libyca, the African wild cat ancestor of all domestic cats.

The source of the name "Abyssinian" is not because Ethiopia, formerly Abyssinia, is thought to be the original home of the these cats, but rather because the first "Abyssinian" exhibited at a show in England was said to have been imported from that country. The British book Cats, Their Points, Etc, by Gordon Staples, published in 1874, contains the first mention of an Abyssinian. The book shows a colored lithograph of a cat with a ticked coat and no tabby mark-

vau. (Photograph by Jane



ve, alert, friendly and relodious voice.

nian is another of the there continues to be ng its history. Abysancient Egyptian cats, gs and sculptures as th muscular bodies, as, large ears and albyssinians today still a" similar to that of an wild cat ancestor of

name "Abyssinian" is formerly Abyssinia, is inal home of the these use the first "Abyssindhow in England was orted from that counce Cats, Their Points, is, published in 1874, tion of an Abyssinian. Hored lithograph of a tand no tabby mark-

ings on the paws, face or neck. The description reads, "Zula, the property of Mrs. Captain Barrett-Lennard. This cat was brought from Abyssinia at the conclusion of the war. . . ." British troops left Abyssinia in May, 1868, so this may be the time when foreign cats with ticked coats first entered England.

Unfortunately there are no written records tracing the early Abyssinians to these imported cats, and many British breeders believe the breed was actually created through crossing of the various existing silver and brown tabbies with English ticked cats called "bunny" cats.⁸

Recent studies by geneticists show that the most convincing origins of the mutated Abyssinian ticked tabby gene are along the coasts bordering the Indian Ocean and parts of southeast Asia. In fact, the earliest identifiable Abyssinian is a taxidermy exhibit in the Leiden Zoological Museum in Holland. This ruddy ticked cat was purchased around 1834-1836 from a supplier of small wild cat exhibits and labeled by the museum founder as "Patrie, domestica India." In addition to the color details, the graceful body, slim leg bones and head type are close to those of a modern Abyssinian. Though the breed was refined in England, its introduction to that country and others may have been the result of colonists and merchants stopping in Calcutta, the major port for the Indian Ocean.33

Abyssinians were shown in early British cat shows held at the Crystal Palace. The first written standard appeared in 1889, describing the cats as "deep brown, ticked with black, somewhat resembling the back of a wild (only not so grey) rabbit." The current CFA standard calls for a deep orange brown undercoat ticked with black, which gives a burnt sienna overall coat color.

In the late 1880s, cross-breeding experimentation by the British produced some silver or perhaps blue Abyssinians, judging by such names as "Aluminum II" and "Salt," the first 2 exports to America in the early 1900s. One prominent breeder, H.C. Brooke, was strongly opposed to the silver coloring and used a deep red-brown cat named Ras Brooke, hoping to bring back the once preferred rufus tone. This cat may have been responsible for introducing the

mutated light brown (bl) or cinnamon gene into the breed. The gene is carried as a recessive to the original ruddy color and produces the "red" Abyssinian, called "sorrel" by some associations and "cinnamon" by others. Red Abyssinians have chocolate brown ticking and overall rich coppery-red radiance.

World War I halted cat breeding in England and it was not until the late 1930s that several top-quality ruddy Abyssinians were exported to form the foundation of today's American breeding stock. At the end of World War II there were only 12-15 Abyssinians left in England, and breeders struggled to revive the breed. Since then the popularity of Abyssinians throughout the world has grown steadily. The first American-bred red Abyssinian kitten was born in 1952 out of 2 imported British ruddies. This color was recognized by GCCF in England in 1963. After a battle for acceptance, reds received CFA Championship status in 1964.9

During the 1950s several breeders began to register blue-ticked kittens occasionally born in their Abyssinian litters. These reflected the genetic "dilute" factor that had evidently been present in some bloodlines, causing the black ticking of ruddy cats to become slate blue on a warm beige ground color. The same factor acting on the reds produces the "fawn" Abyssinians with their light cocoa brown ticking. By the late 1970s these dilute-colored Abyssinians began to capture the attention of breeders and the public. In 1984 the blues achieved CFA Championship status, and the fawns followed with full show status in 1990. In England, Europe, Australia and New Zealand, other colors are accepted.

An important factor in defining the Abyssinian breed is a short, fine, silky, dense and resilient coat showing even and distinct ticking. Each hair shaft on the back and sides is banded with alternating light and dark color, creating an overall "wild rabbit" effect. Though the ticked tabby pattern normally includes striping and markings on the legs, tail and chest, these have been eliminated on the Abyssinian breed through many years of selective breeding. Facial markings, however, are considered desirable. The body is lithe and graceful, with firm muscles (Fig 12). Abyssinians

stand high on slim legs and display a characteristic eagerness. The head is a modified wedge, with gentle contours. Large brilliant almond-shaped eyes and large alert ears give the face a lively expressive look.

These cats are well known for their fast graceful movement and playful intelligent personalities. They are usually bold, sociable with other animals and intensely curious. Responsive and sensitive to people's moods, Abyssinians stay close to their owners and want to be part of all household activity. Their desire to participate and interact with people allows many of them to accept training, learn to walk on a leash, and enjoy travel and other adventures. Though highly demonstrative in showing affection and wanting attention, they are freedom loving individuals and generally prefer not to be overly restrained.

Somali

All Abyssinian pedigrees may be traced back to cats of unknown ancestry in Britain. Considering the need to outcross after

Figure 12. The Abyssinian. (Photograph by Jane Howard)



the World Wars, it is not surprising that when the cats imported to North America were linebred, the recessive gene for long hair was expressed in some lines. "Raby Chuffa of Selene," a male who was sent to the United States in 1953 and appears in the pedigrees of many Abyssinians, is thought to be an early important carrier of the long hair gene.⁴²

For years, long-haired kittens that occasionally cropped up in litters were quietly sold or kept as pets, never to be used for breeding. The first to be recorded and bred was owned by a Canadian. This male, "May-Ling Tutseita of Dunedin," in the 1960s began the oldest Canadian Somali line. About the same time in the United States, an Abyssinian breeder, Evelyn Mague, using her cats carrying the long hair gene, began serious work to develop these cats as a separate breed. She also established the name "Somali" for the breed, associating the Somalia area of Ethiopia. which was formerly called Abyssinia. The name emphasizes the breed's derivation from the established Abyssinian gene pool rather than from purposeful hybridization with another breed. In 1972 Mrs. Mague founded the Somali Cat Club of America with Canadian and American membership, and the breed received CFA Championship status in 1979.

Early British Abyssinians exported to Europe, Australia and New Zealand also produced occasional long-haired offspring. Small groups of breeders in these areas began to develop their own breeding programs. Despite the great distance separating the cats, their pedigrees may be traced to the same English ancestors.

The CFA Somali standard is almost the same as that of the Abyssinian, with the exception of the coat. However, several subtle differences distinguish the breed. Whereas the Abyssinian is a medium-sized cat, the Somali is medium sized to large. With its full-coated body and long brush-like tail, Somalis generally appear more substantial (Fig 13). The medium-long coat feels extremely soft due to a fine double-coat texture. Often there are multiple broad bands of ticking, giving a rich intensified color tone. Such details as tufts on the ears, dark color up the rear legs to the hock, and strong facial markings add to the dramatic

prising that th America ne for long nes. "Raby was sent to appears in sinians, is at carrier of

s that occavere quietly be used for ed and bred This male, in," in the lian Somali the United er, Evelyn he long hair evelop these also estabie breed, asof Ethiopia, ssinia. The derivation n gene pool ybridization Mrs. Mague of America nembership, ampionship

exported to ealand also d offspring. these areas reeding pronce separatny be traced

almost the with the exveral subtle ed. Whereas ed cat, the ge. With its sh-like tail, substantial at feels exple-coat texproad bands sified color e ears, dark hock, and he dramatic

"wild" appearance of the breed. The coat colors accepted for CFA Championship competition are the same as in the Abyssinian: ruddy, red, blue and fawn.

Like Abyssinians, Somalis have quiet voices and lively, companionable personalities. CFA allows breeding to Abyssinians though the resulting short-haired kittens, which look exactly like Abyssinians, must be registered as Somalis. These "variants" are often valuable in Somali breeding programs and make beautiful pets. FIFe, in Europe and elsewhere, allows the shorthaired variants to be shown as Abyssinians.

Singapura

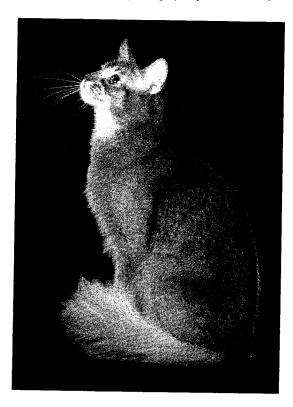
The ticked tabby gene (Ta) is dominant to all other feline tabby patterns and is prominent in feral and street cats throughout southeast Asia. On the 225-square-mile island of Singapore at the southern tip of the Malay Peninsula, small cats with a brown-ticked coat pattern and delicate coloring have been noticed since at least 1965. These cats, with their large almond-shaped eyes and distinct head and body type, are unlike the typical deeper-colored ticked street cats of the area, which often have short twisted "bob" tails and usually display the white spotting factor.

The characteristic dark brown ticking on a warm old-ivory ground color of the Singapura is thought to occur from the combination of 2 major genes native to southeast Asia. The Abyssinian ticked tabby gene (Ta) is modified by the Burmese gene (cb), which changes black ticking to deep brown and results in the soft warm coat coloring.

Tommy and Hal Meadow, breeders who became interested in the cats while living in Singapore, used 3 brown-ticked cats in 1975 to establish the breed. A fourth, obtained from the Singapore SPCA, was imported in 1980 by another cat breeder and is in the background of many American Singapuras. The Meadows presented the Singapuras at several cat shows and concentrated on a breeding program to produce consistency in color, pattern, health and disposition.

CFA accepted the Singapuras for registration in 1982. Though these cats are still relatively rare, many breeders throughout America are now devoted to their advance-

Figure 13. The Somali. (Photograph by Jane Howard)



ment. Full Championship status was granted to the breed by CFA in 1988.

Fully grown Singapuras are the smallest of the pedigreed breeds. Females weigh about 4 lb and males about 6 lb. Their body is moderately stocky and muscular, with the space outlined by the underside of the trunk, legs and floor forming a square. Heavily muscled legs taper to small short oval paws. The head is rounded, with a definite whisker break and medium-short broad muzzle. Large medium-set ears and brilliant wide-set large eyes, with unusual cheetah-like markings at the inner corners, give a special facial expression to these cats (Fig 14). Because the Singapura coat is very short and close lying, the ticking effect resembles fine-grained sand. The cats show some barring on the inner front legs and back knee but should not display chest markings.

Singapuras are curious, friendly, playful and relatively quiet. Females usually have small litters of 3 kittens. There is far

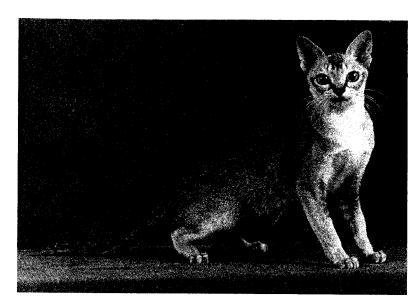


Figure 14. The Singapura. (Photograph by Jane Howard)

greater demand for these cats and kittens than those available.

Ocicat

The epitome of a wild cat for most people would be a large, muscular, boldly spotted cat. The Ocicat is a spotted beauty that retains the gentle temperament of a domestic cat.

"Tonga," the first Ocicat born, was a surprise to Virginia Daly, a well-known breeder from Michigan. Through cross-breeding of Abyssinians to Siamese, she had been attempting to achieve a ticked tabby-pointed Siamese. In 1964 a lovely male kitten was born with golden spots on an ivory body. Though Tonga was sold as a pet, subsequent breedings of the same parents produced other spotted cats that became a new hybrid breed.

In 1966 the Ocicat was accepted for registration by CFA. In addition to Siamese and Abyssinians as the foundation cats, Ameican Shorthairs were added to achieve color genes. It took 20 years to fully develop the breed and to finally achieve CFA Championship status in 1987. The breed has now become popular with both cat fancy exhibitors and the general public. Abyssinians are acceptable for outcross breedings until 1995.

Ocicat males weigh 12-15 lb and females 7-10 lb. Their "jungle cat" appearance bears

no resemblance to any of the foundation breeds. An athletic and powerful yet graceful body with well-muscled legs, gives this cat a commanding presence (Fig 15). The coat is short, close lying and sleek, emphasizing the large, scattered, thumbprint-shaped spots. The head is carried gracefully on an arching neck and is a modified, slightly curving wedge with a broad muzzle and firm jaw. Ocicat eyes are large and almond shaped, angling slightly upward toward the ears, which are moderately large and set neither too high nor too low.

In the preferred pattern, the spots suggest the classic tabby pattern. The genetics underlying this spotting remain a controversial subject among experts. Based on breeding experience, some breeders suspect that a separate gene for spotting modifies a pattern created by one mackerel tabby gene and one classic tabby gene.³⁵

Twelve colors are accepted in Ocicats: tawny (or brown spotted), blue, chocolate, cinnamon, fawn, lavender and the silver versions of each of these. The sex-linked orange gene is not allowed in the breed, as the resulting tortoiseshell pattern would interfere with the spotting pattern.

Ocicats are hardy, vigorous cats, full of vitality and fun. They are highly sociable with people, dogs and other cats. They are nondemanding, adaptable, easy going and confident, making them excellent family companions.

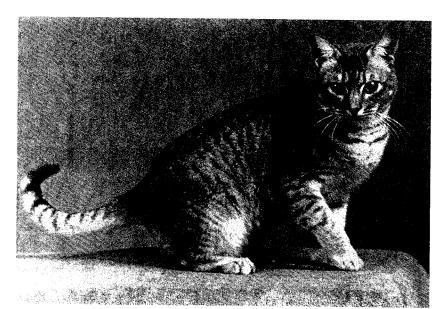


Figure 15. The Ocicat. (Photograph by Jane Howard)

foundation il yet graces, gives this 'ig 15). The eek, emphathumbprintid gracefully a modified, road muzzle arge and alupward toerately large

e spots sugl'he genetics n a contro-. Based on ders suspect g modifies a l tabby gene

low.

in Ocicats: e, chocolate, l the silver ex-linked ororeed, as the would inter-

cats, full of hly sociable s. They are going and lent family

Russian Blue

Solid-blue short-haired cats with a "foreign" slender body type were present at British cat shows as early as 1875. They were said to have been taken to England by sailors from the White Sea port of Archangel in northern Russia, and were therefore called Archangel cats.

In the well-known The Book of the Cat, by Miss Frances Simpson (1903), the Russian cats at the turn of the century were described by one of the earliest breeders, Mrs. C. Carew Cox. She states that many of the blue short-haired cats were actually of Russian origin. However, it is clear that the cats featured in early breedings were non-descript and lacked a common standard for body and head type. Though many were fairly long and elegant, others had a round face and compact body.

Much attention was given to the coat, which Mrs. Carew Cox said was to be "short and close, glossy and silvery" but sometimes is "rather wooly and furry." From the few photographs available, it is apparent that these early cats had thick, dense fur similar to the best of our modern Russian Blues. An even shade of light silver-blue was also appreciated then as it is today. The Russians competed with the British cats in one class at the shows, but reports indicate that the more cobby British type usually won.³⁹

World War II brought an end to the original breeding stock, and in 1945 efforts to reestablish the breed necessitated cross-breeding with Siamese. The 1952 standard called for an "elongated, elegant body, graceful lines, delicate bones and light type. . . . The skull is flat and narrow, the fore-head sloping. . . ." The thick double coat seemed to have totally disappeared in the 1950s. Eventually in the late 1960s there were serious efforts to breed away from the Siamese type. According to reports in British publications, efforts were made to bring back the thick plush coat.

Work to restore the idea of the original Russian Blue cat was also underway in Scandinavia in the late 1940s. Breeding stock based on Russian Blues from Finland and Denmark imported to Sweden was combined with Siamese outcrosses. Russian Blue breeding in America started with imported British cats in 1947 and later cats from Scandinavia. Many Russian Blue breeders currently believe the British lines are responsible for the beautiful light plush coats of the Russians today, and that the Scandinavian cats have contributed the brilliant green eye color. Over the last 20 years, using occasional British and Scandinavian imports, the body and head types have finally been stabilized in America. Because of variations in the standards, however, Russians still deviate in appearance

around the world, including the allowance of colors other than blue in Australia, New Zealand and England.

CFA states that the head should be a smooth, medium wedge, with a distinctive flat-topped skull and straight nose profile defined by a downward angle (Fig 16). The body is lithe, graceful, firm and muscular without being tubular in appearance. There are many points in the standard for coat and color, describing a fine, soft, plush and dense double texture, with an even bright blue color throughout. Lighter shades are preferred and the guard hairs are silver tipped, giving the cat a lustrous silvery sheen.

Russians are gentle and slightly reserved cats with a dignified manner. They have a very quiet voice, are very affectionate with their owners, and live happily with children and other pets. They are moderately active, well behaved and playful all of their lives.

Chartreux

For many years, little had been written in the English language about the historic blue short-haired cats that were common in France and described in French literature in the late 1500s. The name "Chat des Chartreux" first appeared in the Dutch Universal Dictionary of Commerce, Natural History and the Arts and Trades, by Savarry des Bruslon, 1723. Though their origin was attributed to the Chartreux monks, who were said to have had the first of the breed, no records have survived the natural

calamities and political upheavals to positively confirm the breed's ancestry. ¹³ It is assumed that the cats were kept and bred by the monks (best known for their potent green liqueur) to keep their monastery, La Grande Chartreuse, located high in the mountains near Grenoble, free of rats and mice. John Jennings, in his book, *Domestic or Fancy Cats* (1893), writes that the original blue cats bred by the Chartreux monks were longhaired.

The Chartreux cat has throughout history been admired by the French for its sturdy and large structure and its powerful hunting ability. The Dutch trade manual also referred to the Chartreux cat's use in the fur industry. Chartreux pelts were prized for their thick wooly texture similar to that of an otter. 14

By 1756 the Chartreux was listed among the 4 recognized cat breeds in Natural History, by Comte de Buffon, along with the Domestic, Spanish and Angora. There is no doubt that this ancient breed was distinctly removed from the European Domestic cat; however, the first recorded selective breeding of Chartreux began around 1930 on the small island of Belle-Ill-sur-Mer in the Atlantic off the northwestern coast of France, where free-roaming ancestors of the Chartreux were found on the grounds of the Le Palais Hospital. Colonies of Chartreux still exist in France today, where pure Chartreux are differentiated from the hybrid mixtures of blue British Shorthairs and Chartreux.

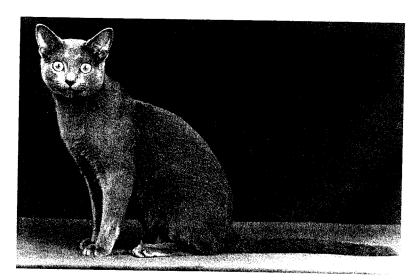


Figure 16. The Russian Blue. (Photograph by Jane Howard)

rals to posiestry. 13 It is pt and bred their potent onastery, La nigh in the of rats and ok, *Domestic* at the origicreux monks

oughout hisench for its its powerful ade manual cat's use in pelts were ture similar

isted among Vatural Hisng with the There is no as distinctly omestic cat; ctive breed-1930 on the r in the Att of France, rs of the ounds of the f Chartreux where pure om the hyorthairs and

Russian Blue. Jane Howard) Helen and John Gamon of La Jolla, California, were intrigued by the description of the Chartreux in Fernand Mery's book, The Life, History and Magic of the Cat, published in 1966. They went to France in 1970 to find cats of pure lines to import. These formed most of the foundation breeding stock for the American and Canadian Chartreux we know today. Other imports broadened the gene pool during the 1970s, and CFA accepted the breed for registration in 1979. Championship status was achieved in 1987.

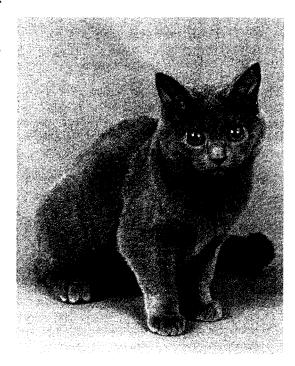
Breeders are dedicated to preserving the Chartreux in its pure form, and the standard therefore emphasizes the historic qualities of these unique cats. Accepted in the blue color only, clarity and iridescent brilliance are important. The coat is dense and water repellent, with a slightly wooly texture that allows it to "break" like sheepskin. Because the degree of wooliness depends on age, sex and habitat, this is difficult to achieve and is usually best exhibited by mature males.

The Chartreux body and head types ensure that these cats will not be confused with other blue cats. The breed's husky, robust structure is referred to as "primitive." While the large male example is sometimes described as a "walking fortress," with broad shoulders, deep chest, strong bones and solid muscle mass, the female is expected to be of medium size. The breed is slow to reach full maturity. All Chartreux are extremely supple and agile, rather than coarse or clumsy. Their legs are relatively fine boned and appear almost dainty in comparison to their body mass.

The head is noted for its round broad shape, powerful jaw and full cheeks (Fig 17). The muzzle is comparatively more narrow than that of other breeds and is tapered, with slight whisker pads. The eyes are round and range in color from copper to gold. The medium-sized ears are set fairly high and erect. Chartreux have an exceptionally alert, sweet and "smiling" expression.

Often described as a "dog-like" cat, the Chartreux has a loyal attitude toward its owner and a nonaggressive, cautious demeanor with strangers. They give the impression of great dignity and stability, and

Figure 17. The Chartreux. (Photograph by Jane Howard)



are well behaved and extremely quiet. In fact, In fact, Chartreux are sometimes said to have no voice at all. A legend explains that they took vows of silence with the monks, causing them to become mute. Their faint chirping sounds are unlike that of any other breed. Chartreux cats play with seriousness, wanting to "kill" their toys, and are considered to be comedians by their owners. They maintain a "joie de vivre" well into old age.

Turkish Angora

The recessive long hair gene is considered to be one of the 7 "ancient mutations" in cats. Authorities agree that this most likely took place in the Middle East. For centuries Europeans referred to long-haired cats as Angoras or Persians. There have been suggestions that the Pallas' cat, Felis manul, a wild cat with a heavy body and a thick long-haired coat, may have been the ancestor of domestic long-haired cats. Most zoologists, however, have rejected this theory because of fundamental differences, and consider mutation to be more likely.

The precise era and location within the Middle East for the origin of the long hair gene are open to speculation. Long-haired cats, however, from both Turkey and Persia were first introduced to Europe by the end of the 16th century and early 17th century. Other early long-haired cats were imported from Russia and Afghanistan. A print identifying an "Angora" cat was included in Buffon's Histoire Naturell, published in 1756, and illustrates a long-bodied graceful cat with a full coat and long ruff around the shoulders. By the late 1700s, sea traders began bringing Turkish Angoras to America from Europe and the Orient.

A letter written in May, 1856, by Lottin de la Val, which is quoted in Fernand Mery's book, *The Cat*, reports his finding a "beautiful feline species (the Angora) on the great Armenian plateau at Erzerum." He noted that the Angora was the dominant variety among the cats of Kurdistan, where he had seen whites, grays and orange-spotted cats. This isolated mountain region in the eastern part of Turkey would have been a logical place for these cats to multiply and thrive because of the cold environment.

Differences in the Angora and Persian long-haired varieties were gradually noticed by the British at the time of the first Crystal Palace Cat Show in 1871. The Persian, as well as the Afghanistan longhairs, had coats described as wooly, a larger head and stronger body than the more rangy Angoras. The Angora coat texture was desribed by an English writer in 1868 as "of fine texture, generally longest on the neck but also on the tail." Though all of the longhairs were bred together, gradually the Persian became the preferred variety in England. By the turn of the century, through crossbreeding in England and Europe, the Turkish Angora breed had become virtually extinct except in its homeland.

Early in the 20th century the Turkish government established a breeding program at the Ankara Zoo to preserve the pure white Angora cats with blue eyes, amber eyes and odd eyes (one blue and one amber). Though the other colors inherent to the breed occasionally occurred in litters, white was the only color officially preserved by the Zoo. In 1962 and 1966, Colonel and Mrs. Walter Grant, followed by other American breeders, began to import several Angoras

directly from the Zoo with certificates of ancestry. Virginia and Thomas Torio travelled to Ankara in August, 1966, to purchase a male and female, and discovered the Zoo had at that time less than 30 cats.³⁸

"The Original Turkish Angora Society" was founded in the late 1960s to promote the white Turkish Angora cats in America with ancestry traceable to the Ankara Zoo.²⁵ The breed was recognized by CFA in 1970 and achieved Championship status in 1973. The only coat color accepted was white, though other recessive colors continued to appear in some lines. Many breeders believed these cats would help increase the limited gene pool and gradually promoted colors other than white. These were finally acknowledged by CFA in 1978.

A breed known as the "Angora" was given preliminary recognition in Britain and is similar to the Angora cats of Turkey and North America, except that is based on a genetic program using Siamese and shorthaired cats carrying the long hair gene rather than cats imported from Turkey. The "Turkish" cat, as recognized in England and elsewhere, is known in America as the Turkish Van.

Turkish Angoras are medium sized and extremely graceful, with refined boning. The hind legs are longer than the front, and the paws are small and dainty (Fig 18). The head is wedge shaped, with a definite taper toward the chin. Long, pointed erect ears are tufted and set high on the head. The long, full tail is often carried horizontally over the body as the cat is moving. Angoras have a silky, medium-long coat with a wavy tendency and should carry a long, full neck ruff. Any color or pattern is accepted today except those showing Siamese hybridization.

Angoras are said to have a humorous, polite, sweet nature. They are playful and mischievous, and stay affectionately close to their owners. As in any breed or in mixed-breed cats, some of the pure white cats are born partially or totally deaf; however, Turkish Angora breeders do not believe this is a detriment, as these cats seem to enjoy their lives as pets and get along as well as their hearing littermates.²⁶ Those cats which are hearing impaired must be placed

ficates of anorio travelled purchase a pred the Zoo its. 38

ora Society"
to promote
the Ankara
d by CFA in
hip status in
ccepted was
colors continany breeders
increase the
lly promoted
were finally

Ingora" was in Britain its of Turkey t is based on se and short-g hair gene rom Turkey, ized in Engn America as

m sized and ned boning an the front, nty (Fig 18). th a definite pointed erect on the head ried horizont is moving. m-long coat ould carry a or pattern is se showing

umorous, poful and misely close to
or in mixedhite cats are
if; however,
t believe this
sem to enjoy
ig as well as
Those cats
ist be placed

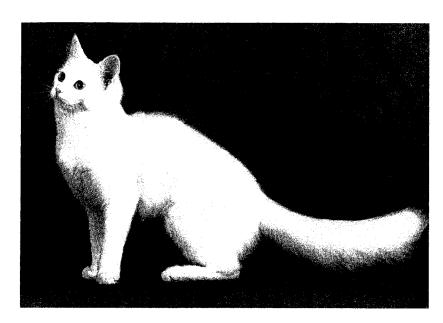


Figure 18. The Turkish Angora. (Photograph by Jane Howard)

in homes assuring absolute protection from outside dangers.

Turkish Van

Along with the other longhairs known by the late 19th century in England, and Europe, cats with a medium-long coat and colored markings on the head and tail came from the Lake Van region of eastern Turkey. In 1955, 2 Britons touring the area were intrigued to see cats still resembling the original longhairs described centuries ago when they were first taken to Europe. Aside from their special piebald pattern, limiting color to the head and tail, the cats were well known in the area for their love of water and swimming. The Britons imported a pair of Van kittens and started a breeding program in England. After several more trips by breeders to eastern Turkey and mating efforts with the additional stock, the "Turkish" was recognized in 1969 in Britain by the GCCF. It also now has full acceptance in FIFe and other European registries, as well as in The International Cat Association (TICA) and the American Cat Fanciers' Association (ACFA) in America.

The first Van cats imported to England were auburn and white. The genetics of the auburn color are the same as for the sexlinked orange color, but the deeper tone is probably a result of many years of breeding in a limited area. Though auburn and white was the color originally preferred, black and white is more usual in the Lake Van area. The cats also carry the dilute factor, allowing cream/white and blue/white. Calicos, as well as tortoiseshells, may also be produced.

In 1982 a British breeder brought some of her Turkish cats to America, where they were shown. In a few years interest in this natural breed has grown and more cats have been imported to North America. In 1988 the bred was recognized by CFA for registration with the name Turkish Van.

Bea van der Lende and Leen Kort, in search of Turkish Van cats, travelled in 1987 from The Netherlands to Van, a province of East Anatolia, of which the capital and largest city is Van (located on the shores of Lake Van). They reported that to the Turkish people of the area, a Van cat is an odd-eyed white cat with one blue and one yellow eye. Though they were able to take 2 black and white cats with them, it is now difficult to fine the original bi-colored Van cats. 40 The Ankara Zoo has recently started a breeding program for the Van cats of eastern Turkey under the protection of the Turkish College of Agriculture. The cats are maintained in natural circumstances within the Van region, and kittens are not allowed out of the area until their numbers increase.⁴¹

The Turkish Van is considered one of the largest domestic cats. Males weigh 12-18 lb or more at full maturity and the females 7-12 lb. They have broad hips and massive shoulders, with long legs set wide apart. The head is a wide, moderately short wedge, substantially broad to harmonize with the large body (Fig 19). Vans have expressive tails, always in motion, with fox-like fullness.

Their soft coats feel like cashmere with no trace of undercoat. The length varies according to the time of year and maturity of the cat but should be semi-long.

Because of their size and unusually active nature, these cats need space and a great deal of understanding to help them adapt to household living. Not all of them like to swim, but owners say they do seem fascinated with water and are more apt to take a dip in sinks and tubs than most cats.

Norwegian Forest Cat

A large semi-long-haired cat, known as the "Skogkatt" (Forest Cat) in Norway, has been a familiar animal on Norwegian farms for centuries. Even today they may be seen in the woods of central Norway and near the Swedish border. Natives speculate that this may have been the cat mentioned in Norse mythology that Thor, the Thunder God, could not lift because of its huge size. The Vikings may have taken the original cats back with them from their sea journeys, or the cats may have entered Norway with the crusaders returning from wars in the Holy Land. ¹⁰ In fairy tales of the mid-19th century, the Forest Cat is referred to as a "fairy cat."

The first efforts in Norway to have the "Wegies," as they are often called, recognized as a distinct breed began in the 1930s. In 1938 the first Norwegian Forest Cat was exhibited at a show in Oslo, Norway. Following World War II the cats were threatened with extinction. Breeders worked to preserve the original characteristics and form of these beautiful cats. A serious breeding program was started in the early 1970s and in 1976 the Federation Feline Internationale (FIFe) accepted the breed, which attained full Championship status the following year. Today classes of Norwegian Forest Cats in European cat shows are among the largest of any breed. In Norway there are 50-180 at each show.

Americans began to take notice of this breed in the late 1970s. The first breeding pair was imported in 1979. A Norwegian Forest Cat Fancier's Association was established in the early 1980s and the breed was presented to the various American registering associations. CFA approved the Wegies for registration in 1987. They are currently evaluated in the noncompetitive Miscellaneous class.

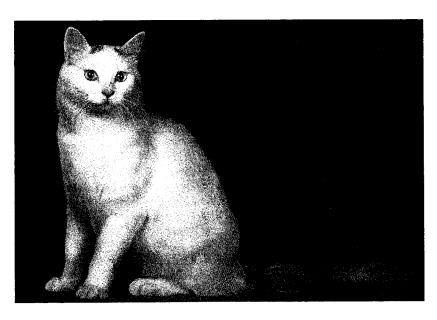


Figure 19. The Turkish Van. (Photograph by Jane Howard)

the original air sea jourred Norway com wars in of the midreferred to

to have the alled, recogn the 1930s. rest Cat was Iorway. Folwere threatworked to eristics and A serious in the early on Feline Inthe breed, iship status s of Norweat shows are . In Norway

otice of this rst breeding Norwegian n was estabie breed was can registerthe Wegies are currently ve Miscella-

. The Turkish ograph by Jane The most distinguishing feature of this natural breed is the quality of the coat. A Wegie is in full coat during the winter months, with a long, thick double texture and huge ruff, a flowing tail and furry britches on the hind legs (Fig 20). The wooly undercoat insulates against the coldest weather, while an oily guard hair outercoat repels rain and snow. The coat does not tangle or mat and requires minimal grooming. In summer, following natural molting of the undercoat, only the shaggy outercoat remains, along with a full tail and tufts in the ears and on the toes.

The Norwegian Forest Cat is medium sized to large, powerful and moderately long, with muscular hind legs slightly longer for jumping and climbing. The head is an equilateral triangle, with the ears forming the outer edges. Brown tabbies and black and white were said to have been the original colors and are still very popular; however, all colors except the pointed pattern or Burmese brown are accepted. Wegies are friendly, loving and hardy.

Persian

To many cat fanciers, Persians represent the most glorious of pedigreed cats. Their long flowing silky coats suggest opulence and luxury. Huge round eyes and a massive body structure give these cats a striking appearance. Their quiet, gentle temperament lends an aura of serenity and dignity to their surroundings. The Persian breed, which is divided by CFA into 7 divisions for competition, is the most popular of all the breeds at shows. Persian registration accounts for more than two-thirds of the total pedigreed cats registered with CFA.⁵

The earliest long-haired cats seen in Europe were introduced by the caravans traveling from Persia and Turkey during the late 16th century. In the most comprehensive 18th century book on natural history by Comte de Buffon (1756), an excerpt from Voyages de Pietro della Valle (1586-1652) refers to these long-haired cats. The Italian traveller mentions not only Angora cats but also a different species from the province of Khorazan in Persia, which he describes as gray, with very long, fine, glossy and silky coats. 12

Angora and Persian longhairs were much admired in France and England, and were commonly crossed. Solid white fur was the favorite, and the blue-eyed white cats first appearing in England were generally Angoras, while the whites with yellow eyes were of the larger, more stocky Persian type. Eventually the British preferred the longhairs with Persian background, partially to avoid the tendency for deafness seen in the blue-eyed white Angoras.³² Because the dominant white gene can suppress the expression of any other colors were carried as recessives by these early cats. Long-

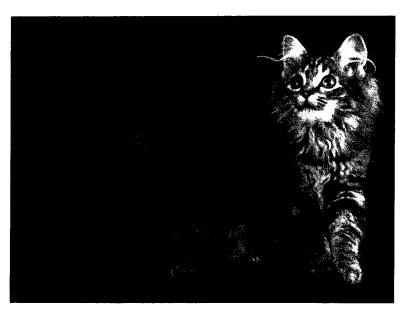


Figure 20. A Norwegian Forest Cat kitten. (Photograph by Jane Howard)

haired cats also were imported into England from Russia. These were said to have been blacks and tabby patterned.

By 1901 the stud books in England showed Persians in black, white, blue, orange, cream, sable, smoke, tabby, spotted, chinchilla, tortoiseshell, bi-color and tricolor. Though blacks were the first to be registered, blue Persians soon became the most popular, probably because Queen Victoria owned 2.45 Persians were exported to North America from Europe at the end of the 19th century. American breeders accepted them with great enthusiasm and used the British standards as a starting point. Eventually the breed was developed to the massive cobby body type and immense coats seen in showhalls today.

Persians may be large or medium sized, with considerable variation. Overall quality and balance are determining elements. The Persian body appears rounded and should be equally massive across the shoulders and rump. Boning is thick and strong, and the legs short. Though Persian coats vary somewhat, depending on color, the ideal is a fine, glossy hair texture standing well off the body, with a huge ruff and full tail.

The CFA Persian standard calls for a round head with a very wide skull and powerful jaws. The nose is to be "short, snub and broad" with a "break." In recent years breeders have given much attention to the shortness of nose and degree and placement

of the break, which is the stop at the nose transition from the forehead. Some prefer this to be a deep indentation, while others believe the break should not be overly severe. Silver Persians, for example, usually have less extreme nose breaks. Judges have latitude in interpretation, in that the standard wording is not specific concerning the degree of this feature, except for the "Pekeface" Reds.

Several other aspects of the head structure have great effect on the overall look. Small ears set low on the head and tilted forward, along with full, large, round, brilliant eyes set far apart, are important characteristics that contribute to a desired sweet expression. The standard calls for Persians to have a "proper bite." Cats are disqualified if they display any "deformity of the skull resulting in an asymmetric face and/or head." Conscientious breeders take special care to select breeding cats that maintain the Persian head appearance without displaying the problems often associated with a brachycephalic (overly shortened) head type.

The 7 Persian divisions have been established on the basis of color and pattern. The various colors in the *solid division* are to be even in tone, sound to the roots and without markings (Fig 21). All have copper eye color, with whites also competing in separate classes for blue-eyed cats and odd-eyed cats (one blue and one copper eye).



Figure 21. A solid-colored Persian. (Photograph by Jane Howard)

o at the nose Some prefer while others be overly semple, usually Judges have hat the stanoncerning the or the "Peke-

e head strucoverall look. ad and tilted , round, brilportant charo a desired ard calls for te." Cats are y "deformity mmetric face oreeders take ng cats that appearance is often assojoverly short-

e been estabpattern. The sion are to be and without copper eye ting in sepaand odd-eyed eye).

 A solid-colored (Photograph by ward) The shaded division is for silver cats with white undercoats tipped with black, the "cameos" (red tipped with white undercoat), tortoiseshell cats with white undercoat, and golden cats, which have warm cream undercoats tipped with black (Fig 22). The goldens, though tipped, are the result of a separate gene recessive to the shaded inhibitor gene. "Chinchilla" or "shell" tipping is very slight and gives a sparkling appearance to the coat, while "shaded" tipping is darker. Silver and golden cats have green or blue-green eyes

distinctly outlined with black. Cameos and tortoiseshells have brilliant copper eyes.

Cats in the *smoke division* are genetically similar to shaded cats, except the tipping is so deep that the cat appears solid, blue-cream or tortoiseshell colored on the surface, but has a white undercoat evident when the coat is parted (Fig 23).

Tabby division cats come in 3 patterns: classic, mackerel and patched. They are seen in many colors, and the rich contrast of today's Persian tabby markings is truly

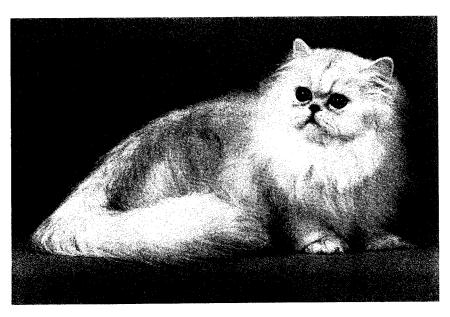


Figure 22. A shaded Persian. (Photograph by Jane Howard)

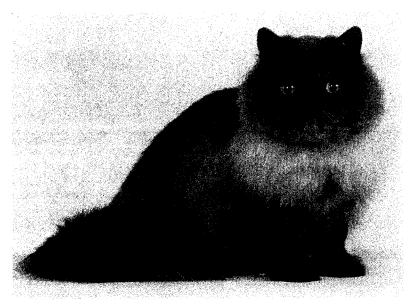


Figure 23. A smoke Persian. (Photograph by Jane Howard)

dramatic (Fig 24). The patched tabby is a classic or mackerel pattern with the addition of red and/or cream patches. The color and pattern is a result of the sex-linked red gene. "Peke-face" red tabby Persians conform in color to the standard for red tabbies; however, these cats have differing underlying bone structure in the head.

The parti-color division is for tortoise-shell and blue-cream cats (Fig 25). As of 1990, a separate bi-color division was established by CFA for cats of accepted colors combined with piebald white spotting (formerly in the parti-color division) (Fig 26). Van bi-color cats are white with colored patches confined to the extremities (head, ears, legs and tail). Calicos, Van calicos and tabby and white cats are also included in this division.

Cats in the Himalayan division were at one time considered a separate breed. Crosses between Siamese and long-haired cats were tried in the 1920s and 1930s. After years of work the goal of producing a cat with Persian type, also displaying the Himalayan or Siamese point-restricted pattern, became a reality (Fig 27). By 1961 all of the American associations had recognized the Himalayan as a breed. Gradually the Himalayans became indistinguishable in type from the Persian breed. Finally in 1984 CFA declared the Himalayan cats with colorpoint pattern a Persian division, making offspring of crossbreeding eligible

for championship competition in the appropriate Persian color class. Many point colors are accepted in this division, including solid colorpoints, lynx (tabby) points, tortie and blue-cream points. All cats in the Himalayan division must have deep vivid blue eyes. Solid color chocolate and lilac cats resulting from Himalayan/Persian crosses are shown in the Solid Division in CFA.

Persian breeders often believe certain personality traits go with various colors or patterns. Tabby Persians seem to be especially active and outgoing. Tortoiseshells are often mischievous. Himalayans tend to be entertaining and playful. Generally, however, Persian cats are universally known for their sweet, gentle, affectionate and soothing temperaments. They are passive and adaptable to any living arrangement. Though they do have short bursts of playful energy, Persians are rarely destructive and generally remain content as quiet observers. Daily grooming and combing are necessary to keep their long soft coats free from tangles and mats. Occasional bathing is also needed to keep their coats shiny and free of excessive oil. Most Persians become accustomed to this care, which should be started when they are kittens. They grow to welcome the daily attention. Their owners also tend to be people who look upon the grooming routine as a pleasant experience and part of the enjoyment of living with a Persian cat.

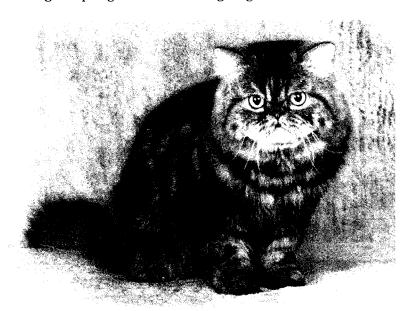


Figure 24. A tabby Persian. (Photograph by Jane Howard)

n the appropoint colors cluding solid s, tortie and the Himalaid blue eyes ats resulting s are shown

ieve certain us colors or to be espeortoiseshells ans tend to ierally, howy known for and soothpassive and rrangement. ts of playful tructive and uiet observg are necests free from thing is also and free of become acshould be 'hey grow to heir owners k upon the experience ving with a





Figure 25. A tortoiseshell Persian. (Photograph by Jane Howard)

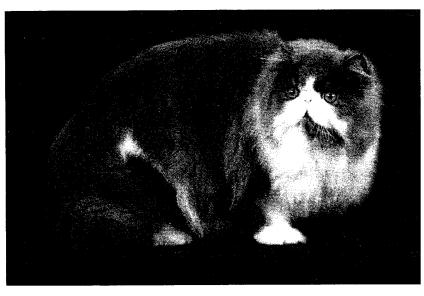


Figure 26. A bi-colored Persian. (Photograph by Jane Howard)

Exotic Shorthair

For many years British breeders have experimented with crossbreeding Persian and Russian Blue lines into the British Shorthair breed. In the 1950s and 1960s in America some breeders began using Persians in their American Shorthair breeding programs, as at that time there was an open registration policy. The purpose was to add colors not available in the American Shorthair gene pool, such as chinchilla and shaded silver, which existed only in the Persian breed. As a result of this hybridization, the American Shorthairs began to acquire some

undesirable characteristics, including round heads and soft, overly long coats. Most breeders then discontinued the outcrossing.

These hybrid cats, however, were appreciated by some breeders for their own exceptional and unique beauty. In 1966, through the initiative of a prominent CFA judge, Jane Martinke, who suggested a program for recognizing the hybrids, CFA decided to designate the new breed as Exotic Shorthair. The ideal was to be a shorthaired Persian, and all breeders of the hybrid American Shorthairs were given the opportunity to transfer registration of their

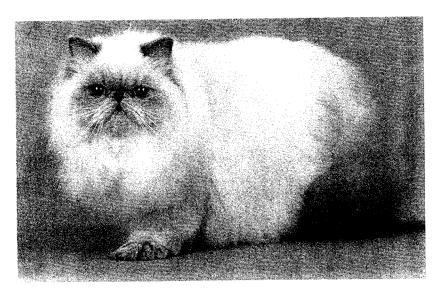


Figure 27. A Himalayan Persian. (Photograph by Jane Howard)

cats to the new breed. By 1967 the Exotic Shorthairs were accepted for Championship status. Burmese and Russian Blues were also used in the early years of this breed, because at that time any shorthair was allowed. Today only Persians are accepted as outcrosses.²⁴

The standard for Exotic Shorthairs is identical to that for Persians except for the coat, which should be of medium length, soft and plush, standing out from the body (Fig 28). The length is slightly longer than that of other short-haired cats but should not be long enough to "flow," as does the Persian coat. Exotics are accepted in all of the colors described in the Persian breed. Because of its close association with the Persian, this breed has been judged with the long-haired breed group at CFA shows since 1983.

After many years of dedicated work, breeders have produced Exotic Shorthairs equal in body and head type to the Persian. Despite this, the breed has its own distinct appearance, which some call the "teddy bear look." The stocky body is boldly apparent, and their short legs and neck are more easily seen without the long coat to hide the conformation (Fig 28).

Many owners say their Exotics have livelier personalities than Persians. The easy coat maintenance holds great appeal to pet owners who like the massive, round-faced Persian look but do not want to comb a cat daily. Because of the Exotic's dense, soft coat, an occasional bath and regular light combing are desirable to avoid excessive shedding.

Siamese

The most familiar short-haired breed throughout the world is the Siamese. These cats are easily recognized by their distinct color pattern, the result of a genetic mutation causing pale body hair and dark extremities (muzzle, ears, legs and tail). The Siamese gene is temperature sensitive, creating darker extremities, and is part of the "albino" series of alleles, which progressively diminishes the amount of pigment in the hair. Also included in this series are the Burmese, "light-phase Burmese (Tonkinese), blue-eyed albino and pink-eyed albino cats.

The Siamese gene and pattern is well known to breeders of other animal species and referred to as the "Himalayan" pattern. In cats it is also known as the "colorpoint" or "point-restricted" pattern. Because the first cats to be recognized with this coloring came from Siam, now Thailand, the color mutation has long been associated with the Siamese breed, even though the true origin of the gene is not known. Blue eye color, also characteristic of Siamese, is linked to this major color gene and may be intensified through selective breed-

ing to the deep vivid brilliance seen in showquality Siamese cats.

The cats known today as "Siamese" represent only one of several early varieties of cats native to Thailand that have been well documented in the oldest known book devoted to cats. The manuscripts called The Cat-Book Poems are housed in the Thai National Library in Bangkok and were saved from the ancient Siamese city of Ayudha, founded in 1350 and burned by invaders in 1767. This remarkable graphic record of early cats was brought to the attention of the western world in the 1970s by Daphne Negus. Descriptions and illustrations clearly depict pointed cats with very pale coats and minimal dark coloring on the extremities. It is interesting to note the slim body and legs, along with large ears and a sharply tapered muzzle. There is evidence that the pointed cats were especially valued and kept by royalty, ensuring their good care and perpetuation.46 Seal-pointed cats living within the high walls of the Royal Palace were protected from crossmating and remained genetically fairly pure.

A Himalayan

Photograph by

s dense, soft

regular light

oid excessive

naired breed

amese. These

their distinct

enetic muta-

ınd dark ex-

nd tail). The

ensitive, cres part of the lich progresof pigment in series are the lese (Tonkik-eyed albino

tern is well imal species

alayan[°] patas the "col-

pattern. Beognized with i, now Thaiing been assoeven though not known. istic of Siador gene and ective breed-

ard)

Another mention of the Siamese pattern in early literature, by naturalist Simon Pallas, described 3 cats in central Russia in 1793 with a light chestnut brown body and black ears, paws and tail. Because the Siamese pattern depends on temperature, point development and color shading vary with the climate, as well as the cat's age.

The cooler the environment, the darker the color. The Russian cats may have represented a separate mutation or may be related to the cats of Siam. Pallas described their head as "longer toward the nose than in the common cat," which seems similar to the head on those from ancient Siam.

The earliest known Siamese cats imported to the western world were a pair of seal points from Bangkok in 1884 presented to the sister of the British consul general in Thailand. She exhibited "Pho" and "Mia" in 1885 at the annual Crystal Palace Cat Show. The Siamese were reported to be in England at least 14 years earlier, however, as they were evidently present at the first Crystal Palace Cat Show of 1871. Described then as "an unnatural, nightmare kind of cat," they caused a sensation. Much controversial comment accompanied the cats brought from Siam because of their body and head type, kinked tails and crossed eyes.

The first British show standard, which originated in 1892, and rewritten in 1902 on formation of the Siamese Cat Club, called for a "striking-looking cat of medium size, if weighty, not showing bulk, as this would detract from the admired svelte appearance. In type, in every particular the reverse of the ideal short-haired domestic cat . . . also distinguished by a kink in the tail." It was not until many years later that the kink was to be considered a fault, along

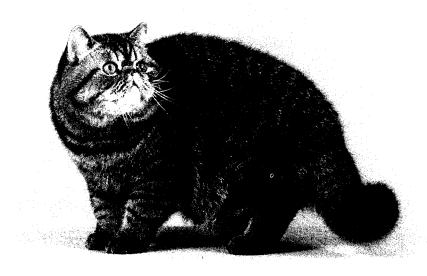


Figure 28. An Exotic Shorthair. (Photograph by Jane Howard)

with crossed eyes. Generally the features considered desirable in show-quality Siamese in 1902 have been achieved in today's cats.

In the early 1900s the breed in England consisted of not only the "royal" or sealpoint color, but included some other cats from Siam described as "chocolates." The latter consisted of several distinct genetic types: solid brown cats (known today as Havana Browns, as well as the Burmese cats), and warm brown cats with dark points, most likely the Tonkinese of today. Reports from early shows indicate that chocolatepoint Siamese also existed and were bred soon after the first cats from Siam were imported and that at least one blue point was registered before 1900. In that solid blue cats were illustrated in The Cat-Book Poems manuscripts, it is not surprising that some seal-point Siamese entering England carried the recessive gene for the dilute factor, which changes seal to blue and chocolate to lilac. In the book, The Siamese Cat, published in 1908, author Henry Milner Rideout wrote that "the King (of Siam) has officially declared that the Blue Cats are royal."34

The first known American cat fancier to import and breed Siamese, Mrs. Clinton Locke, obtained a pair from Lady Marcus Beresford in England, whose original cats were brought from the Royal Palace in Siam. This pair, a seal-point male and chocolate-point female, produced 2 cats that were big winners at the 1902 show in Chicago.34,37 Blue points were recognized by CFA in 1932, but chocolate points did not receive full recognition until 1950 in England and 1951 in America. Though lilac points are inevitable when the dilute factor is combined with the chocolate color, it was not until the mid 1950s in America and 1960 in England that this dilute color was accepted.46

Many more point colors have been introduced through crossbreeding with Siamese; however, CFA and determined traditional breeders consider only the classic 4 colors originating from ancient Siam to be true Siamese. Pointed cats of other colors are classified by CFA as the Colorpoint Shorthair breed. Most CFA breeders are of the opinion that restricting hybridization in Siamese is necessary to maintain the excellent unblem-

ished body color and even point color. They believe that certain tabby patterns in the cat's genotype tend to be reflected in ghost markings on the body.

Since the first British show standard of 1902 described a "marten" face and a head rather long and pointed," the tapering wedge-shaped head form has been the goal of Siamese breeders. Eyes are almond shaped and slanted toward the nose. The profile is a long straight line from the top of the head to the tip of the nose. The ears are strikingly large, continuing the lines of the wedge. The body is medium sized and a combination of firm muscularity and fine boning, resulting in a substantial yet very lithe, svelte cat (Fig 29). The torso is tubular, with the shoulders and hips continuing the sleek graceful lines emphasized by the close-lying coat. Long slim legs and a long thin tail complement the overall elegant yet strong appearance.

One of the best-known and most endearing personality traits of Siamese is their distinct noisy voice and ability to communi-

Figure 29. The Siamese. (Photograph by Jane Howard)



color. They terns in the ted in ghost

standard of and a head he tapering een the goal are almond e nose. The m the top of The ears are lines of the sized and a ity and fine tial yet very orso is tubus continuing sized by the 3 and a long d elegant yet

nost endeare is their diso communi-

Jane Howard)



cate. Siamese are intelligent, precocious and highly social with people and other animals. They love to play with toys and leap to high surfaces, making ideal pets for people who appreciate their special devotion and active companionship. Siamese females have large litters and few reproductive problems. They are the most popular short-haired breed, based on CFA registration numbers (Table 2), and often live to a very old age.

Oriental Shorthair

Most of the cats in southeast Asia today are not pointed cats. The Cat-Book Poems manuscripts, dating from 1350 to 1767, in Siam, described and illustrated a variety of cats, including some with coats of jet black, black and white bi-color, solid brown, blue/gray and shaded silver, as well as point-restricted coloring. The original cats imported to England from Thailand were often of solid color. It was not until the Siamese Cat Club in the late 1920s issued a statement excluding all but blue-eyed pointed cats from breeding and showing that other Thai cats began to decline in favor. 46

After World War II Baroness von Ulman, working with 2 other British breeders, began efforts to breed a solid brown cat with the chocolate brown gene carried by the Siamese, rather than the sable of the Burmese. The resulting cats of Siamese type and solid chestnut color were recognized in 1958 as a breed called the Chestnut Brown Foreign

Shorthair. Around 1962 the British geneticist, Patricia Turner, began her long-term breeding program to produce blue-eyed solid white cats of Siamese type. These cats were eventually accepted in England in 1977 as a separate breed, known as "Foreign Whites." The solid white color produced by the dominant white gene "masks" the underlying genetic color of cats. Therefore, in the course of Ms. Turner's breeding program, which used Siamese cats as well as non-Siamese cats, there were many kittens born of solid or patterned color all over.

The first British tabbies of foreign type to attract attention were spotted and received acceptance as the Oriental Tabby breed in 1978. Numerous solid and patterned colors have since been produced over the years, some with brilliant contrast and others of pastel subtlety. The sleek tight coat of the Oriental Shorthair seems to accentuate the detail of pattern and beauty of every color tone (Fig 30).

American cat fanciers were captivated by the first Oriental Shorthairs in England and began importing them in the early 1970s. Several breeding programs also were underway in America and Europe during the early 1960s and 1970s. CFA Championship status was granted to the Oriental Shorthair in 1977, dividing the breed into 5 color groups: solid, shaded, smoke, tabby and parti-color. All have green eyes, except the whites, which may have blue or green

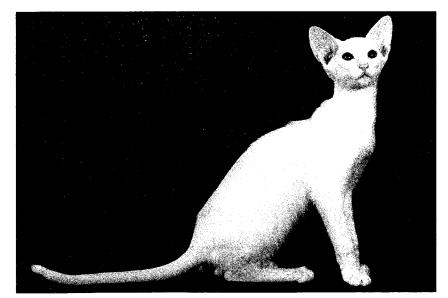


Figure 30. The Oriental Shorthair. (Photograph by Jane Howard)

eyes. Because Siamese and Colorpoint Shorthairs may be used as outcrosses, the health and vigor of the breed reflects its huge hybrid gene pool.

The Siamese or colorpoint gene is recessive to the full color gene, making it inevitable that Oriental Shorthairs will produce pointed cats. CFA rules state that those meeting the Colorpoint standard may be shown in Colorpoint Shorthair classes; however, the Siamese breed does not allow these "variants." In other associations and in Europe, the pointed variants are considered Siamese. The Oriental Shorthair standard is almost identical to that of the Siamese, except for color.

Like their Siamese relatives, Oriental Shorthairs are active and extremely outgoing toward people and other animals. Some owners believe they are generally a little less talkative than Siamese and are more inclined to use body language.

Colorpoint Shorthair

The Colorpoint Shorthair breed looks identical to the Siamese, except for color. The breed was the result of the early hybrid experiments by cat fanciers in Britain, who crossed Siamese with red domestic shorthairs and Abyssinians in an effort to develop more than the 4 traditional Siamese colors. Two red points were shown at the Siamese Cat Club show in England in 1934; however, the first red points (then called "orange points") and seal tortie points had poor Siamese body and head type. Breeding programs for red points were established in America in 1947 and again in England in 1948, but again the cats lacked the desired refined body type, which might have been achieved had there been more intense linebreeding to Siamese. Siamese breeders were biased against them for many years, and it was not until 1966 that they were finally accepted (as Siamese) by the British GCCF (Governing Council of the Cat Fancy).46

CFA has continued to refuse acceptance to these hybrids as Siamese but did recognize the Colorpoint Shorthair as a separate breed in 1964. Since then, many other colors have been developed and accepted, including blue-cream points, chocolate-tortic points and lilac-cream points. Most other North American associations, as well as

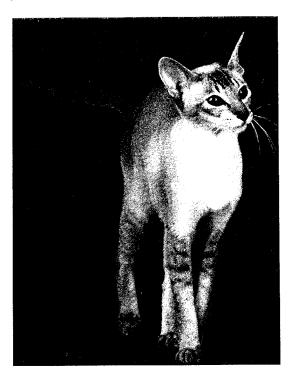
FIFe in Europe, consider these cats as Siamese.

The 10 "lynx point" colors now included by CFA were created by introduction of Tabby Shorthair outcrosses in the early 1900s in England and in the 1960s in America and England. These cats with tabby markings restricted to the point areas are called "tabby-point Siamese" in England and in other associations.

The CFA standard for Colorpoints is almost the same as that for Siamese, except for the color descriptions. Siamese may be used for outcross breedings. It has taken a great deal of time and hard work, but the cat fancy finally has taken note of the exceptional quality and beauty in these cats. A seal lynx-point Colorpoint Shorthair achieved a top CFA National Award in 1982, marking modern history for this breed (Fig 31).

Acceptance by the general public was immediate, as the personality of Colorpoints includes the vocal audacity and demanding, intelligent nature of Siamese cats, along with a great variety of striking point colors.

Figure 31. A lynx-point Colorpoint Shorthair. (Photograph by Jane Howard)



ese cats as

ow included oduction of the early e 1960s in cats with point areas are" in En-

points is alnese, except
nese may be
has taken a
ork, but the
e of the exthese cats. A
Shorthair
l Award in
ry for this

blic was im-Colorpoints demanding, cats, along point colors.

orthair. (Photo-



The gene pool is huge and the breed is hardy.

Balinese, Javanese, Oriental Longhairs

Over the years long-haired kittens appeared occasionally in Siamese litters. Though the most likely reason for the occurrence of this recessive gene would be a throwback to non-Siamese cats somewhere in the ancestry, many breeders preferred to believe that long-haired Siamese were the result of a spontaneous mutation. In 1940, 2 breeders recognized the special beauty in a silken coat added to the elegant grace of the Siamese cat and began to purposely breed these long-haired cats. They chose the name "Balinese" because the flowing movement of these cats seemed similar to that of the dancers of Bali.

In the face of strong opposition and reluctance on the part of Siamese breeders to allow matings to top-quality cats, the early Balinese began with a heavier body type than that of the Siamese, and acceptance was difficult. Breeders continued to work for finer boning by breeding back to Siamese, while at the same time being careful to not sacrifice the long silky coat. In 1970 CFA granted Championship status to the breed, recognizing only the 4 colors accepted in the Siamese breed: seal point, chocolate point, blue point and lilac point. The breed standard is almost the same as that of the Siamese; however, Balinese appear to have softer lines and a less extreme body type because of the long coat. One of the distinct features of these cats is their plume-like tail (Fig 32).

Almost at the same time as the Balinese cats were becoming known, breeders were already working to develop other point colors through breedings to American Shorthairs. Long-haired kittens also were cropping up in matings of Colorpoint Shorthairs that had been developed through hybrid breeding with cats carrying the recessive gene for long hair. In 1986 CFA granted Championship status to these cats as the Javanese breed (Fig 33). In several other associations, however, they are considered Balinese.

It was inevitable that one day breeders would want Oriental Shorthairs in long coats to complete the series of Siamese-type breeds. In the late 1970s and 1980s breeders began crossing Balinese to Oriental Shorthairs, and the second generation produced long-haired Orientals (Fig 34). It is not easy to maintain good coat quality and yet keep the refined body type; however, with the cooperative attitude of today's Siamese and Oriental Shorthair breeders, matings to top-quality cats are helping this breed advance. These cats were accepted by CFA for registration as the Oriental Longhair breed in 1988 and are evaluated in the noncompetitive Miscellaneous class.

Havana Brown

All-brown cats were among the earliest cats to come into England from Siam (Thai-

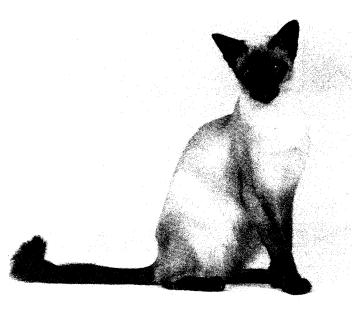


Figure 32. The Balinese. (Photograph by Jane Howard)

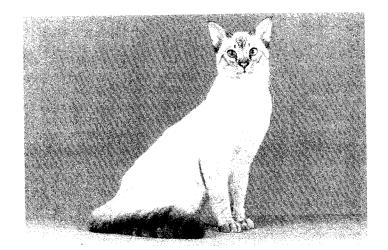


Figure 33. The Javanese. (Photograph by Jane Howard)

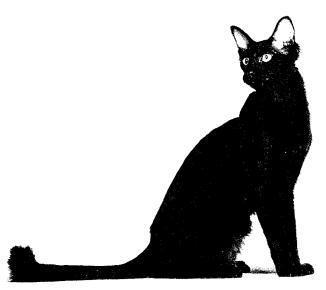


Figure 34. The Oriental Longhair. (Photograph by Richard Katris)

land) in the late 1800s. It is now assumed that the genetics of these cats were not all the same. Some would today be called Burmese, while others carried the brown gene of the Siamese chocolate-pointed cats. After the Siamese Cat Club ruled that only blue-eyed pointed cats should be bred and shown, all of the self-brown cats disappeared from the cat fancy.

Around the early 1950s breeders working independently and later together began a breeding program designed to recreate the self-chocolate brown short-haired cat. In 1954 the first kitten of the new color to be registered was born.² "Bronze Idol" resulted from a mating of a seal-point Siamese, carrying chocolate, to a solid black cat, also

carrying chocolate. (The black cat had been from a seal-point Siamese bred to a black.) This kitten became the foundation of the new Chestnut Brown Foreign breed in England, which was later renamed "Havana" after a rabbit breed of the same color. The breed as it exists today in England would be considered a Chestnut Oriental Shorthair by CFA classification, in that the head and body type are the same as in the Siamese.

The first Havanas in America were imported from England in the late 1950s. Breed recognition was given in 1959, with the word "Brown" added to the name. American breeders preferred to maintain the early moderate body and head type, rather than strive for a Siamese-like cat.

The Javanese.

The Oriental (Photograph d Katris)

at had been to a black.) ation of the reed in End "Havana" e color. The nd would be al Shorthair ne head and Siamese.

ca were imlate 1950s. 1959, with the name. To maintain head type, ese-like cat.

The breed gradually evolved in America into a form totally distinct from that of any other breed. In 1964 full CFA Championship status was achieved by the Havana Brown.

The North American Havana Brown head is particularly unique in the world of cats. The muzzle has been described by breeders as resembling a protrusion on the face rather than an extension of the head. There is a pronounced break on both sides behind the whisker pads. When viewed in profile, there is a distinct stop at the eyes, and the end of the muzzle appears almost square (Fig 35). Large ears are round tipped and tilted forward. Brilliant green oval eyes add to the penetrating alertness of the Havana Brown. Graceful and moderately lithe in body type, Havanas are firm and muscular, and substantial in every way but never coarse or cobby. They stand high on long, straight legs and have a medium-long slender tail. Females have slim, dainty legs. The rich warm mahogany brown color and smooth, lustrous coat give this cat its true glory.

The Havana Brown temperament is even, quiet and gentle. They are demanding

Figure 35. The Havana Brown. (Photograph by Jane Howard)



of attention from people, and have a soft voice and loud purr. Havanas are adaptable and able to play and amuse themselves, but they are happiest with feline companionship and love to curl up with several cats to enjoy mutual grooming. They are a hardy breed with no known genetic defects. Often called a feline connoisseur's cat, Havana Browns are still surprisingly rare and undiscovered by the general public.

Birman

The "Sacred Cat of Burma," as the Birman is often called, is a long-haired stocky cat with seal, chocolate, blue or lilac point-restricted color. Over the body there is a faint golden beige cast (the "golden mist") in all 4 colors. Distinctive pure white feet are important to the breed. Though the Birman's true origins are uncertain, the cats are forever linked to southeast Asia because of a famous legend that explains their coloring.

In the time of Buddha the ultimate goal of followers was to pray, work and be self-less in an effort to reach the state of being beyond self and senses, that of Nirvana. If an individual failed in this striving, his soul would be reincarnated in that of a lower being. Many believed human souls were residing in the bodies of cats, which led to a great love and care of cats throughout ancient Asia and the keeping of cats by Buddhist monks.

The legend of Birman cats evolved before the birth of Christ. One hundred pure white cats with yellow eyes lived with monks as guardians of the Temple, Lao-Tsun, built in Burma to honor the goddess Tsun-Kyan-Kse who ruled over the transmutation of souls. One day raiders attacked this temple and the head monk, Mun-Ha, was killed. His loyal cat, Sinh, placed his paws on his master's body and turned to face the golden image of the goddess. Instantly the cat's coat turned from white to golden and his eyes became sapphire blue like hers. Only his paws remained pure white where they touched the priest as a symbol of purity. All of the other temple cats developed the same coloring. After 7 days of mourning Sinh died, taking the soul of his master to Paradise. Since that time all of the remaining golden cats with white paws were considered sacred and custodians of the souls of the monks. Only a few very worthy people were permitted to possess one of them.²⁶

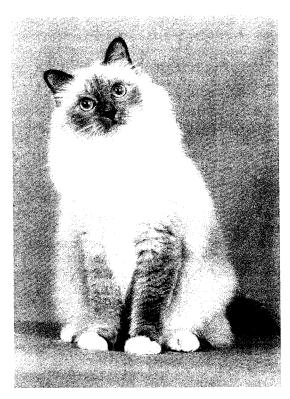
The Birman was first recognized as a natural breed by the French in 1925. Their modern history started when a pair was sent or smuggled to 2 men living in France from the High Priest of the Lao-Tsun Temple. The 2 men had travelled to Burma and helped protect the Buddhist monks from Brahmin aggression. They reported seeing the Birman cats and learning of the legend. The 2 cats were sent in 1919 as a gesture of gratitude, but on the sea journey the male died. The female fortunately was pregnant and founded the breed in France, which later flourished throughout Europe.

After the devastation of World War II only 2 Birmans were known to have survived in Europe, "Orloff" and "Xenia de Kaabaa," and work to reestablish the breed had to begin again. 26 The first cats to enter North America came from France in 1959. Many more were imported from France and England, including 2 kittens born to a pair directly obtained from a temple in Cambodia. 6 Through collaboration with French breeders, Birmans became well established in America and were registered with CFA by 1966. Championship status in CFA was granted in 1967.

The coat of the Birman is very different from that of other long-haired cats. It is silky and medium long, with a texture that does not mat. The coat is wavy on the belly. Birmans are strongly built, elongated and stocky, with heavy legs. The head is of medium length and the nose has a Roman down-turned shape in profile. The ears are of medium size and set as much on the side of the head as on top (Fig 36). The eyes are placed wide apart, and almost rounded and deep blue.

Only the 4 point colors (seal, chocolate, blue and lilac) are accepted by CFA; however, in some associations additional colors are allowed. The body should have the "golden mist" beige cast; much attention is given to the 4 white "gloves." The front paws are white, ending in an even line across the paw at the second or third joints. Back paws have white "gloves" and "laces" extending up the back of the hock, ideally ending in an inverted V. Faultlessly gloved cats are the exception, and the Birman

Figure 36. The Birman. (Photograph by Jane Howard)



standard emphasizes that the cat is to be judged as a whole. Nevertheless, lack of white on any paw or white in the point areas is cause for disqualification. The white spotting gene responsible for the very restricted degree of white on Birmans is generally thought to be a recessive gene and not part of the more common dominant piebald spotting gene. 16

Birmans are gentle, well-mannered cats, yet they have boundless energy and like to seek attention by using their quiet voices. They blend easily into an active household, adjust well to cats of other breeds and enjoy endless lap sitting.

Burmese

The story of the Burmese breed begins with one female cat, "Wong Mau," who was imported to America from Burma in 1930. Dr. Joseph C. Thompson, a psychiatrist from San Francisco, served as ship's doctor in the US Navy and developed a keen interest in the Far East. He had spent time as a Buddhist monk in a monastery in Tibet and

ne Howard)



at is to be ss, lack of the point ation. The or the very 3irmans is e gene and ninant pie-

nered cats, and like to liet voices. household, and enjoy

eed begins," who was a in 1930, sychiatrist ip's doctor keen intert time as a Tibet and

had become familiar with the self-brown short-haired cats seen throughout southeast Asia for centuries. These cats, known as "copper" cats, were described and illustrated in the ancient Thai manuscripts. *The Cat-Book Poems*, preserved from the city of Ayudha (1350-1767). Dr. Thompson, who also bred Siamese cats, acquired Wong Mau and began a breeding program to determine her genetic makeup with the intention of establishing a new breed in America resembling the Asian copper cats. 30,43

The initial matings of Wong Mau, which produced the foundation pedigree for the breed and determined the genetic principle of the Burmese cat, were outlined in an article published in the April, 1943, issue of the Journal of Heredity. The article confirmed Dr. Thompson's belief that Wong Mau represented a hybrid cat containing one gene for Burmese (solid brown) and one gene for Siamese (point restricted). This he believed gave her what he called the lighter shade of Burmese. The article reported that, by mating Wong Mau to a seal-point Siamese, "Tai Mau," and inbreeding with the hybrid offspring, it had been possible to produce 3 generations of true-breeding purebred" Burmese with a "dark color phase."36 These and other later breeding experiments proved the existence of the Burmese gene (cb) and established that all Burmese cats are homozygous for a color gene, which is a member of the albino series of alleles and causes solid black to appear dark sable brown. Today Wong Mau as a Burmese-Siamese hybrid with intermediate color would be considered a Tonkinese.

CFA accepted the Burmese for registration in 1936 with a Siamese body and head conformation. During the 1930s and 1940s other American breeders working with Dr. Thompson imported a few more cats from Burma to enlarge the gene pool, but outcrossing to Siamese continued. The darkphase true-breeding and the light-phase intermediate brown-pointed cats (Tonkinese) were considered Burmese, causing a great deal of confusion. In addition, the brilliant gold eye color of the early imports was quickly diminished to a chartreuse green. CFA finally decided to suspend registration of the breed altogether in 1947.

Around this time the first Burmese were exported from America to Europe and the

breed was recognized by the GCCF in Britian in 1952. They are now popular in all parts of Europe, Scandinavia, Australia and New Zealand. In addition to the original sable brown, other colors have been introduced. The Burmese conformation in countries to which they were exported remains moderately "foreign" or slim; however, this is no longer the case in America.

Dr. Rosemonde Peltz, a breeder of Burmese and authority on many cat breeds, described in the 1978 CFA Yearbook the tremendous blow American Burmese breeders suffered when the breed was suspended by CFA. In her comprehensive history of the breed, she said, "The most striking aspect of the whole disheartening situation is that they continued to breed... to present an excellent Burmese of the best type possible."

After a determined effort, CFA registration was reinstated in 1953, based on a new color standard allowing only a "solid coat without markings." The body type was described as "medium, dainty, long." By 1957 the CFA standard was again changed, calling for a body "midway between Domestic Shorthair and Siamese." The key words, "somewhat compact," entered the standard in 1959, and there has been no major change in wording since then. The concept of the American Burmese gradually became that of the medium-sized cat with "substantial bone structure, good muscular development and surprising weight for its size." Later the word "somewhat" was dropped to further emphasize a compact body type.

The head is rounded, with a broad, short muzzle showing a nose break. Large rounded expressive eyes should be brilliant gold. A special sweet expression gives the Burmese a distinctive appearance (Fig 37). The early Burmese cats of the 1930s had heads described as "appleheads," which were "dome shaped" when seen from the front, between the ears. These cats were also considered "chunky" in body type. During the late 1950s breeders started to bring this stocky image back and to avoid the dainty or svelte Siamese appearance.

By the mid-1970s some breeders began selecting for a more extreme shortening of the nose to emphasize the round head called for in the standard. The resulting skull changes eventually lead to a head type that

is believed to be associated with cranial facial lethal deformities in newborn kittens.²¹ In an effort to eliminate defects in the breed, the concept of the desired Burmese look is again being challenged as breeders work on solutions. One important aspect of the breed, which was never changed, is its gleaming, very close-lying coat with a fine, glossy, satin-like texture.

As a result of the early years of Siamese hybridization, 2 recessive genetic factors remained in some Burmese lines. The mutant chocolate gene produces, in the Burmese breed, "champagne" coloring, while the dilute factor affects the sable and champagne colors to create blue and platinum, respectively. Though these colors began to attract interest from some breeders, they were strongly opposed by others who had worked for years to identify the Burmese breed solely with the solid dark sable brown coloring of the Asian copper cats. In 1980 CFA decided to identify a separate breed, called the Malayan, to accommodate the 3 additional colors. Finally, in keeping with the changing history of this breed, Malayan cats were incorporated into the Burmese breed in 1984, and are currently judged in a separate Dilute division.

It has been said that Burmese remain kittens all their lives. They are notoriously intelligent and fun loving, often surprising

Figure 37. The Burmese. (Photograph by Jane Howard)



people with inventive games. A characteristic movement associated with the breed is a dance with the hind legs called the "Burmese shuffle." Though their voice is relatively quiet, they use a variety of noises to communicate. These cats have a strong need to be close to their owners and are cuddly lap sitters. Burmese females tend to be especially clever and bossy, and often take the lead in a household with other breeds. Altered males are usually mellow and loving.

Tonkinese

Hybrid offspring from Siamese cats bred to Burmese are the basis of the Tonkinese breed. The Burmese (cb) gene is only partially dominant to the Siamese (cs) gene. Combining the 2 results in an intermediate blend of coloring in the heterozygous cats, who have a dark-pointed pattern but deeper body color than Siamese. Matings of these Tonkinese cats produce a predictable average of 50% with hybrid Tonkinese coloring, 25% with homozygous Burmese coloring and 25% with homozygous Siamese pointrestricted coloring. The solid-colored and pointed offspring are called "variants" and can never be eliminated in this breed. Though today no further outcrossing is allowed to Siamese and Burmese, variant cats are valuable in breeding programs and make highly desirable pets.

The well-known foundation cat for the Burmese breed, "Wong Mau," would today be considered the first recognized Tonkinese to be imported to America. Most likely some of the brown cats described in England in the late 1800s as "chocolate Siamese" were also early Tonkinese. It can easily be presumed that Tonkinese hybrids lived in ancient southeast Asia as long ago as Siamese and Burmese "copper" cats existed, as they undoubtedly interbred. The brown hybrids quickly lost favor in England during the early 1900s when only the "Royal" seal-point cats with light body color and blue eyes could be shown.

Modern experiments in breeding Tonkinese began on the east coast in America and in Canada during the 1960s. Originally called "Golden Siamese," "Honey Siamese" and "Chocolate Siamese," by 1967 they were finally referred to as "Tonkanese" and had achieved acceptance by the Canadian

characterise breed is a the "Burmis relatively ses to comong need to cuddly lap to be espeen take the breeds. Aland loving.

se cats bred e Tonkinese is only pare (c⁸) gene. ntermediate zygous cats, 1 but deeper igs of these ctable averse coloring, se coloring mese pointcolored and riants" and this breed. ossing is alvariant cats grams and

cat for the would today ized Tonki. Most likely ibed in Encoclate Sianese. It can nese hybrids as long ago er" cats exerbred. The in England nonly the it body color

ding Tonki-America and . Originally ey Siamese" 1967 they kanese" and e Canadian Cat Association (CCA). In 1971 North American breeders voted to call the breed "Tonkinese" and worked for acceptance by American registering associations. CFA finally allowed registration in 1978 and full Championship status in 1984.

In addition to the blended coloring from the 2 ancestor breeds, the Tonkinese breed presents an intermediate body and head type. These cats are neither long and lithe like the Siamese, nor compact and round like the Burmese. Medium conformation, as described throughout the Tonkinese breed standard, is not as easily defined and understood as extreme type. Achieving a consistent head and body type from such opposites has been very difficult for breeders. Muscular and surprisingly heavy, the Tonkinese is a moderately proportioned and balanced cat. The head is a modified wedge, with gently curved contours and a blunt muzzle. The ears are medium sized and set as much on the sides of the head as on top (Fig 38). The eyes are almond shaped, slanted along the cheekbones and set wide apart. The unusual aqua color is a definitive characteristic of the breed. The Tonkinese coat has a quality completely unlike the extremely sleek and satin-like textures of its ancestors. Described as "mink," it is medium short, close lying, fine, soft and silky, with a lustrous sheen, but it does not lie tightly against the body. There are 5 accepted coat colors: natural mink with dark brown points and medium brown body;

champagne mink with medium brown points; blue mink; platinum mink; and honey mink (derived from the light brown or cinnamon gene).

The Tonkinese personality seems to be a "happy medium," according to the enthusiastic cat fanciers who enjoy these cats in their homes. Tonkinese are active cats, outgoing with people and other animals, even tempered and only slightly vocal. They are charming and fun, yet gentle and affectionate, easy to groom and hardy.

Bombay

The challenge of creating a new breed is the ultimate dream of some cat fanciers. Nikki Horner, from Louisville, Kentucky, started breeding cats at the age of 16. After winning top national awards with several breeds and producing numerous grand champions, she became one of the rare individuals who actually achieved this aspiration. The Bombay breed represents her desire to produce a copper-eyed black short-haired cat with Burmese conformation. The image of a domestic cat with the exotic appearance of a "mini-panther" led to her choice of the breed's name, inspired by the black leopard of India.

Her first attempts with crossbreedings of black domestic shorthairs to Burmese in 1958 were unsuccessful, producing offspring that were, in her words, "big and horsey." The coats were too long and the

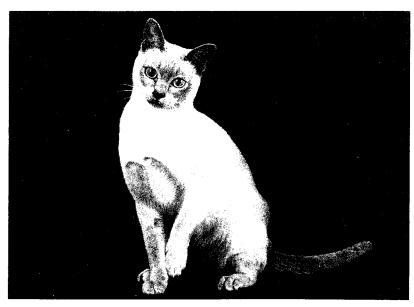


Figure 38. The Tonkinese. (Photograph by Jane Howard)

eye color poor. Eventually she found the right combination of cats, starting with a black American Shorthair male with deep copper eye color and a Grand Champion sable Burmese female. Through a long process of inbreeding and outcrossing and careful selection, she was able to consistently produce a black cat unlike any other. Eighteen years after the original attempted breeding and following a great deal of effort to promote acceptance of the breed, the Bombay achieved CFA Championship status in 1976. Outcrossing to Black American Shorthairs and sable Burmese is still allowed.

The Bombay and Burmese standards are almost identical, except for color. Because of a few subtle variations, however, many judges and breeders interpret the description of type to be different. Whereas the Burmese body is "presenting a compact appearance," the Bombay body is to be "of medium length," "neither compact nor rangy." Generally, Bombays are a little higher on their legs and have slightly longer body and tail proportions. The head is rounded with a short muzzle, but there should not be a "pugged" or "snubbed" look. A coat that is black to the roots is extremely important, along with black nose leather and paw pads (Fig 39). Deep gold to copper eye color is imperative for a top example of the breed.

Bombays are bold and outgoing, and make intelligent, affectionate companions. They generally combine the easy-going temperament of the American Shorthair and the inventive, more talkative character of the Burmese.

Korat

As one of the earliest known breeds in the world, the Korat is also probably the purest. Even today the breed is very similar in appearance to its native ancestors which were known to have lived wild in the jungles of the Malay Peninsula. All Korats trace their pedigrees to Thailand. These silver-blue short-haired cats with luminous green eyes have been cherished and rare in their native land for centuries, where they are known as the "Si-Sawat." ("Si" is the word for color and "sawat" is a wild fruit plant with a silver blue seed.)

Figure 39. The Bombay. (Photograph by Jane Howard)



Korats were described and pictured in *The Cat-Book Poems* from the ancient city of Ayudha (1350-1767), and have been the subject of many delightful stories and myths. Their shimmering silver color signifies wealth to the Thais and for hundreds of years Korats have been considered the symbol of good fortune. The Thai people describe Korat eyes as the color of young rice, associating the cats with good crops. The gift of a pair of Si-Sawat to a new bride is said to ensure a happy marriage and home. In early Thailand they were never sold but instead were offered as special expressions of honor or esteem.

Mrs. Jean Johnson of Oregon, who had lived with her husband in Bangkok for 6 years, travelled extensively in Thailand searching for the silver blue cats in the late 1950s and reported seeing only 5 or 6. They were not to be found on the streets and none were for sale. All those who possessed these cats were members of the Thai government, the Thai nobility or representatives of foreign governments. In June, 1959, a pair of Korats was sent to her as a gift from Thailand. "Nara" and "Darra," littermates, were the first Korats in America. To avoid close inbreeding, Mrs. Johnson

lane Howard)



pictured in ancient city ve been the tories and color signinundreds of ed the sympeople deyoung rice, crops. The ew bride is and home. ver sold but expressions

n, who had gkok for 6
1 Thailand
2 in the late
3 or 6. They
3 treets and
4 possessed
5 Thai govrepresentaJune, 1959,
6 as a gift
"Darra,"
7 in Amer7 in Johnson

crossbred these cats for one generation to Siamese she had brought back from Thailand, carefully eliminating any progeny with Siamese characteristics from future breedings.¹⁹

Throughout the 1960s more cats were acquired from Thailand by the growing circle of Korat fanciers. Daphne Negus, an important pioneer in the breed, journeyed to Thailand to import 9 Korats as this number is believed by the Thai people to bring good luck. In 1965 the Korat Cat Fanciers' Association was established to protect and develop the breed, as well as to preserve its heritage. A standard was written based on the appearance of the original native cats, and the Korats were accepted by CFA for Championship status in 1966. Except for the early outcross matings, this breed has been as carefully guarded and exclusive as any in the cat fancy. Importing from Thailand is still allowed and Korats are now accepted by registering associations all over the world.

Like the ancient Korats, the breed today is muscular and semi-cobby with a body that has the "feeling of hard-coiled spring power" and a back carried in a curve. The head is unique, with the curving lines of the eyebrow ridges and the sides of the face forming a heart shape. The Korat's well-rounded eyes are large and brilliant, seeming oversized for the face (Fig 40). The ears are large and set high, giving an alert expression. The glossy, close-lying coat is

heavily tipped with silver, resulting in an intense sheen often described as a halo effect and best appreciated in the sunlight.

Korats have a sweet, gentle disposition and are said to be highly protective of their owners and children. They communicate with people using their quiet voices, and do not like loud noises. Korats move with cautious dignity and prefer to remain close to their owners and familiar places.

Japanese Bobtail

Through close examination of many examples of early Japanese artwork, it is apparent that cats with short pom-pom tails must have been held in high esteem for centuries in the Far East. Domestic cats were introduced to Japan from China and Korea in the early 6th century. It was customary for every Buddhist temple to keep at least one pair of cats to protect the sacred documents from rodents. Numerous woodcut prints and painted screens picture cats with ladies of luxury and include them in Imperial family settings. In Japan, cats were obviously considered creatures of great beauty, elegant grace and delight. By contrast, early Chinese art emphasizes almost exclusively the hunting ability, agility and strength of the $cat.^{20}$

Japanese folklore is rich with tales in which cats are often associated with good fortune or are transformed from women. The name for the cat, "neko," is sometimes given to geisha girls because of their ability



Figure 40. The Korat. (Photograph by Jane Howard)

to charm. A popular story includes the saying that cats with long tails take human form and bewitch people. This is one possible accounting for the presence of so many cats with the unique short kinked tail seen for centuries throughout Japan and other parts of the Orient. Another famous legend explaining why the cats of Japan so often have bobbed tails tells of a cat resting near the hearth whose tail was set afire by a spark. As the frightened cat ran through the streets of the Imperial City, all the houses turned to flames. By morning the city was destroyed, with only ashes remaining. The Emperor was so angry he decreed that the tails of all cats be cut short to avoid a similar disaster in the future. 15

Perhaps the best-known of all legendary Japanese cats is "Maneki-Neko," a small attractive calico female, who was said to have beckoned and lured passersby and was associated with good fortune. She is represented with her paw raised in a welcoming way and was painted on the facade of the famous Gotokuji Temple near Tokyo, where hundreds of replicas remain. Maneki-Neko figurines, both antique and modern, may be seen in many Japanese stores and restaurants as a symbolic attraction to customers. The pom-pom tail is evident on the back of the statue.

The original cats entering Japan from China and Korea were solid black, pure white, black and white bi-colors, and occasionally black, red and white tri-colors. Tricolored calico cats, called "mi-ke," were considered a symbol of good luck, especially by Japanese sailors who believed these cats could foresee storms. Because of superstition and the Japanese belief in the connection between men and all living things, cats were ensured a reverent position for many years. Finally, between the 13th and 15th centuries, the Japanese silk industry grew in importance. When it became threatened by the mice attracted to the silkworms, the government decided that cats could no longer be pampered house pets. They were ordered to be set free to save the silk industry and grain harvests.

Appreciation for the beauty and personality of cats has never faded in Japan, and in modern times many of the pedigreed breeds have been imported. Among the common street cats seen today in Japan,

most have bob tails. The tail structure is unique to each cat, with the bone often twisted like an "S" or even a corkscrew.

Extensive studies by geneticist Dr. Neil Todd proved that the gene responsible is recessive and completely different from the dominant Manx tailless gene. It is not a lethal factor and causes no deformities. Though occasionally there are bob tails with short straight tails, there are never full-length tails.

An American cat fancier living in Japan for almost 20 years admired the special beauty and charm of the Japanese Bobtails, and developed them as a breed. Judy Crawford began breeding cats of the colors that would produce the mi-ke tri-colored off-spring shortly after World War II. One day in 1967, Elizabeth Freret, a cat breeder in America, was shown a Japanese Bobtail being boarded at a Maryland pet store for a family who had recently returned from Japan. She was fascinated to hear of the many street cats in Japan with short tails just like the one she had seen. A year later she was in contact with Miss Crawford and by August, 1968, 3 Bobtails arrived in America. After a standard was developed, the cats were presented to the CFA Board, which accepted them for registration in 1969. Championship status followed in 1976 and there has since been a continuous flow of Bobtail imports from Japan into North America.

The body standard for Bobtails is in keeping with the cat's original background as an elegant aristocratic housepet. Though they are muscular, the impression of the Japanese Bobtail is one of lean refined style, rather than massive structure. The American-bred Japanese Bobtails have developed away from the body type seen on the streets of Japan today. The hind legs are longer than the forelegs, but angled so that the back remains level when the cat is relaxed (Fig 41). The tail must be clearly visible and should not extend more than 3 inches. It may be rigid or flexible; however, because of the curves, a characteristic fluffy pom-pom effect is apparent.

The head shape forms an almost perfect equilateral triangle, with gentle curving lines, high cheekbones and a fairly broad muzzle. Large oval eyes are set at a protructure is sone often screw.

st Dr. Neil nsible is refrom the is not a leeformities. tails with never full-

g in Japan the special :e Bobtails, ludy Crawcolors that olored off-I. One day breeder in se Bobtail store for a rned from ear of the short tails year later awford and arrived in developed, FA Board, stration in ollowed in continuous Japan into

tails is in ackground et. Though ion of the fined style, he Amerideveloped the streets are longer o that the is relaxed visible and inches. It because of pom-pom

ost perfect le curving airly broad at a pronounced slant when viewed in profile. The large ears are upright, set wide apart on the head and tilted forward.

Bi-colors and tri-colors, along with solid blacks, reds, whites and tortoiseshells, are the most predominant colors. Other Japanese Bobtail colors include "patterned" categories denoting any variety of tabby striping or spotting with or without white. The dilute blues and creams are allowed in solid color or in the patterned categories. Preference is given to bold, dramatic markings and rich vivid color. The Bobtail coat is medium short, soft and silky, lying comfortably on the body without a noticeable undercoat.

Japanese Bobtails are ideal family pets with an alert, endearing personality. They are active in a gentle way and not overly demanding of attention. Their curiosity, ability to adjust to other animals and children, and quiet chirping voices contribute to the distinct Bobtail character.

New Breeds

Thirty-one breeds are currently recognized by the Cat Fanciers' Association for full Championship status. The Burmese breed is subdivided into 2 divisions, and the Persian breed is subdivided into 7 divisions. The breeds now accepted for registration only are the American Curl, Norwegian

Forest Cat, Oriental Longhair and Turkish Van. These cats may be exhibited in the noncompetitive Miscellaneous classes. According to the CFA "Rules Governing Acceptance and Advancement of New Breeds and Colors: 1979," at least 5 years are needed after registration is established, along with other requirements that include a proposed standard, to be approved for recognition as a Provisional breed. Finally, after further evaluation and show requirements have been met, and with agreement among the breeders on the standard and acceptable colors, the breed may be presented to the CFA Board of Directors for Championship status consideration.

CFA is acknowledged to be one of the most rigorous and careful of all cat registry organizations in the world regarding approval of new breeds. CFA breeders and the elected members of the Board of Directors generally believe it is important to the future integrity of the cat fancy to determine whether a new breed will truly be an asset both in health and beauty before registration is allowed. Once development of a breed has commenced and many people have invested time and money, rejection becomes more difficult. It takes some preliminary work to present and evaluate the potential of a new breed before registration. Several factors are considered by CFA

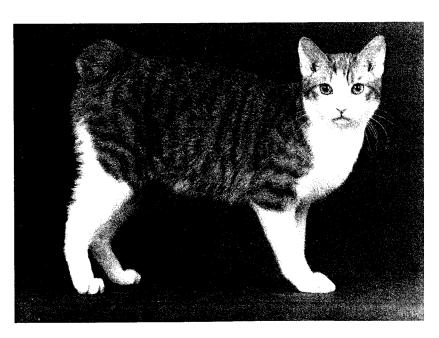


Figure 41. The Japanese Bobtail. (Photograph by Jane Howard)

Board Members before recognition of a new breed. These include:

- Information on genetic makeup, number of breeds or characteristics combined in the development of hybrids and predictable consistency in offspring produced.
- History and background of the cats in their country of origin, and/or genetic information regarding a spontaneous mutation.
- Possible overlap in characteristics that might threaten the distinctive qualities already associated with existing breeds.
- Health status and potential for inherited genetic abnormalities, temperament and general acceptability to the public as desirable pets.

With the increasing popularity of cats as pets in recent years, many new breeds have been developed. Some remain the whim of an individual and have not been able to meet CFA requirements of 10 breeders working with the breed for registration application. Some have not attempted CFA approval, while others have applied and were rejected. Following is a list of some breeds accepted by at least one association other than CFA:

American Bobtail: Originated from an initial mating of a mixed-breed short-tailed male to a Siamese female about 20 years ago. Subsequent matings indicate the dominant Manx gene is responsible for tails of various lengths. Introduction of the long-hair gene with Himalayan breedings, and more recently with Maine Coons, has been allowed.

Burmilla: This breed is the result of a planned mating of a British Chinchilla Longhair (Persian) male to a Burmese female in 1982, producing shaded silver shorthairs of Burmese type (British standard). The Burmilla has been accepted as a provisional breed by the Cat Association of Britain

Bengal: This breed is a hybridization of domestic cats with the native Asian Leopard Cat (a small spotted wild cat of high pattern contrast) to produce a spotted cat with wild appearance and domestic cat temperament.

California Spangled Cat: This breed has short hair, with a spotted pattern and "wild look." It was created by one man over a period of 15 years, using a variety of American domestic cat breeds and 2 imported cats from northern Africa and southeast Asia.

Longhair Scottish Fold: This breed evolved because of the recessive longhair gene in pedigreed Scottish Fold litters through use of approved outcross breeding. The pedigrees and appearance are the same as the parent breed, but the look is soft and round. The cats appear to have no ears at all, as they are folded down and covered with fur.

Nebelung: These blue semi-long-haired cats resulted from a chance mixed-breed cat mating. One breeder decided to replicate the appearance by introducing Russian Blue cats and breeding with mixed-breed long-haired cats of a type similar to that of the Russians.

Ragdoll: This breed was founded 25 years ago with the breeding of a long-haired mixed-breed female to a Birman male. They are very gentle and said to be limp when held. The cats are large and long-haired, with point-restricted color. Some are mitted and others have a bi-color pattern. The appearance is similar to that of Birmans. Controversy surrounds their origin.

Siberia: This is a long-haired cat originating in Russia. Some were imported to western Europe from Leningrad and also from Czechoslovakia. Following more than a year of complex arrangements, the first 3 Siberia kittens directly imported from Russia to America arrived on June 28, 1990. Another cat fancier travelled to Russia to bring back adult breeding Siberia cats from Leningrad and Moscow in July, 1990. Siberias are massive cats (males 17-26 lb), with a long mane, lustrous straight single coat without undercoat, and thick curls on the belly and breeches. Tabby colors are preferred.

Snowshoe: This short-haired cat was developed in the 1960s as a hybrid between the Siamese and American Shorthair bicolor (Fig 42). Breeders have experienced difficulty producing the desired white pattern with reasonable consistency.

Sphynx: This hairless cat resulted from a spontaneous mutation that has occurred

nis breed has ern and "wild an over a peety of Amerimported cats neast Asia.

This breed sive longhair Fold litters oss breeding. are the same ok is soft and we no ears at and covered

ni-long-haired xed-breed cat to replicate Russian Blue d-breed longo that of the

founded 25 a long-haired n male. They e limp when long-haired, ne are mitted tern. The ap-irmans. Con-

red cat origiimported to rad and also ig more than ts, the first 3 ed from Rusne 28, 1990. to Russia to ria cats from ly, 1990. Sies 17-26 lb), raight single hick curls on y colors are

I cat was debrid between Shorthair biexperienced d white paty.

sulted from a nas occurred

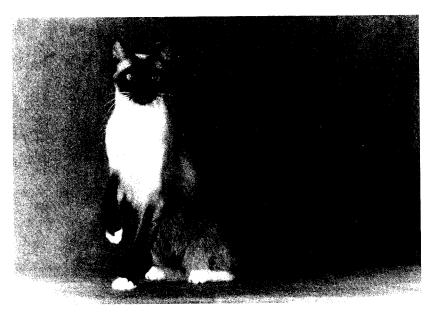
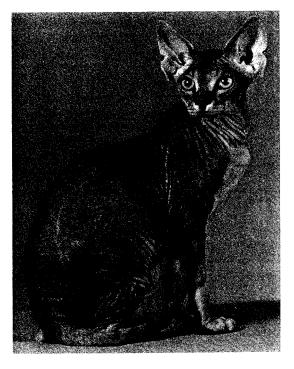


Figure 42. The Snowshoe. (Photograph by Jane Howard)

several times (Mexican hairless cats were pictured in Miss Simpson's 1903 Book of the Cat. The hairless gene is recessive to that for a normal coat but is dominant to that for the Devon Rex wavy coat. These cats have short down fuzz on some parts of the body. Their body conformation is striking, with wrinkled skin (Fig 43). Immune sys-

Figure 43. The Sphynx. (Photograph by Jane Howard)



tem and fertility problems were reported in the past, but in recent years the breeders have been able to produce robust cats.

Selkirk: The most recent and unconfirmed mutation in domestic cats was seen in 1987 in a litter of housecats in Wyoming. One of the kittens was brought to a Persian breeder from the local humane society. This female had an unusual curly coat, evidently the result of a dominant gene, unlike the recessive Cornish and Devon rex genes. When bred to a Black Persian Champion, she produced 6 kittens, 3 of whom were curly. The coats are thick, plush and soft, falling in loose curls, rather than waves. Because the wirehair gene is also dominant, more work is needed to determine if the genetics of these cats are the same and if the kittens perhaps represent a semi-long-haired version. The proposed name for the new breed is "Selkirk."

Household Pet Cats

A true cat fancier has a love and appreciation for all cats, whether or not they are pedigreed. Many people involved in breeding pedigreed cats also include mixed-breed cats as part of their households, and help local humane societies or shelters in efforts to decrease pet overpopulation. Registering associations, such as CFA, include competition for nonpedigreed cats in their licensed cat shows as part of their interest in pro-

moting the welfare of all cats. The Household Pet Class at shows often serves as an introduction to people interested in joining the cat fancy and participating in cat club activities. Many go on to breed championship cats or to exhibit altered pedigreed cats in the Premiership competition.

Household pet cats are judged on their beauty, according to the subjective opinion of the judges, and on condition. CFA has no written standards for household pet cats, preferring each to be valued for its own uniqueness. Unlike pedigreed cats, which are compared to the ideal guidelines described in the various breed standards, household pets may be of any color, pattern, coat texture, or body and head type.

Condition requirements are the same for household pet cats as for pedigreed show cats. General good health and vigor must be reflected in the cat's overall appearance, as well as alertness, movement and coat quality. The cat must be in prime physical condition, with good muscle tone, sound bone structure and healthy weight. It is important for all show cats to be faultlessly clean and well groomed. Condition also includes a well-balanced temperament and receptiveness to the handling and judging procedure. Because the noise and activity of the showhall environment can intimidate some cats, judges disregard normal timid behavior. It is nevertheless surprising that most household pet cats seem to easily adapt to the show procedure and display delightful responsiveness to the attention they receive from judges and the public.

Household Pet Classes give judges an opportunity to educate visitors about the general characteristics of cats and the importance of altering cats not used for pedigreed breeding programs. All CFA Household Pet adult entries (over 8 months of age) must be castrated or spayed, and may not be declawed. Presentations of fine examples of household pet cats help increase people's awareness of the natural beauty and charm of all cats, and how they are enhanced by good care, diet and grooming.

References

- 1. Bernstein J, in Fogarty M: The Cat Fanciers' Association Yearbook. 1980. pp 434-445.
- 2. Bittaker A and Placchi N, in Fogarty M: The Cat Fanciers' Association Yearbook. 1982. pp 289-297.

- 3. Bokonyi E: Development of early stock rearing in the Near East. Nature 264:19-23, 1976.
- 4. Cantin J, in Cat Catalog, *The Ultimate Cat Book*. Workman Publishing, New York, 1976. pp 3-8.
- 5. Cat Fanciers' Association: Breed registration totals for the period of January 1 December 31, 1989. Cat Fanciers' Almanac March: 59, 1990.
- 6. Cowles W, in Fogarty M: The Cat Fanciers' Association Yearbook, 1989-90. pp 306-313.
- 7. Deal V, in Fogarty M: The Cat Fanciers' Association Yearbook, 1983. pp 627-639.
- 8. Denham H and Denham S: Notes on the Abyssinian cat today and yesterday. *Child of the Gods*. London, 1951.
- 9. Faler K: This is the Abyssinian Cat. T.F.H. Publications, 1983.
- 10. Gabrielsen C and Hall S: Ten years in the USA (Norwegian Forest Cat). Cat World International 17 (4):12-15, 1989.
- 11. Gibney A, in Fogarty M: The Cat Fanciers' Association Yearbook, 1986. pp 624-631.
- 12. Haukenberry B and Federico M, in Fogarty M: The Cat Fanciers' Association Yearbook, 1982. pp 302-303.
- 13. Hawkins A, in Fogarty M: The Cat Fanciers' Association Yearbook, 1981. pp 578-586.
- 14. Hawkins A: The Chartreux. Cat Fancy June: 36-41, 1985.
- 15. Hinkle D, in Fogarty M: The Cat Fanciers' Association Yearbook, 1984. pp 121-126.
- 16. Johnson J, in Fogarty M: The Cat Fanciers' Association Yearbook, 1988-89. pp 386-387.
- 17. Kleist CE: History and magic of the Egyptian Mau. Cat World (Cats Magazine Exhibitor Edition), June: EE4-EE9, 1985.
- 18. Mery F, in: The Life, History and Magic of the Cat. Grosset & Dunlap, New York, 1975. pp 13-27.
- 19. Negus D, in Fogarty M: The Cat Fanciers' Association Yearbook, 1981. pp 513-528.
- 20. Nixon B, in Fireman J: Cat Catalog. Workman Publishing, New York, 1976. pp 20-25.
- 21. Noden D, in Fogarty M: The Cat Fanciers' Association Yearbook, 1985. pp 426-431.
- 22. Peltz R, in Streetman C: The Cat Fanciers' Association Yearbook, 1972. pp 413-417.
- 23. Peltz R, in Fogarty M: The Cat Fanciers' Association Yearbook, 1975. pp 226-229.
- 24. Peltz R and Uzee J, in Streetman C: The Cat Fanciers' Association Yearbook, 1972. pp 403-412.
- 25. Reade M and Reade B, in Fogarty M: The Cat Fanciers' Association Yearbook, 1983. pp 642-649.
- 26. Rindfleisch E, in Fogarty M: The Cat Fanciers' Association Yearbook, 1980. pp 385-400.
- 27. Robinson R, in: Genetics for Cat Breeders. 2nd ed. Pergamon Press, New York, 1977. pp 123-129.
- 28. Robinson R: Evolution of the domestic cat. Carnivore 5:4-12, 1982.
- 29. Scheuer-Karpin R, in Fogarty M: The Cat Fanciers' Association Yearbook, 1984. pp 244-245.
- 30. Segnar KE and Beane C: The Burmese. Cat Fancy September:40-46, 1989.
- 31. Sinclair K: Color genetics, with emphasis on the Egyptian Mau. Cat World (Cats Magazine Exhibitor Edition), August: EE6-EE8, 1985.

- y stock rearing
- imate Cat Book. pp 3-8.
- registration toember 31, 1989.
- ut Fanciers' As-
- anciers' Associ-
- Notes on the ild of the Gods.
- at. T.F.H. Pub-
- ears in the USA
- ıt Fanciers' As-
- , in Fogarty M: b, 1982. pp 302-
- e Cat Fanciers'
- at Fancy June:
- ıt Fanciers' As-
- ıt Fanciers' As-
- . 641 - 17 - - 41- -
- of the Egyptian ibitor Edition),
- nd Magic of the 5. pp 13-27.
- it Fanciers' As-
- alog. Workman
- ıt Fanciers' As-
- ıt Fanciers' As-
- Fanciers' Asso-
- ian C: The Cat
- op 403-412. rty M: The Cat
- p 642-649.
- e Cat Fanciers'
- t Breeders, 2nd p 123-129.
- nestic cat. Car-
- y M: The Cat p 244-245.
- Burmese. Cat
- h emphasis on agazine Exhibi-

- 32. Stuart W: Delving into the Persian past part II. Persian Quarterly Fall:11-13, 1988.
- 33. Svenson T, in Fogarty M: The Cat Fanciers' Association Yearbook, 1985. pp 636-637.
- 34. Switzer NJ: Is the Siamese really pure? Cat World (Cats Magazine Exhibitor Edition), March: EE3-EE5, 1984.
- 35. Switzer NJ: Simplified view of color and pattern inheritance part X. Cat World (Cats Magazine Exhibitor Edition), May:EE8, 1987.
- 36. Thompson J et al: Genetics of the Burmese cat. Heredity 34, 1943.
- 37. Thompson P: The way it was for Siamese. Cat World (Cats Magazine Exhibitor Edition), May: EE18-EE19, 1985.
- 38. Torio V and Torio T, in Fogarty M: The Cat Fanciers' Association Yearbook, 1983. p 641.
- 39. Urcia E, in Fogarty M: The Cat Fanciers' Association Yearbook, 1984. pp 250-255.

- 40. van der Lende B: Vantrek. Cat World (Cats Magazine Exhibitor Edition), January: EE4-EE6, 1988.
- 41. von Saxe-Coburg D: The odyssey of the Turkish Van. Cat Fanciers' Newsletter December:28-31, 1988.
- 42. Warren P, in Fogarty M: The Cat Fanciers' Association Yearbook, 1978. pp 371-382.
- 43. Wright M and Walters S, in: The Book of the Cat. Summit Books, New York, 1980. pp 82-85.
- 44. Wright M and Walters S, in: The Book of the Cat. Summit Books, New York, 1980. pp 16-17.
- 45. Wright M and Walters S, in: The Book of the Cat. Summit Books, New York, 1980. pp 54-59.
- 46. Wright M and Walters S, in: The Book of the Cat. Summit Books, New York, 1980. pp 86-90.
- 47. Wright M and Walters S, in: The Book of the Cat. Summit Books, New York, 1980. pp 28.