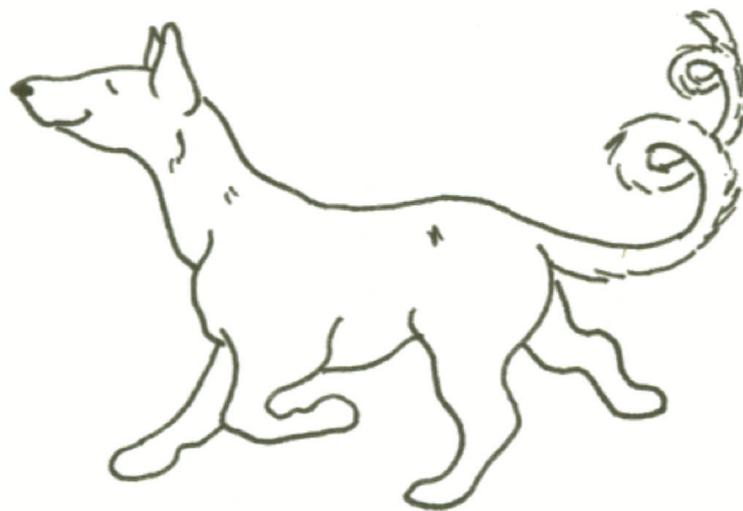


Chapter Twenty-six
FADS OR FUNCTION?



CHAPTER TWENTY-SIX

Fads or Function?

“Perhaps even worse than an aimless approach is a breeding program that chases after the fads dictated by the show ring or other people. Such a program is constantly acquiring, discarding, and thus wasting genetic resources in a futile attempt to catch up to the current leaders in the breed.”

D. Phillip Sponenberg, D.V.M., Ph.D., and Carolyn J. Christman, D.V.M., Ph.D.,
A Conservation Breeding Handbook, 1995

Sometimes I wonder – would I have enjoyed fame as a model of the Flemish painter Peter Paul Rubens had I been born four hundred years ago? Today’s fashion standard of whippet-thin bodies makes it difficult to find dresses that fit my unfashionably stocky physique properly. My body type, described by my physically delicate but bluntly outspoken younger sister as “robust peasant stock,” has not been in vogue for years. This does not cause me any loss of sleep, though it did lead me to ponder the fads governing not only human traits but also those of the animals bred by us. In *Cloning*, Boston University ethicist George Annan asks, “What is a better human being?” He answers his own question by stating, “A lot of it is just fad.”

As talk of a breed standard floats around the alpaca industry, it behooves us to clarify which traits clearly serve a functional purpose and which ones are fads created by clever advertising. Exactly what niche do we expect the alpaca to fill?

Before I address specific alpaca issues, let’s examine how fads impact the health and ultimately the commercial value of other species. The general public is becoming more familiar with the concept of genetic and health problems in the dog world. Selective breeding based on fads in the show ring has brought physical misery to untold generations of dogs, and emptied the pockets of their owners in the form of huge veterinary bills.

Following the misguided belief that “more must be better,” ignorant and uncaring breeders exaggerated traits to the point of developing stylized caricatures of formerly functional animals. Over-angulated rears and floppy pasterns crippled the German Shepherd. The Afghan Hound, once a proud and skillful hunter over rough terrain, is largely a crate dweller or couch potato, the maintenance of his nearly floor length coat only allowing brief exercise on impeccably manicured grounds. The broad heads and slim hips

of several breeds make it impossible for bitches to give birth without human intervention. Virtually all of their puppies are born by Caesarean section.

Established breeders of the Border Collie were so terrified of losing their dogs' fabulous herding ability to fads in the show ring that they fought AKC acceptance of their breed tooth and nail. They lost. It might be a small comfort to them to see that the tide has turned. Dog breeders came to realize that the pet-owning public was tired of continually carting their dogs to the vet's office. The average owner is more interested in enjoying healthy pets than show winners. In an ideal world, such winners would also be the healthiest, most functional animals.

The famous Merino sheep offer another example of fads run amok. Many Merinos at one time sported folds of skin heavy enough to remind one of a Chinese Shar-pei. These folds were "created" to allow increased wool harvest per animal. However, the micron count varied considerably between the exterior and interior of these folds, and shearing could take as long as 2.5 hours for some of the larger rams. At that time, breeders were obviously more interested in promoting this fad than overall health and easy maintenance of their sheep. Barbara Platt describes in *sheep!magazine* (yes, that's how it's spelled) how "despite their heavy fleece production and their ability to forage where other breeds failed, the American or Vermont Merino had their drawbacks. The ewes were not prolific, were poor milkers, and their lambs were weak." Platt tells how one breeder "declared them to be so feeble that for the first 24 hours it was seldom possible to determine if they would live." Scary, isn't it?

Merino breeders fortunately came to their senses and most bred out the trait for the heavy folds. Apparently, an overlap on the neck remains and still poses a special challenge to a shearer. Breeders did manage to get their Merinos back on the path to hardiness and overall fitness.

Many sheep breeders at one time preferred a muffle-faced sheep (excessive fiber growth on the face). This fad may hold significance for alpaca breeders because of the discovery long ago that "wool blindness inhibits eating and mothering," as stated by well-respected sheep breeder and author Paula Simmons. Simmons informs the reader in her book *Raising Sheep the Modern Way* (1989) that Australian tests "have proven muffle-faced ewes to be less fertile and productive." In the 1970's, breeders made a concerted effort to eliminate this trait in their herds. I was told by Edie Van Valkenburg, a South Jersey breeder and judge of Jacob sheep, that the majority of present-day breeders prefer and choose open faces.



Jacob sheep are an ancient breed and were at one time in danger of becoming extinct. Thankfully, fanciers appreciate their unique look. Handspinners love the wool of these spotted beauties (photo by Edie Van Valkenburg)

The glossary of Dr. Gauly's book *Neuweltkameliden* (1997) describes a "tuco (entucado)" as "Tier mit unerwünschtem uebermaessigem Faser-wachstum im Gesicht, Ohren und Augen verdeckend" (translation: "an animal with undesirable excessive fiber growth in the face, covering ears and eyes").

Presumably a muffled face, both in sheep and alpacas, connotes a super dense fleece. Super density sounds desirable, but at what price?

Every geneticist whose work I've read advises moderation in selecting for specific traits. I marvel at the arrogance of individuals who totally ignore the combined recommendations of those with vastly superior knowledge.

Who knows how fads get started? Sometimes it takes just one aggressive individual promoting a certain trait heavily represented in his herd, and ... ta da! ... a fad is born. Even knowledgeable people are often too lazy to properly investigate and research the validity of claims made by these individuals. Novice breeders don't know enough to question them at all.

Since writing about muffle-faced sheep and alpacas in *The Lama Letter*, I found this pertinent quote from Rigoberto Calle Escobar. He wrote: “The laniferous formation of the head even in the cases of greater coverage always leaves a strip along the nose where the fiber is absent, a feature that avoids blinding as it occurs in sheep because of excessive fiber on the face.”

Doctors Sponenberg and Christman also tell us that “when sheep were intensively selected for wool coverage, for example, the result was expected to be heavy fleeces. In actuality, this selection produced ‘wool blind’ sheep with poor survivability.”

Before taking on the responsibility of breeding, any person worth his or her salt will question the purpose and function of traits in their chosen species or breed. If you don’t know why your dog’s breed standard calls for hare feet, well sprung ribs or a harsh, wiry coat, make it your business to find out. Knowledgeable, ethical breeders will not resent or evade your questions.

Analyze the meaning and purpose of advertisements in animal magazines. An alpaca breeder praised his animals for having short muzzles (“the projecting part of the head of a dog, horse, etc.” – Webster’s Dictionary). Short in relation to what? Shorter than those of the average alpacas grazing in North American pastures? Should muzzles be short, and if so, why? Is a very short muzzle a functional trait for a grazing animal? Does it affect bite? Will selecting for extremely short muzzles impact ease or difficulty at birthing? Do correlations of head shape to other body parts exist in alpacas as they do for sheep and other species?

Breeders of Burmese cats who selected for extremely short heads lived to regret that decision. It resulted in severe neurological problems. In the *AKC Gazette* (March, 2000), Kim Campbell Thornton tells us in her article about Pomeranians: “The breed’s shortened muzzle has made it more difficult for the mouth to accommodate all the teeth.” At the other extreme, dog breeders who selected for extra incisors (resulting in the broader heads they desired) were informed by geneticists that deviations from the norm in regard to teeth were tied to abnormal calcification of the bones in such cases.

In Cocker Spaniels, researchers found a mild degree of hydrocephalus. Breeders had created this brain defect by selecting for a certain “domey” head shape deemed desirable in the show ring.

Interested readers may wish to study the concept of *neoteny*, the retention of juvenile features in an adult animal. In many species, domestication produced a more juvenile head shape that features a shortened muzzle. Denise reminded me of research suggesting that both animals and humans are more drawn to, and take better care of, “cute” juvenile-appearing animals. The authors of “Behavioral Genetics and Animal Science” (from *Genetics and the Behavior of Domestic Animals*) refer to several researchers who have done pertinent studies in that area.

In the *AKC Gazette* (January, 2001), Golden Retriever breeder Jeffrey G. Pepper wrote: “The muzzle should be about the same length from stop to nose as the skull from stop to occiput, never substantially less, even if a short, bear-like muzzle looks cute to you.”

An elongated head makes functional sense for those animals that have to either see predators or prey at a far distance. Such head shapes are advantageous, for example, for the vicuña (prey) and all sighthound breeds (predators). The heads of horses also became longer as the species adapted to life on the open plains. With such a head shape, horses “evolved the ability to see with binocular vision as well as monocular vision” (James C. Heird, et al).

Alpaca breeders who believe that a short muzzle always correlates to an absence of llama genes may want to re-visit Mendel’s Law of Independent Assortment. Breeders of other species have proven how easy it is to change head shape on animals without resorting to crossbreeding. Aside from that, one specific physical feature does not determine the entire genetic make-up of an animal.

In an earlier chapter, I briefly discussed an important discovery made in South America. Jane Wheeler, an American archaeozoologist, proved with DNA testing that roughly 90 percent of all tested alpacas were llama-alpaca hybrids. Breeders should remember this Wheeler quote when they read certain advertising claims: “The other thing we discovered is that it’s not possible to tell whether an alpaca or a llama is a purebred by looking at it. It’s necessary to do DNA testing to certify purity” (*Discovery Magazine*, April 2001, pp 58-65).

In *Animal Breeding and Production of American Camelids*, Rigoberto Calle Escobar tells us that alpaca’s legs “are thin and agile with strong musculature ...” An article in a North American publication presents

thin legs as an undesirable trait. Why? Another author claimed that heavy bone presented a desirable trait in the harsh Peruvian climate.

Susan Tyler, an Australian scholar of medieval Japanese culture and fellow alpaca breeder, questioned this last statement and wrote in personal correspondence: “I cannot see why they should need thick leg bones for coping with the severe environment of the Andes, when vicuñas do not seem to be heavy boned and yet cope just fine ...” Vicuñas are not domesticated – for thousands of years they’ve procreated based on the old rule of survival of the fittest.

Although I have not had the pleasure of observing a live vicuña, the numerous photos I’ve seen of these delightful camelids all show animals with comparatively delicate leg bones. Their muzzles cannot be described as short by any stretch of the imagination. Research has proven the vicuña to be the wild ancestor of the alpaca. Draw your own conclusions.

Dr. Harry Preston, praised by Professor Escobar as “a pioneer in scientific matters dealing with the health of the South American Camelid” in Peru, also described the legs of alpacas as “thin and agile with a strong musculature.”

Alpacas are natural pacers. Pacing is an extremely efficient mode of locomotion for grazers. It cannot be sustained for a long time by animals with heavy bone accompanied by wide fronts. Of course, selecting against super heavy bone does not translate into selecting for weedy animals lacking substance. Moderation and common sense are the key words here.

Lynd Blatchford, a llama breeder from Maine, gave me a good laugh with his *Observations from the Pasture* (*GALA Newsletter*, August 2001). Among other tidbits, Blatchford confessed to a “new awareness.” He wrote: “My epiphany came when I saw several very large, heavy-wooled, heavy-boned llamas which could best be described as oxen with banana ears.” He questioned whether these animals were “up to the task of being llamas?” In South America, llamas were and still are typically bred to serve as pack animals, and are expected to travel over great distances. Would such conformation be functional?

Sighthound breeders have taken issue for years with those who try to add heavy bone to the phenotype of their hounds. While possibly appropriate for a mastiff or a Saint Bernard, it is counterproductive to the functional gait (double suspension gallop) of a Borzoi or a Greyhound, for

example.

Some camelid breeders prefer heavy fiber coverage on the legs of their animals. While I admit that it looks “cute,” is it more functional than sparsely covered limbs? Should “cuteness” guide our breeding selections? Leg fiber has little commercial value (too coarse) and is a nuisance to shear. In my trusty sheep book, author Paula Simmons advises breeders to avoid the following: “Wool going too far down on legs. It is more trouble to shear.”

Simmons modified her stance somewhat in *Storey’s Guide to Raising Sheep*. She allows that in extreme climates “wool on the legs and head, like socks and a hat on people, help the sheep maintain body temperature.”

It should be recognized that a trait may be functional in one environment and just the opposite in a different one.

Afghan Hound breeders can, or should, identify with the “overdone fleece” situation. Georgie Guthrie (*AKC Gazette*, August, 1999), admonished dog show judges for not recognizing that short hair on the lower legs of some Afghans (Persian cuffs) is entirely appropriate for that breed. What’s more, it is specifically mentioned as being permissible in the official AKC breed standard. And why shouldn’t it be? No one can convince me that an Afghan Hound with heavily coated pasterns is a more functional animal in the field!

The sad fact is that many breeders only give lip service to the concept of striving to select for functional animals, without fully understanding the reality of the situation. The even sadder truth is that functional conformation is often not what puts the blue first-place show ribbons in the hands of owners and breeders. In the *AKC Gazette* (August, 2000), Scottish Deerhound breeder Joan Shagan candidly shared with readers the story of Andy. She describes this male out of her first litter as “one of the most handsome puppies.” Unfortunately, Andy “was also very unsound coming and going.” When Shagan showed him to help build points for other dogs, this structurally unsound Deerhound became the first male in the litter to finish his champion title. His breeder kept Andy as a pet but did not use him in her breeding program.

I found an interesting article on pasture lambing in the 2003 *Premier* supply catalog. Under the sub-topic of flock genetics, I read: “Large ewes with small stomachs, though ideal for the showing, cannot

consume enough dry matter to produce enough milk to support two young lambs...”

Another example is the Churro sheep, owned by the Navajo Indian tribe. The Churro’s were substantially weakened by the introduction of “improved” breeding stock not suitable for their environment. We must acknowledge the fact that extensive human intervention, genetic “tinkering,” and programs to “improve” a breed or species can be harmful to the animals.

Novices do not always understand why experienced, knowledgeable breeders select for or against certain traits. Before you judge these decisions to be completely arbitrary and possibly frivolous, conduct some research of your own. You might be surprised at what you uncover.

For example, one author I read described the long horns of the African Ankole Watusi cattle as “whimsical.” This is not so! Carolyn J. Christman, et al, explains in *A Rare Breeds Album* (1997) “the horns are part of adaption to a hot climate by allowing dispersal of excess body heat.”

Without ignoring breed standards and common sense, breeders can apply their own interpretations and tastes, creating the healthy diversity necessary for the ultimate survival of the species. I realize that I’ve made this point before – but it’s an important one and bears repeating. No matter what your own personal vision or dream is, before you decide to embrace a trend, ask yourself: “Is it fad or function?”

