



## **The Percentage Problem: What's Left of the Original Seppalas?**

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**T**HE LAUNCHING last August of a Seppala Siberian Sleddog registry and associated breed club by Continental Kennel Club in the U.S.A. has precipitated a crisis in the small world of Seppala breeders and owners. Over two hundred dogs were apparently accepted into this registry initially, using eligibility standards which this author believes to be totally inadequate. No effort whatever was made to consult with the Seppala Siberian Sleddog Breed Project under whose auspices the breed had already existed in Canada for five years prior to the opening of Continental's registry, and no concern was shown for ensuring compatibility between the existing Canadian eligibility standards and those of the new U.S. registry. Reconciling the eligibility standards of the two registries and ensuring mutual recognition and compatibility between them would seem essential if there is to be a viable SSSD breed.

Before a new breed can be successfully launched, the population of animals which is to constitute that breed must be defined clearly and qualitatively, in such a way that everyone who wishes to become involved can understand the exact terms of eligibility. That was not done in the present case. Only a rough quantitative definition of the population was attempted, stating that "equal to or greater than 93 percent Seppala" was to be the benchmark for SSSD status, and the details whereby such a percentage would be determined were left entirely undefined by the eligibility rules, stating only that "the breed club representative will determine the Seppala content of the dog."

Elsewhere in the promotional brochure an attempt was made to define what was meant by "Seppala content," but the definition given was still quantitative, partly incorrect, incomplete, and involved the tracing of pedigrees for every applicant all the way back to Siberian Husky breed foundation stock (i.e., through ten to thirty generations). In any case, no definition of Seppala content is found within the document detailing SSSD eligibility rules.

Obviously under these circumstances, no one other than the "breed club representative" is likely to be able to determine just which animals are eligible for SSSD status and which are not, and the power of the "representative" to decide, to accept or to reject any particular candidate animal, is absolute. The situation is manifestly untenable and grossly unfair to all interested parties.

Since a Seppala Siberian Sleddog under the terms of the Continental eligibility rules is at present defined as "equal to or greater than 93 percent Seppala content," it will obviously be necessary to examine both the idea of such a quantitative definition of the SSSD and the methods used to arrive at percentages of Seppala content. Before we make such an examination, though, it will be worthwhile to define the terms that may be crucial to it.

## Defining Our Terms

**Seppala lineage:** This term is used to describe bloodlines that derive exclusively from animals owned or bred by Leonhard Seppala, or from dogs from Siberia imported by Seppala, from the period 1914 through 1931. (Examples of Seppala lineage: William L. Shearer III's "Foxstand," Rose Lee Frothingham and Marie Turner's "Cold River," Harry R. Wheeler's "Seppala," J. D. McFaul's "Seppala," J. Malcolm McDougall's "Malamak," Gary and Gwen Egelston's "Seppineau," J. Jeffrey Bragg's "Markovo," etc.)

The two major Siberia import males, the brothers Kree Vanka and Tserko, were imported by the Seppala/Ricker partnership kennel in Poland Spring Maine. Other important source animals were bred in Maine by that partnership. Others, including the foundation for the Poland Spring kennel, were bred by Seppala in Alaska prior to his going Outside in the late 1920s to tour with his sleddogs, a tour which ended in Maine with the establishment of the kennel there. These three sources combined to form the rootstock for the above bloodlines that subsequently became known as Seppala lineage.

**Non-unique Seppala:** All contemporary Siberian Huskies — whether of racing or of show background, or merely of backyard-breeding or pet stock — will prove to have a majority of Seppala lineage behind them when pedigrees are taken "all the way" back to breed foundation animals or even beyond into pre-registration stock ("back to the boat," as I like to say). Eva B. Seeley and Lorna B. Demidoff, pioneers of the Siberian show-dog, were quick to make use of Siberian Huskies bred by Harry Wheeler and of the Wheeler-derived Cold River stock. Ch. Monadnock's Pando, the Demidoff dog most crucial to the development of modern SH show bloodlines, was 68.75 percent Seppala in pedigree, through Cold River, Wheeler and other stock that traced back to Leonhard Seppala dogs or to the Poland Spring Siberia imports.

For purposes of this discussion we shall call this kind of Seppala content "non-unique Seppala," since it is held more or less in common by all registered SH bloodlines. This kind of Seppala content can be determined in sum only by taking a dog's entire pedigree "back to the boat."

**Unique Seppala:** A succession of working sleddog kennels bred stock derived from pure Leonhard Seppala and Siberia import bloodlines, maintaining from the 1930s through the mid-1960s a mainline Seppala lineage trunk that had nothing whatever to do with Eva B. Seeley's show-dog breeding or with subsequent bloodlines influenced by the desires of Seeley and her successors to alter the original Siberian dog to conform to the changing fads, fancies and ideals of the show ring.

The continuity of this pure-Seppala trunk faltered when the third Seppala Kennels, owned by J. D. McFaul of Maniwaki, Que., sold out to Earl F. Norris ("Alaskan/of Anadyr" kennels), a breeder of Seeley-derived show-race dual-purpose Siberians. Norris had no interest in maintaining the pure Seppala trunk and wanted the McFaul stock only as a useful breeding adjunct to his own Seeley-derived bloodline, possibly to maintain structural soundness and working attitude, using Seppalas as an outcross.

From 1969 through 1975 the remnants of the McFaul Seppala lineage were salvaged by what later became known as the "Markovo rescue effort," in which some twenty litters were

bred by Markovo and Seppineau kennels from McFaul and McFaul-derived stock, thus preserving the continuity of the pure Seppala trunk.

Seppala content will be labelled “unique Seppala” when it is derived from the McFaul/Shearer (Seppala/Foxstand) mainline stock through Markovo or Seppineau breeding, because this kind of Seppala content is not shared by the general Siberian Husky population, but is the unique heirloom bloodline, the only “pure Seppala” line that has survived to the present day free of any significant interbreeding with Seeley-derived stock. Unique Seppala is not represented today by any bloodlines other than those derived from the 1970s Markovo/Seppineau stock.

**Markovo Seppala:** We use the term Markovo Seppala to describe contemporary Siberian sleddogs that ascend in every pedigree line to one or another of the ten “second foundation” animals of the Markovo rescue era. The term is used without restriction as to who may have bred the animal in question, as long as the pedigree traces exclusively to the ten second foundation dogs. Markovo Seppalas are the only surviving “pure Seppala” Siberian stock of the present day.

**Second foundation:** Ten dogs were used by Markovo and Seppineau kennels in the 1970s to ensure the survival of Seppala lineage. These ten became in effect a second founder group for contemporary Seppala stock. No other Seppala lineage sleddogs from that era gave rise to pure Seppala bloodlines that are known to have survived to the present day. The ten second foundation dogs are listed as follows:

DITKO OF SEPPALA (male), breeder McFaul, owner Bragg  
SHANGO OF SEPPALA (male), breeder McFaul, owner Bragg  
VANKA OF SEPPALA (male), breeder McFaul, owner Egelston  
MIKIUK TUKTU TORNYAK (male), breeder Simms, owner Olson  
MALAMAK’S OKLEASIK (male), breeder McDougall, owner Egelston  
DUSKA OF SEPPALA (female), breeder McFaul, owner Norris (leased to Bragg)  
LYL OF SEPSEQUEL (female), breeder Jacobs, owner Bragg  
MOKA OF SEPSEQUEL (female), breeder Jacobs, owner Egelston  
FROSTFIRE ANISETTE (female), breeder Barber, owner Bragg  
WILLI-WAW’S GALE OF CUPID (female), breeder Morton, owner Egelston

## **Defining Seppalas: Excluding Show-dogs**

THE TRADITIONAL DEFINITION of Seppala lineage was probably published for the first time in 1976, in my book *The Seppala Siberian: A Breeder’s Manual*. Of course as a matter of practice, this definition had been followed in the kennels of Wheeler, Shearer, Belford and McFaul for four decades. I cannot, and would not wish to, claim it as my own invention; I merely made public the

principles that had guided major breeders of the pure Seppala trunk from the 1930s on. That definition was as follows:

Seppala Siberian: Any registered Siberian Husky whose pedigree lineage may be traced back exclusively to foundation stock bred by Leonhard Seppala or imported directly from Siberia.

In his 1986 book *The Seppala Siberian*, Douglas W. Willett comments on the foregoing definition as follows:

This definition does not help preserve the working ability of the strain and creates a Pandora's box of uncertainty [sic] over what is or is not a "Seppala."

Willett in the same book set forth his own notions of what constitutes Seppala strain (based on 1920s and 1930s individual foundation dogs), which in application over the past quarter-century have proved beyond any reasonable doubt to be the real Pandora's box of uncertainty! At various times Willett has qualified his definition by excluding stock that has passed through "three successive generations of cosmetic or non-work-oriented breeding," "one generation of Zero breeding," and "three consecutive generations of Anadyr, or Igloo Pak, or Monadnock breedings."

The original definition as published in 1976 needed no qualification, exceptions or exclusions. Show-dog breeding programmes excluded themselves since all of them invariably involved Seeley-derived stock. To my knowledge there has never been any known bloodline of show-dogs that would conform to my definition of pure Seppala, although there have from time to time been individual Seppala-lineage show champions (e.g., Vanka of Seppala II, Sargo of Seppala II, Vixen of Seppala IV, Chugach of Seppala, Mikiuk Tuktu Tornyak).

In any case, whatever definition is preferred, it seems to be universally agreed that definitions of Seppala dogs apply exclusively within the category of working sleddogs and that show-dogs, cosmetically-selected stock and non-working populations are not properly qualified to be considered true Seppalas (or Seppala Siberian Sleddogs).

Having established that show bloodlines are beyond the pale, we must nevertheless underline the fact that show bloodlines generally consist of some sixty to seventy percent non-unique Seppala background! This fact should be remembered, as forgetting it will land us in trouble.

## **Defining Seppalas: Racing Siberian Huskies**

OUTSIDE THE DOMAIN of show-dogs and pet stock, there exists an extensive and various body of registered Siberian Husky stock that is usually characterised by the term, "Racing Siberian Husky." In the larger sense the term can probably be stretched to include any and all Siberian Huskies that are regularly used to pull a dogsled or a wheeled rig. It is this broad applicability that makes the term (and the associated concept) rather dangerous in use. Everyone thinks he knows exactly what is meant by Racing Siberian Husky (which we may abbreviate here as RSH for the sake of convenience). Yet, just like the term "Alaskan Husky," in the end it will be found to include a large body of questionable stock, much of which would perhaps make serious RSH fanciers rather uncomfortable.

In some European countries I can recall many newly-minted mushers being convinced that "Innisfree" (to name just one major example) was a valid RSH bloodline, because the breeders insisted that their dogs were "working Siberians." In a similar fashion, the "Karnovanda" show-dogs of Judy Russell have been persistently promoted as working sleddogs over the years. I can recall a

wildly-popular RSH stud-dog of the 1970s, called “Avalanche,” whose grandsire was Ch. Monadnock’s Red Tango of Murex, a prominent show-dog.

Hundreds of fanciers of “dual-purpose Siberians” — sometimes described as “the good-looking dog that can also run” — regularly take their teams of show-stock to races (better not ask what kind of races!). With enough patience, persistence, tolerance, and disregard of the resulting performance quality, almost any kind of Siberian Husky can eventually be persuaded to go along in harness in a team, and thus to qualify technically as an RSH.

Of course, the RSH carries in its pedigree history the usual majority percentage of non-unique Seppala content, just as do the show-dogs. In addition, many of the serious RSH bloodlines display a varying quantity of unique Seppala content. Historic RSH bloodlines like Natomah, Igloo Pak, and White Water Lake had their share of ancestors from the Shearer and McFaul-Seppala kennels.

In the past this variable unique Seppala content of RSH bloodlines has given rise to the practice of calling them “other Seppala” lines. This is unjustified, even ridiculous. None of the RSH lineages have consistently produced dogs of Seppala type and mentality; most are also inferior in performance qualities as well. Doug Willett writes in this regard:

...the breeders involved in the major strains and their offshoots had their own images, both physical and mental, of what they were trying to create.

That some of the major RSH lines did have an “other Seppala” component in their make-up (other, that is, than Markovo/Seppineau stock) is granted; but along with that other Seppala component invariably comes not only a hefty Seeley-derived component, but also a breeder vision or image that is alien to the Seppala mould.

White Water Lake, Natomah, Wobiska, Arctic Trail and the rest are not “other Seppala” bloodlines. Anadyr, Calivali and Igloo Pak most especially are completely incompatible with Seppala characteristics. All of these are Racing Siberian Husky bloodlines, separate entities in their own right, with their own distinct “images, both physical and mental.” Useful, perhaps, in cross-strain RSH breeding programmes, they have no legitimate place in the Seppala lineage family, and no part to play in the development of the Seppala Siberian Sleddog breed.

## **Interbreeding of Racing Siberian Huskies and Seppalas**

THE APPARENT unique Seppala component of several major RSH bloodlines has provided an easy excuse for interbreeding them with Markovo Seppalas. Although the major RSH lines are always to a greater or lesser extent Seeley-derived, nonetheless they (unlike their show-dog cousins) will usually pass the Willett three-generation cosmetic breeding test (though not always, as witness Avalanche). Various reasons have been offered for such interbreeding, none of them especially compelling.

One such reason is that these breedings allow us to “pick up” the non-Markovo Seppala dogs that were lost to the pure Seppala mainline during the 1970s and 1980s; but along with the lost dogs we also pick up a large dose of the Seeley contaminant that Wheeler, Shearer, Belford and McFaul went to great lengths to exclude.

The major reason that always seems to be given for RSH interbreeding is that these dogs constitute an “outcross” to Markovo Seppalas, increasing genetic breadth and contributing renewed vigour and hardiness through heterosis. Yet when the “Seppala content” of these dogs is calculated, it usually seems to turn out to be anywhere from 60 to 90 percent! (Kodiak’s Lily and Kodiak’s Layla, for instance, were claimed to be 86.3 percent Seppala.) Personally I find it difficult to understand

how a so-called outcross that is 60 to 90 percent identical in background to the Seppala mainline can contribute enough heterosis effect (“hybrid vigour”) to be worthwhile. It is an interesting exercise in doublethink to consider the same animal to be both an outcross and 90 percent identical by ancestry. Especially since 93 percent Seppala content is apparently sufficient to be considered a purebred SSSD.

## **The reasons for a Percentage-Seppala System**

INTERBREEDING of Markovo Seppalas with Seeley-derived Racing Siberian Huskies has made some sort of percentage system an absolute necessity, in order to track Seppala content of successive generations. Unfortunately, the exact nature and ground rules of such a system have never been very clear. Doug Willett calculated Seppala percentages for many different ancestors and for various RSH bloodlines in his 1986 book; nobody cared to try to duplicate that Herculean task. Then in 1992 a second book, *The Sepp-Alta Siberian: A Breeders Manual*, offered additional percentages, covering most of the significant RSH “outcrosses” up to that point. The 1992 book introduced a slightly different methodology in which percentages were calculated for five major bloodline groups. It also made quite clear that Anadyr, Igloo Pak, Zero and a “Monadnock” catch-all group were to be considered “non-Seppala” and not lumped with mainline Seppala content, despite their non-unique Seppala contribution.

Unfortunately, though, the percentage system has never been clearly understood by the majority of breeders. I seriously doubt that anyone other than Doug Willett has been capable of making independent calculations of Seppala content from breed foundations with accuracy, or had the resources necessary to do so, or cared enough to try. Everyone has accepted the figures in the Willett books and left it at that.

Unfortunately, too, the system has never distinguished in a clear-cut way between non-unique Seppala content and unique Seppala content. Instead of making the distinction, it has instead muddled the waters by calculating non-unique Seppala content “back to the boat,” and then applying exclusion clauses to eliminate unwanted lineage groups: show-dogs, Harris Dunlap’s Zero Siberians, Anadyr, Igloo Pak, etc.

In this way a real Pandora’s box of confusion has resulted. Once we admit the possibility of a Seppala being, say, 93 percent Seppala and the remainder Seeley-derived content, then we become involved in a sliding scale of Seppala-ness with no clear-cut qualitative distinction, other than the various exclusion clauses! What is the difference between a 68 percent Seppala show-dog and a 68 percent Seppala RSH, particularly if both animals have been trained to work in harness? Differences there certainly are, but how on earth to define them objectively? What is there, other than a subjective choice, to justify excluding the show-dog as a possible ancestor for SSSDs but allowing the RSH?

There is really just one basic reason for having a percentage system in the first place: it is needed only if we contemplate the dilution of the Wheeler/Shearer/Belford/McFaul/Markovo pure-Seppala trunk by interbreeding it with Seeley-derived Racing Siberian Huskies. And that is exactly what has happened during the Willett years of Seppala history.

## **Making the “Unique Seppala” Distinction**

IT IS ABSOLUTELY CRUCIAL that we distinguish unique Seppala from non-unique Seppala, if we interest ourselves in “Seppalas” as such, particularly in Seppala Siberian Sleddogs. Non-unique

Seppala is just that, not unique; it is held in common by all registered Siberian Husky bloodlines. There is nothing special about it. It has been manipulated by everyone from Eva B. Seeley on down for twenty or thirty generations; it has been inbred, stripped down, selected to produce things like Ch. Frosty Aire's Banner Boy. When we say, "this dog is 75 percent Seppala," if we are deriving that percentage by going back to breed foundation stock, then we are saying nothing at all worth saying, nothing that cannot be said of most of the show-pet-dualpurpose-backyardbreeding majority of the Siberian Husky breed!

It is unique Seppala that makes the difference. It was the McFaul "Seppala" stock, as represented by dogs like Ditko of Seppala and Shango of Seppala, that was the object of the Markovo rescue effort. It was the Wheeler/Shearer/Belford/McFaul trunk that we sought to preserve and provide a future for. As far as I am concerned, not much has changed to this day — those are still the objectives, that goal still applies, and it is just as difficult and elusive now as it was in the 1970s. Now, as then, assimilation is the major risk, the danger that the tiny population of pure Seppalas will be absorbed into the vast morass of Seeley-derived Siberian Huskies, show-dogs, pet stock, RSHs or whatever. Even to establish a separate Seppala Siberian Sleddog registry is no guarantee of safety — because through the use of a back-to-the-boat percentage system, the risk of assimilation simply becomes the risk of infiltration, that is, the customary 25 or 30 percent of Seeley contribution will eventually invade the SSSD registry through Anadyr, Igloo Pak and similar "outcrosses." That, by the way, is already happening apace.

## Imaginary Numbers — How Infiltration Works

AT THE SEELEY LAKE, MT, symposium (an appropriately named venue), a set of photocopied legal-length sheets were distributed by way of a summary of Seppala lineage breeding to date. These sheets contained some interesting percentage figures, as did the bound pamphlet titled "The International Seppala Siberian Sleddog Club" that presented the new SSSD eligibility rules and database entries for some 163 Siberian Huskies.

Although the fact has not been publicly mentioned until now, some impressive re-calculation of percentages has taken place. Some examples: Caliban of Kimball, 73.1% Seppala by the 1992 Willett book (p. 57), is now considered 87% Seppala; his dam Vanessa of Alta, 66.25% in 1992 (p. 60), is now 93% Seppala. Caliban was mated to Ninnis Calamity Jane, a female of Anadyr and Takkalik (Anadyr-derived) background, all Anadyr and Takkalik dogs for at least three generations, therefore "non-Seppala" by the rule laid down on page 18 of the 1992 Willett book — to produce Mystictrail's Annie Oakley, whose percentage is given as 82 on the breeding summary sheets.  $73.1 + 0 / 2 = 82$ . This has to be the New Transfinite Non-Euclidean Math, sometimes referred to as "imaginary numbers"! Bred to (Markovo Seppala) Race of Sepp-Alta, "Oakie" produced Sepp-Alta's Griffin at Windy Ridge and Sepp-Alta's Zeus at Windy Ridge: 91% Seppalas, who nevertheless have a zero-percent (by Doug's own published rules) Anadyr grandam.

I do not wish to disparage Griffin and Zeus. I am sure they are excellent Racing Siberian Huskies — exactly. They have about as much unique Seppala content as Ch. Monadnock's Pando had non-unique Seppala content — yet they are siring progeny claimed to be 94 to 96 percent Seppala, eligible for purebred Continental SSSD status.

The foregoing is a factual and perfect example of how Seeley-strain infiltration can take place even in a separate Seppala registry. I presume that Seppala content for Vanessa, Caliban, and Calamity Jane has been calculated using the back-to-the-boat method, though I do not personally have access to the necessary AKC studbook records to confirm the assumption.

As of last August when the summary sheets were distributed, Griffin and Zeus had already sired six litters eligible for SSSD status. At that rate, it has already become difficult to say how low the ultimate unique Seppala content of Continental's so-called Seppala Siberian Sleddogs will be. I calculate the unique-Seppala content of Griffin and Zeus to be on the order of 64 percent.

## **Does a "Pure Seppala" Strain Really Exist?**

THE "OFFICIAL" BREED BOOK for the Siberian Husky breed, *The New Complete Siberian Husky*, Second Edition, by Michael Jennings (Howell Book House, 1978), states, in the half-page it devotes to the Harry Wheeler kennel (p. 51):

...today some people still speak of the "pure Seppala strain" that emanated from this kennel. In all fairness, however, it should be pointed out that, given the fact that almost all the early stock came directly from Seppala or related breeding, the dogs coming from this kennel were no more "pure Seppala" than those from most other foundation kennels, the only difference being that Wheeler perpetuated the name longer.

That, believe it or not, is all that Jennings has to say on the subject of Seppalas. The official "party line" of the Siberian Husky Club of America has always been to give all credit to Eva B. Seeley and Lorna B. Demidoff while minimising the crucial importance of the Wheeler kennel in the formation of the SH breed, and above all to deny the existence of Seppala strain.

The cumulative effect of breeding decisions during the post-Markovo era is slowly justifying Jennings' position. Soon there will be no unique Seppala left, if current trends continue — the Wheeler/Shearer/Belford/McFaul/Markovo trunk will finally be extinct, and Jennings' statement will at last be correct.

Although 75 dogs are listed in the Seeley Lake pamphlet as having Seppala content of 98, 99 or 100 percent, I could find only 14 Markovo Seppalas out of the entire group of 163 dogs. Unique Seppala is getting scarce. (At the moment my own kennel contains 48 Markovo Seppalas out of a total population of 66 sleddogs. But my kennel hardly counts, as I have been kept in quarantine from the U.S. breed project — as the rules stand at the moment, my dogs are not eligible for Continental's registry, nor am I personally eligible for membership in ISSSC.) The last kennel of which I am aware to maintain a pure Markovo Seppala breeding programme was that of Carolyn Ritter in Mercer, WI; Carolyn sold out in 1993 and since then it has been a question of a litter here, a litter there, in the U.S.

Nevertheless, it is not yet too late to correct the situation. Although the Rob Frazier database published in the Seeley Lake pamphlet lists only 14 Markovo Seppalas, it is quite far from inclusive. I can think of at least five major kennel groups of Seppalas that are not listed there; there may be more than that, plus unlisted minor kennels. Each of those kennels will have a few Markovo Seppalas among the others. There must at the very least be three or four times as many Markovo Seppalas still alive, quite apart from my own, as the number listed in the database. The topic of Markovo Seppala development and re-population deserves an article to itself; I mention it here only to underline that it is not yet a lost cause.

## **RSH or SSSD?**

THE GREAT NECESSITY of the moment is clarity. We need to examine Seppala breeding and be fully aware of what we are doing. The existing percentage system has done nothing but foster confusion. I



reiterate that the Frazier database lists 75 dogs as 98 percent Seppala or greater, yet of these, only 14 are Markovo Seppalas. Fully 50 of those 75 are listed at an uncompromising 100 percent. At least one of the 50 (Goose of Sepp-Alta, if it matters) is a grandson of Sno-Sepp's Elvira of Sepp-Alta — Elvira was only half Markovo Seppala. So if Goose is classed as 100% Seppala, then what is the percentage of Race of Sepp-Alta, a Markovo Seppala? Does anyone seriously believe that there is no difference, no distinction to be made? We need to be able to distinguish between Goose, the great-grandson of a Kodiak bitch, and Race.

As the percentage system now stands, it fails to make any such distinction. Occasionally I see an ageing Markovo Seppala offered for sale; invariably the advertiser raves about the dog's "wonderful pedigree." Apparently Markovo Seppalas are still valued by some breeders. Occasionally others have expressed to me their inability to accept that an Elvira grandson and a dog of pedigree similar to Race's can both be considered "100% Seppala." I am not the only person to feel that somehow, the distinction must be made.

If we are to have a distinct Seppala Siberian Sleddog breed, it is high time for us to be clear about what it is that we are trying to preserve, breed and protect in a separate registry. In my view it is, or ought to be, the McFaul Seppala dog and its descendants: the unique Seppalas. There is no need to preserve and protect the 70 or 80 percent Seppala in a separate SSSD registry. There has never been any lack of these dogs, nor any threat to them. The innate superiority of Seppala genes guarantees that most serious Racing Siberian Huskies will also be percentage-Seppalas, that they will have large amounts of Seppala ancestry.

The time has come when we are forced either to distinguish clearly between SSSD and RSH, or else to admit that the SHCA and Michael Jennings are right, and that there is no such thing as "pure Seppala." The Pandora's box of confusion opened by the Willett percentage system and the persistent use of RSH stock as "outcrosses" in Seppala breeding have resulted in a gradual decline in the numbers of Markovo Seppalas and a lack of attention to their breeding and preservation.

It should be crystal-clear that if what we are interested in having is a Seppala Siberian Sleddog that actually deserves that name, we must begin to pay proper attention to the preservation and development of the mainline Seppala trunk, that is, the Markovo Seppalas. They represent all that is left of the original Seppalas. They are still numerous enough, diverse enough and genetically healthy enough to form the logical foundation stock for an independent Seppala Siberian Sleddog breed, separate and distinct from the AKC/CKC/FCI Siberian Husky show-dog breed (and from the Racing Siberian Husky as well). That cannot happen, though, if we are so unclear about what we are trying to do that we admit Racing Siberian Huskies into the SSSD registry on the pretext that they, too, have a majority Seppala ancestry!

## **Can the Markovo Seppalas Stand Alone as a Breed?**

AS YET WE HAVE no accurate census of the numbers of Markovo Seppalas (since the existing system fails even to distinguish them as a group), no survey of the scope of their surviving bloodlines, nor yet a very good idea of how much interest there may be in them, as opposed to RSHs. Until we know these things it may be difficult to say how easily they can be made into an independent entity.

I have felt for some years that the Markovo Seppala genome has gotten rather narrow and restricted. It was never very broad even in 1976 immediately after the Markovo dispersal sale, and during the post-Markovo era I feel a good deal may have been lost by way of genetic breadth, both through losses within the Markovo genome and through failure to make use of collateral-lineage stock that was still available in the late 1970s. It would seem reasonable, before we begin to

experience major genetic problems, to make a studied and sustained effort to broaden their gene pool and to attempt to restore some of the genetic diversity of the 1920s.

We have seen over twenty-five years of efforts to broaden the Seppala gene pool through the use of various sorts of RSH stock, but the main result of all that experimentation seems to have been to produce a very large body of part-Seppala stock, while at the same time diminishing the numbers and importance of the pure Seppala trunk. I do not think there is dramatic evidence that the part-RSH/part-Seppala stock is much better than the pure strain. Race of Sepp-Alta, a Markovo Seppala, is at the moment widely promoted as the Seppala Siberian Sleddog's foremost stud dog. Meanwhile a succession of "white hope" RSH-lineages have come and gone without making very much difference, or so it would appear from this observer's point of view. Although most of these "outcross" lines can still be found here and there, I do not think they have fulfilled the bright promise with which each was announced and promoted in its turn. Rocky of Alta, Goosak's Uulof and the rest made only a transient mark — now the latest flavour-of-the-season is the so-called "Oakie outcross." That, too, will pass.

My own feeling has been that there is good reason to try using outcross stock that is as close to Seppala strain in phenotype and temperament as possible, but otherwise unrelated, with no known pedigree connections. In other words, to go outside the AKC Siberian Husky genome, and to place the emphasis on assortative mating instead of pedigree breeding if outcrossing is to be done.

My personal experience has been with two outcross sires: Shagal iz Solovyev, a dog imported from Ekaterinburg, Siberia, and Terry Streeper's "Hop," a world-class Alaskan Husky racing leader and stud dog. Again, here is a subject that merits a separate article. But I can say here that the Russian dog's progeny have been unexpectedly excellent, running with the best of my Markovo Seppalas with ease. The Hop progeny constitute only a single litter and I have not yet quite made up my mind about them; they have shown tantalising possibilities but also significant drawbacks.

In any case, if we are to make use of outcross bloodlines, I think it imperative that it be done in a studied and careful fashion, selecting outcross candidates very carefully and evaluating the results quite thoroughly. Furthermore, I think that at least two generations of breeding the progeny back to pure Markovo Seppalas ought to be considered essential in most cases.

I would rather see controlled outcross breeding to unrelated sleddog stock of superior type, temperament, structure and working ability, than all this indiscriminate interbreeding with RSH lines and subsequent playing about with imaginary numbers to provide their progeny with fake SSSD passports. If the SSSD is to succeed as a breed apart, it must be a breed visibly distinct from the Siberian Husky! Continued interbreeding of Seppalas with RSHs only subverts that goal, while offering no genetic contribution that has not already been done to death.

## **What About All Those Part-Seppalas?**

IT IS UNFORTUNATE that the part-Seppalas so grossly outnumber Markovo Seppalas at this stage of the game. There is great danger that the evolving Seppala Siberian Sleddog breed will be swamped at the very outset with RSH bloodlines, and will never be anything other than an RSH with a fancy, fraudulent name.

I tend to think that the problem can only be handled, practically speaking, by a two-pronged approach. First, put the lower-percentage stock into a separate Racing Siberian Sleddog registry, in which the only restriction on pedigree lineage might be the three-generation non-working exclusion clause, or something like it. Second, for those who have near-Seppala stock and really want to have Seppala Siberian Sleddogs, establishing a new percentile Seppala content evaluation method, one that ignores non-unique Seppala and measures only the close-up unique Seppala pedigree content.

Then establish a fairly high unique Seppala percentage baseline (Doug Willett has always insisted that the cut-off point should not be below 95 percent, and that 97 percent might be better for the more conservative-minded.) Finally, upgrade by breeding the near-Seppalas to Markovo Seppalas in a grade registry until the purebred baseline is reached.

This approach would not provide instant SSSDs for owners of Oakie outcross progeny, I admit. But I have often warned that if we accept everything that the owner claims to be a Seppala, we shall inevitably just duplicate the existing AKC registry genome, in which case there is no point in establishing a separate breed. Anyone who wants instant SSSDs should look around for Markovo Seppala stock for breeding; it is still available, and it needs to be given more attention.

If two separate registries are mounted, a Racing Siberian Sleddog registry along with the Seppala Siberian Sleddog registry, then no one will have to worry about the ineligible dogs already in his/her kennel. There will no longer be any room for complaint, nor any motive to dilute the Markovo Seppala lineage with RSH stock. What is ineligible as an SSSD will be an eligible RSSD, and no harm done.

## Reforming the Percentage System

I HAVE GIVEN several months' intensive thought and work to this problem; others, too, have been working on it. It is always possible to elaborate the system into a state of greater complexity; the trouble is, it is already too complex and unwieldy. Only a tiny handful of people really understand it, and I question whether anyone can make it work with absolute accuracy on a back-to-the-boat basis. I could write a small book on the existing errors and inaccuracies in the present system; let one example suffice: Bayou of Foxstand (1940s Gatineau foundation bitch) was not 81.25 percent Seppala; she was at least 96.1 percent Seppala. Several dogs known to come from Seppala's breeding or from the Poland Spring kennel were omitted from the calculations for Rollinsford Nina of Marilyn, Bayou's grandam. Bayou's percentage influences that of Markovo founder Lyl of Sepseque, with the result that Lyl's true Seppala percentage was 98.8, not the 97.7 given in the Willett book — and often referred to by him in articles written thereafter, as a justification for further dilution of the Seppala genome.

The above example only underlines the difficulties and uncertainties involved in researching Seppala percentages back to foundation stock and beyond. Refining an already complex and laborious system will only result in still greater complexity. It is time to abandon the "back to the boat" method of measuring Seppala content, which few people are capable of employing accurately anyway. What is needed now is a system that clearly measures "what's left of the original Seppalas," that is, of the mainline Wheeler/Shearer/Belford/McFaul/Markovo lineage.

We need to measure the contribution of unique Seppala ancestors in the first ten or twelve generations of the pedigree, not the contribution of breed foundation animals from the 1920s and 1930s. There is really just one logical way to accomplish that. Since the Seppala trunk passed through the genetic bottleneck induced in the 1960s by the retirement of McFaul without a successor kennel, that trunk is now represented in pure form only by the stock that passed through the Markovo and Seppineau breeding programmes. The only pure Seppalas since the attrition of the 1960s and 1970s are Markovo Seppalas. So if we measure Seppala content, that is what we should be measuring: the contribution of the ten "second foundation" dogs of the 1970s. It is rare that this will involve taking a pedigree beyond ten generations; it is fairly easy to accomplish without error, and to calculate the final sum without much difficulty. (Back-to-the-boat involves one's having to figure  $167 \times 0.000095367\%$  for the recurrences of Kree Vanka in the 20<sup>th</sup> generation of a pedigree, and to

sum the result with similar calculations for each founder from every generation in which that founder occurs. It is practically impossible to do this without error.)

What about the non-Markovo Seppalas, someone will ask; this method means that the dog gets no credit for them at all, doesn't it? That's right. And it is fair, because those non-Markovo Seppalas are no longer present as unique Seppalas! Their contribution has been mixed with that of the mixed-lineage stock to which they were bred, so that the result no longer represents unique Seppala. The idea that the genetic contribution of long-dead ancestors can be singled out, summed up and considered in isolation from that of their breeding partners is simply untenable, genetically speaking. Once a reproductive event has occurred, the uniting of sperm and ova to produce progeny, the unique genetic pattern of each parent no longer exists in those progeny: a new, unique pattern has been generated for each individual pup, composed of genes from both parents, and the parental pattern cannot be recovered. Pedigrees tend to give breeders a false sense of security through knowing the names of all the ancestors; but knowing a dog is present in the fourth, fifth, sixth or whatever generation of a pedigree does not mean that the breeder has any certitude at all regarding the nature and extent of that ancestor's influence in the contemporary dog. Once mixed lineage has been bred to Seppala strain, the result thereafter is mixed lineage.

## Conclusions

- (1) The present time is crucial: either we arrive at the correct method for defining the Seppala Siberian Sleddog founder generation now, or we are stuck forever after with the results of a badly-chosen founder set.
- (2) The existing percentage system will not do, because it will inevitably result in the infiltration of large amounts of Seeley-derived Racing Siberian Husky ancestry, making it very difficult if not impossible to perpetuate the unique and valued traits of the Wheeler/Shearer/ Belford/McFaul trunk.
- (3) The McFaul Seppala stock was the basis for Seppala Siberian Sleddog values and genetics; it represents all that we must strive to preserve and protect. If we are not committed to that, we have little reason to establish a separate Seppala Siberian Sleddog registry, because once we leave out show stock, the basic division that remains is Seppalas vs. Racing Siberian Huskies. To perpetuate Seppala values and characteristics, the very small pure Seppala population needs to be isolated and protected from the influence of the other two much larger groups.
- (4) A system is required that can evaluate reliably and accurately the unique Seppala content of candidate dogs, in order to ensure that the McFaul Seppala rootstock is represented as fully as possible in any SSSD registry.
- (5) Unique Seppala content can only be tracked reliably by summing up the Markovo Seppala contributions to each dog's pedigree, because Markovo Seppalas are the only remaining pure Seppala population.
- (6) Any percentage system that is based on summing up Seppala contributions from Siberian Husky breed foundation onward will not help us to preserve unique Seppala characteristics, since Wheeler and Poland Spring stock was incorporated as a majority proportion of mainstream Siberian Husky

lineage, including show bloodlines. Foundation-level Seppala content is not unique to Seppala strain, but is held in common by any and all Siberian Huskies. Exclusion clauses to eliminate unwanted bloodlines are vague, clumsy and unworkable. Non-unique Seppala is not what the SSSD registry is intended to preserve.

(7) There is too much mixed lineage stock, the result of interbreeding Markovo Seppalas with Racing Siberian Huskies, in too many kennels; if we allow all of it to enter the SSSD registry, McFaul Seppala type and characteristics will be overthrown right from the outset. Yet its presence cannot be ignored. Therefore any solution to the percentage problem must somehow make provision for this stock, in such a way that the pure Seppala set of characteristics is adequately protected.

**(8) The optimum solution for preservation of unique Seppala characteristics will probably prove to be two parallel registries: a Racing Siberian Sleddog registry which lower percentage stock can share with other Racing Siberian Husky bloodlines, and a Seppala Siberian Sleddog registry founded with Markovo Seppala stock, possibly also admitting mixed-lineage stock with a fairly high Markovo Seppala content percentage cut-off level (the Willett "conservative" recommendation of 97 percent would seem sensible), the latter registry including a "grade registry" in which near-Seppalas in excess of 90 percent Markovo Seppala content would be tracked for upgrading by breeding to Markovo Seppalas.**

(9) Any solution that fails to give strong preference to Markovo Seppala stock, that admits mixed lineage stock to the Seppala Siberian Sleddog registry on level terms with Markovo Seppala stock, or that fails to make some reasonable provision for the mixed lineage stock, will eventually prove to be the downfall of the very thing that a Seppala Siberian Sleddog registry exists to preserve; the unique Leonhard Seppala working sleddog bloodline.

(10) Provision must necessarily be made for the addition of fresh genetic material to the Markovo Seppala rootstock from time to time, but such additions must be carefully considered and closely controlled. They should be exceptional, not an everyday matter, and in the interests of continued Seppala uniqueness it is better that they should come from sources other than the present AKC/CKC/FCI Siberian Husky registries. New stock from Siberia, or one-time carefully-chosen studdings from top-flight Alaskan Husky stock, are more likely to satisfy the need for genetic diversity without any concomitant risk of assimilation of Seppalas into the "outcross" population. Experience has proven that to seek outcrosses among mixed-lineage Siberian Huskies will only mean the eventual loss of unique Seppala characteristics and genetics.

