

Sled Dog Sports Massage

Get your Paws off. **On** me!

By Wayne Baiton R.M.T.

How much do your dogs do for you? - Looking to do more for them?
How about massage!

Massage dates back many years and 'originates' from many cultures across the world. That's the reason for all of the different names and theories about how it works in the human massage world. Don't stress.

Some massage therapists may disagree, but massage is not magic. Your bond with your dog is quite magical. And this makes you the best massage therapist for them.

If one allows themselves to get lost in the literature available, the different types of massage seems endless. Complicated does not equal effective.

Massage is simple to perform for someone so used to physically handling dogs.

A few simple adjustments and we can provide different outcomes for our dogs. We need to match the right type of massage to what we hope to provide to our canine heroes.

Small adjustments in the physical application and/or the time frame of when the techniques are applied can be used to alter the effects of the massage. This helps the musher use the massage to meet the dog's needs at a given time.

Is it time to be relaxed, or is it time to be stimulated? Is it time to stress the muscle tissue or is it time to not stress the muscle tissue...tissue drainage, blood flow, etc.

Distance and Sprint mushing, Skijoring, bikejoring and cani-cross is all done at professional to recreational levels.

While the drive for performance can be pretty serious at times, fun and adventure are pervasive across all levels of participation.

Massage can help all dogs.



(Michelle Phillips and Renegade)

Try not to be distracted or confused by the large number of weird names that the massage industry has created over the years. Almost every type of massage technique you can physically apply, has dozens of different names and falls under numerous ideologies and theories, but often.... they are applied exactly the same.

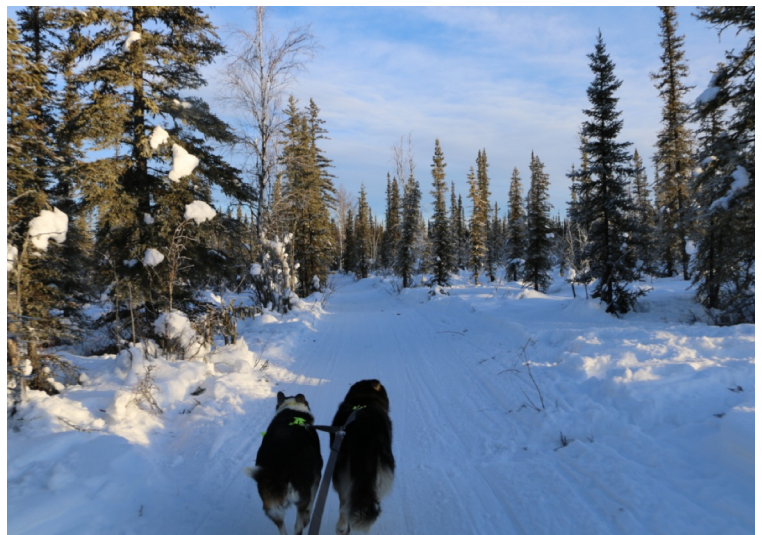
Sled dog Sports Massage is not to be confused in any way with veterinary medicine. Vets have the important and critical task of diagnosing and treating the various injuries and conditions your dogs may be afflicted with. It's very important that a veterinarian is consulted when your dogs' require a therapeutic intervention.

Sports massage is a non-medical skill that may provide a valuable benefit to your dog's performance and undoubtedly a strong increase in the bond with your four-legged friends.

Competitive mushing however, usually adds 'recovery time' as a primary concern. Often mushers are hoping for a fast and complete recovery for their dogs so the team is able to complete 'more' in a given amount of time, whether that be a multi-day event or a training season.

While the dogs' physical performance is mind-blowing, the physiological adaptation to exercise response to classic Frequency-Duration-Intensity-Specificity models still applies. Massage can hopefully allow for a bit more activity to be done safely without tipping over into the negative effects of overtraining.

If we hope to optimize the environment or opportunity for the dog to recover a little better/faster, adding in quality massage may help out.



(the girls...'motoring' outside Fairbanks)

Working sled dogs overlap these two divisions and share aspects of both. The physical load and schedule of freight hauling or the trap-line can be very demanding and the environment the dogs work in can be equally challenging. However, the demanding environment and the time spent with the dogs can be equally rewarding for the musher.

Hopefully the working musher can gather information from this article and benefit their dogs also.

Some sources on massage make bold claims on the 'benefits' of massage. "Healing injuries", "releases toxins from the muscle", "develops muscle tone" "promotes longevity" "removing waste products", "relaxing muscle knots" or "reduces spasms". All of which are not entirely accurate when the physiological effects of massage are studied in detail.



working with Hugh Neff's Team Yukon Quest 17'

The possible/probable effects of massage may be summarized more accurately as;

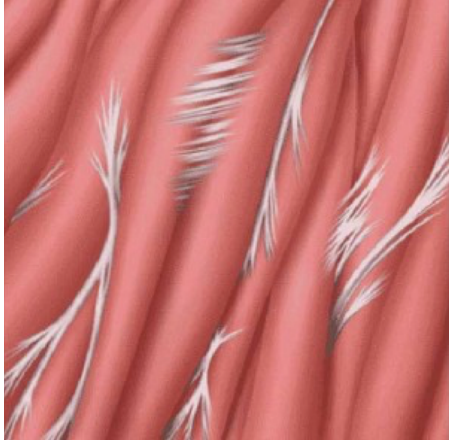
- 1) Redistribution of extracellular fluid (interstitial, intravascular and transcellular compartments – this means blood at the tissue level!)
- 2) Stimulation of various neurophysiological reflexes. (sympathetic (fight/flight responses[SNS]) and parasympathetic (rest/digest responses[PNS]))
- 3) Mechanical stimulation of the connective tissues. (focussed upon the musculo-skeletal system involved with locomotion – think muscles, tendons, fascia, etc.)

The first two categories can be broken down a lot further, but this requires tremendous amounts of study in biological details. Way too much to keep you reading. How and when the massage is physically applied are the primary factors which increase or decrease the chances of having any positive effect for the dog.

As before, don't let the words confuse you. How about, 'stimulating the nervous system and increasing blood flow' for the first two effects. Probably a bit easier to remember when your determining 'what kind of massage do my dogs need right now?'

It remains my opinion that the third effect surrounding the connective tissues is likely the most beneficial when it comes to sled dogs.

Working muscles respond predictably to repetitive mechanical stress.



Inter and intra-muscular adhesion is a result of micro-damage occurring from the intense exertion of long and/or hard hours of running. The break down of connective tissue and resulting inflammation sets the stage for the connective tissue to abnormally bind within itself and to adjacent structures. This is termed 'adhesion'.

The inflammatory response also sensitizes nociceptors (neurological O2, prostaglandin, temp, pressure, etc. sensors), and this contributes to the stiffness/soreness felt following physical exertion.

I'm sure you've felt it a time or two after a few early season runs (I mean your legs, not the dogs!) or pushing your sled up those hills.

Dogs experience this delayed onset muscle soreness too, (D.O.M.S.). It can set in within hours of the activity and peak 24-48 hours later.

During a training schedule, or even more difficult, a racing scenario, your dog's muscles undergo a significant stress cycle and the chance of 'too-much, too-soon, too-hard' can leave them stiff and sore. On occasion the excitement and social facilitation of a race environment can entice the dogs (and more likely you) to allow the dogs to perform more intensely than the training sessions leading up to the event.

When the dogs are allowed to over-do it a bit, is when they can benefit most from massage.

OK, so you and your massage come in and save the day! Oh, I forgot, you're already a hero in their eyes. With your hands trained in sports massage, it will make you a 'super-hero'!

The massage strokes or techniques to move fluid, stimulate the nervous system and disrupt adhesion are applied differently. They are, however, pretty easy to learn for mushers who are so used to physically handling dogs.



(Walter and his buddy Hugh Neff)

Due to the 'hand's on' nature of massage and the need to be mentally present while administering it, massage provides a very effective opportunity for assessment of your dogs.

Your familiarity with the dogs and their bodies allow you to find things like abnormal tissue texture, contour, heat, pain. If something's amiss, your more likely to find it.

While difficult, it does remain possible for you to harm your dog with massage. Aside from locating painful areas or abnormal anatomy which may require specific attention, you should avoid disturbing the larger superficial nerves, arteries and veins. These are located in the lateral (side) neck, groin and medial hind and forelimb (groin/armpit).

Pay attention to any signs of systemic shock (psychological and physiological. - ask your Vet), as proper emergent care for life threatening situations far outweighs the importance of continuing the massage.

The veterinarian remains at the top of the medical care hierarchy of an injured animal. Find your definition of a good one and nurture/treasure that relationship.

Learn how to do the massage techniques from someone who knows what they're doing, then practice and get good. Adapt the massage specifically to each dog's needs and enjoy the experience.

Here is a basic guideline on the performance of the massage strokes;

1) Passive fluid movement (increasing blood flow)

Massage techniques (or 'strokes') that are designed to move fluid usually conform to the primary vascular structures. They attempt to capture the fluid and physically push it towards the heart, following the return flow of the venous and lymphatic anatomy.

Attempts can be made so that the strokes are done in a way that doesn't disturb superficial arterial flow, nerves or other more fragile aspects of the dog's anatomy. You also should try to accommodate the skin, hair follicles and subcutaneous fascia arrangement. Sound complicated? It's not. Try to squeeze/push up the limbs (like the opposite of milking a cow, alternating hands up the leg)

Use flat hands moving towards the central chest when working on the torso. Try stretch the skin and subcutaneous fascia as far as it will let you as you apply pressure towards the centre of the chest, replace the hands closer to the heart and repeat. Do a few repetitions of the stroke in each spot along the route.

2) Stimulating the nervous system

These ones are easy. Its less about the direction or location of the stroke and its all about the speed of the moving hand and how close to surpassing the comfort level of the dog. To stimulate the SNS (fight/flight) the movements need to be brisk and heavy. Perhaps using all your fingertips at once to shake or jiggle and area.

The stroke to stimulate the PNS (rest/digest) is more like a slow soothing petting of the dog. Broad easy strokes flowing in the direction of the hair follicles (just like almost every canine massage video you'll see).

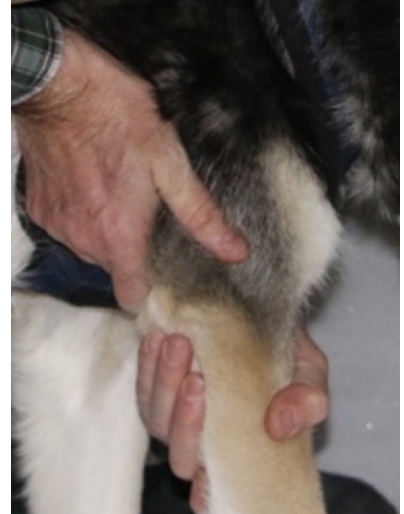
3) Disrupting adhesion

An effective way to address the needs of the connective tissue is to push pressure across the fibre direction of the musculature. Almost every detailed picture of canine muscular anatomy will include numerous little lines illustrating the muscle fascicles/ striations which can be termed fibre arrangement.

Learn and remember them.

Work your hand contact or thumb at 90 degrees to the fibre arrangement (see my hand on Taiga's triceps. Using the base of my thumb moving rearwards across the muscle)

Move either in one direction or both if the area allows for it. It doesn't require a large number of repetitions. About a half dozen strokes over the chosen area/muscle is plenty if done with a progressive heavy pressure.



Listed here, are 6 typical classifications or types of Sports Massage;

Each type has its 'best fit'. Just like tools.

What's better, a chainsaw or a bucket? It's difficult to answer that if you don't know what the particular job is.

While numbers 2 and 3 are where you, the musher, may have a significant impact on your dogs' performance during a race, the others have their place too.

1) Pre-Event massage;

The type of massage that is performed within hours to minutes prior to an athletic event, training session or any physical activity. This should concentrate on increased blood flow and sympathetic neural stimulation – Not that those harness banging beasts need it!

2) Inter-Competition Massage**

The type of massage given to the dog between events or heats or during the short rest periods while engaged in longer events or activity. Initially after stopping the importance of blood flow focus is paramount. The opportunity now also exists for slower full-body techniques which allow for injury assessment.

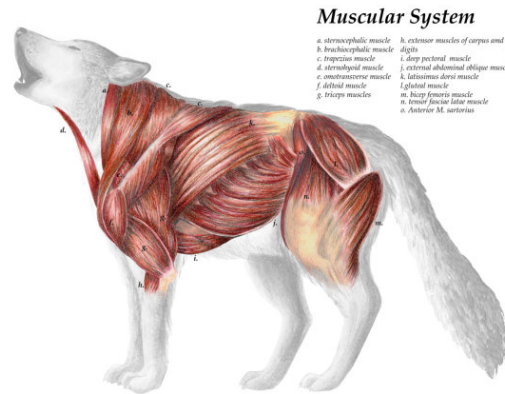
If the rest period allows enough time for a mild inflammatory response to set in, connective tissue adhesion can be addressed every 2 hours. The final massage prior to re-start should be focussed again on blood flow and sympathetic stimulation.

3) Post-Event massage**

This type of massage is given to the dog following the finish of the activity and where the dog has at least 12-24 hours of complete rest available. This time frame provides opportunity for a progressive series of varied techniques.

As soon as the dogs come down, perhaps after feeding, blood flow and parasympathetic (relax) stimulation should be sought so that they can rest.

Approximately 2 - 4 hours later, the connective tissue related techniques should be applied in order to address the adhesion which begins to set up quickly. This and blood-flow techniques can be re-visited every 2 hours, pending on the sleep and eating schedule. Sometimes sleep outweighs the importance of massage.



4) Maintenance massage

This category of massage is done on a repetitive and re-occurring basis to assist in the recovery during a training program and help minor injuries from developing into major ones. It will combine techniques and theory from Inter-Comp, Post Event and injury care. The techniques may be more anatomically specific for each individual dog and done in a time frame that is a little more casual when compared to race time.

5) Injury care massage

This type of Massage treatment is provided with specific goals to assist in the recovery from injuries of the musculoskeletal system. It remains very important that therapeutic or rehabilitation types of treatment are provided under the recommendation/supervision of a Veterinarian.

Using massage therapy as part of injury care requires a significant study of anatomy, physiology, pathology, kinesiology and other bio-sciences. More detail than this article can provide.

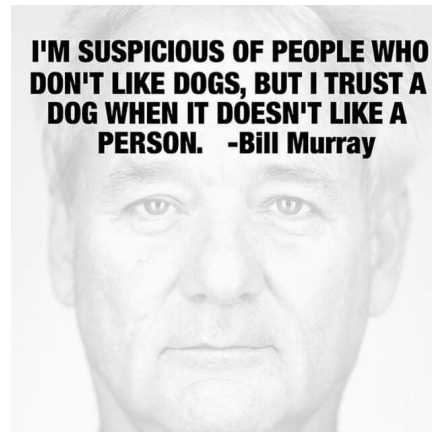
6) Relaxation massage

This type of massage is the most common type of massage that is done in the animal/pet world.

It is a form of petting with intent, which makes it easy to apply and very safe for almost any dog. Most dogs are very receptive to this type of massage, and while it may possess benefits, the physiological effects are limited in regards to a sled dog's needs.

The effects of massage can be broadly categorized into psychological (to the mind) and physiological (to the body). Technically, these two things are interconnected and it is rather difficult to affect one and not the other, but that's a good thing.

Add in the trust, loyalty and dedication that is built between a musher and their dogs, and massage can provide a very holistic opportunity to interact and benefit together with your best friends.



One major difference between performing massage on a human compared to a dog is the understanding of what's going on at the moment and what's *going* to happen later. No one has to tell you that your dogs live 'in the present'.

Relaxation Massage (which feels really nice, but does little to address the effects of training/racing) stands apart from the majority of other types of massage. It feels good, period.

It may be difficult to communicate or explain to your dogs that certain types of massage might not feel really nice right now, but it will feel great later.

A lot of the more effective massage strokes are typically performed with deeper and more deliberate pressure, and are, at times, a bit uncomfortable. Be careful.



(Dave 'Dalton Gang' leader with his leaders, Denali and Healy)

For the dog, if it hurts, it hurts. Remember deliberate pressure is not necessarily painful pressure. My hope is your skill rises to the level of being able to provide safe, effective and efficient massage technique for your dogs.

Your relationship with your dog's and their trust in you will hopefully allow them to tolerate the deeper massage in certain situations, which will open up additional therapeutic opportunities for the massage to have greater effects.

The redundancy of applying the massage over and over on them will hopefully allow them to accept it as part of their routine. Ease them into the process and they'll love you even more for it.

Remember, as with other negative experiences, the dog's reaction to a mistake or over zealous massage (too painful), could result poorly, so we owe it to them, to take it seriously.

The use of various liniment, essential oils, salves and other additives are commonly used by mushers. Some use what is recommended by others and some create their own massage lotions.

Extreme care must be taken when applying things like this to your dogs.

If the liniment contains Capsaicin (common pain relief chemical), and is applied topically with massage, (especially to the wrists/feet), the remaining liniment (or additive) can easily get into the dogs' eyes or nose.

With the historic popularity and loose regulation of DMSO (dimethyl sulfoxide, a carrier agent/anti-inflammatory) makes it even easier to introduce various substances past the protective barrier of the skin into the bloodstream. Many chemicals can be toxic at certain levels.

Be very careful if you fall into the, 'if a little works, a lot must be better', mindset.

Please be aware of what your introducing into and onto your dog, and perform your due diligence on knowing the nature of these chemical substances.



Remember, sports massage does not require a lotion or lubricant.

The dogs connective tissue/skin are so extensible; you can perform a wide variety of technique without having to glide over the surface of their coat to gain the physiological effects of the techniques.

With all this in mind, the trust bond that we have with our dog(s) will be the single most influencing factor that will make YOU (and maybe your handlers), the BEST massage therapist for your dog. A stranger will not be able to get results anywhere close to what you can achieve with your dogs.

The individual techniques of the various types of sports massage are fairly intuitive and easy to perform. With some attention to the muscular anatomy and care of the related vascular and neurological structures massage can provide a safe and effective enhancement of your dog's physical performance, injury prevention and most importantly building of the bond between you and your dogs.

I have offered short courses in in the application and theory of Canine Sports Massage for awhile now and love getting out there with my dogs.

I would be happy to work with any musher interested, regardless of competitive level and experience with the sport.



(rolling canine sports massage school!)

I'm not a professional musher. I can barley call my skijoring recreational, but I have spent a few decades learning, performing and teaching therapeutic and sports massage. Being a checkpoint volunteer and doing a short presentation at the 16' Quest gave me an awesome experience to meet and witness first hand, the commitment of competitive mushers and the devotion to their dogs.

Enjoy and thanks for reading.



Sincerely, Mixxy and Taiga...
And the lazy dude out back!

Happy to learn more and answer questions anytime; feel free to contact me directly;

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