



## Preparing for the Yukon Quest: A Rookies' guide

### 1. Overview

**Expect the Quest to be cold,** very cold. Temperatures of minus 50F to minus 60F are not uncommon. On the other hand, it can be as warm as +40F.

**Be prepared to rely on yourself for long stretches.** There are 9 checkpoints – not counting the start and finish. They range from 50 miles to 200 miles between them.

The cold and the isolation can be very devastating to mushers. Obviously there is the physical aspect. You can easily freeze your fingers or feet and be out of the game. But consider and take very seriously the mental aspect. Severe cold sucks not only warmth, but energy and good spirits as well. Getting depressed will take you out as surely as frozen fingers will.

**In the cold, there is more to do and even the smallest of chores become more challenging** and will take a longer time to execute. Hydration and caring for yourself and the team becomes critical.

You will wear bulkier clothes and more of them, and you must guard against sweating in them. Your level of frustration will rise.

The dogs will need to wear coats and in many cases flank and penis sheath protection. They will need to eat more calories and their food will need to be warm. Staying hydrated will be challenging but essential.

Even your hand warmers will freeze and become useless unless you warm them first. Alkaline batteries must stay warm to function.

**Know your gear;** how it functions in the cold, the wet, and the wind. Know how long it takes to dry. Learn how to do everything with gloves on.

Your gear is useless if you lose it. Put dummy strings on your mitts. Develop good habits for keeping track of everything. Do not just toss things down in the snow.

**Develop a routine.** You will be tired. Even on a 6 on- 6 off schedule, you will get about 3 hours of sleep every 12 hours. And that is if you are very good at your routine. Develop a routine for caring for the team and yourself during your rest stops. Do this

routine every time you train the dogs and you will be able to take better care of your dogs and be able to do so even while dead tired.

**Dogs that are suited for the Quest** generally have a good insulating coat, good feet, no dewclaws, eat aggressively, are not prone to injury, do not fight, are easily caught when loose, and in many cases are spayed and neutered.

Dogs with skimpy coats and dewclaws require more intensive maintenance, as well as dogs that are prone to sore wrists or shoulders, etc.

Your dogs will get tired at some point. If you have properly trained, conditioned, rested, and fed them, they will snap right out of it. Also, dogs are very perceptive of their musher's mood. You may have to put on an Academy Award winning performance at some point to avoid bringing the team down.

Other useful skills are: fire starting, snowshoeing, navigation.

## 2. Training for the Race

**Conditioning: developing muscle mass and endurance.**

**Training: developing brain mass and experience.**

**Sled dogs should be fed a high-quality feed** even in the off-season. Dogs use protein to build and repair muscle, and they use fat for energy. Carbohydrates are **not** used effectively by dogs for energy. In the summer the protein/fat ratio may be 30/20, but in the fall when they are developing their winter coat and beginning conditioning, they need higher levels of protein and fat, such as 32/25 or even 35/26. This is a good time to use the feed that you will use on the race. You may need to supplement fat up to 60% of the total calories when extremely cold or under heavy training.

Keep your dogs at optimum weight year-round.

**Dogs need exercise.** These dogs are athletes and should not drop to zero condition during the off season. Free-running, swimming, and cart training are options to consider. Dogs are also quite social and should never be ignored.

It is very important to have as many leaders as you can, certainly more than one or two, in your team. Off-season and early season four-wheeler training is a great time to develop leaders.

**Train and condition yourself.** Carrying 5 gallon buckets develops good upper body strength but that's about it. Consider toning those extra pounds into muscle and developing your cardio-vascular system. Good physical condition may give you a good mental advantage. Also, train yourself to drink plenty of water. It has been said that many mushers wouldn't "make the team" due to poor eating and drinking habits. And train yourself into good organizational and routine habits.

You can even train yourself for camping, without dogs, right in your own yard: Fire up the cooker. Test your sleeping bag. Make sure your personal food thaws and is edible. Pack your sled. Practice doing everything with gloves on, etc.

**Develop your dogs' trust.** Be consistent in how you handle them. Never lose your temper. Keep them safe from bullies. Be honest in their and your abilities. Challenge them but do not push them beyond their limit.

**Avoid routine in dog training.** Don't run the same trail all the time, making the same turns and stopping in the same places. Mix it up. Run different distances and different speeds. Also, within reason, the worse the weather (cold, windy, etc.), the better the training. Consider trail conditions and train accordingly to avoid injuries. The dogs should experience other teams, glare ice, open water, deep snow, loose dogs and people, snowmachines, and even bicycles on the trail.

**Be proactive.** Learn how your dogs move as individuals. Know each dog's gait and pay attention when his gait changes. An abnormal gait is an indication that the dog is tired or injured or maybe even suffering from ulcers or myopathy. Move the dogs around in the team, and change sides, often. If something isn't working right, fix it or change it right away. Be sure the harness fits. A fall harness may not fit as well once the dog's winter coat comes in and he has developed more muscle. Keep your gear in good repair.

**Check each dog after each run.** Part of your routine should be to check over every dog after every run. Start at the nose and head, go down each shoulder, gently move each front leg through range of motion fore and aft, flex the wrist up and compress the shoulder. Examine the foot thoroughly, looking for worn nails and pads, nicks and cuts, and sores or splits in the webbing. Feel the back checking the body weight and then put the hind legs through range of motion and check the feet. Males should be checked for rubs between their testicles and leg, and frost bite on the testicles and penis sheath. Check females for signs of estrus and frost bite on their vulva and nipples. Do this every time, even in fall training. It will become second nature and you will pick up on early signs of injury while there is still something to be done about it.

Feed the dogs while they are still on the gangline after each run before taking them back to their house. It simulates the race and you will see which dogs eat readily and which don't. This should be a part of your routine.

### 3. Fall Conditioning

Many mushers use a four-wheeler in the fall to begin conditioning and training the team. Be very careful to not overheat your dogs. Provide water for them on the trail even if you have to carry it. Keep the runs short – less than 5 miles and slow – less than 10 mph, until the temperature allows more.

**Open-throat breathing is a sign that the dog is overheating.** Cool him down immediately with cold water applied to his flank and stomach areas especially.

**Watch their feet.** Depending on the surface they are running on, their nails and pads may become too worn. Decrease the miles, find a better surface, or in some cases you may have to give the dog some time off.

The goal of fall conditioning is to **build a base of good muscle.** Runs should be slow with the dogs pulling a load.

**Conditioning requires recovery.** Many mushers condition one day on – one day off. However, try not to give three days off as you will lose ground on the conditioning.

As the temperature permits, run at different times of the day and night. Racing requires round the clock running.

**Remember that you are training for the Yukon Quest,** not the North American sprint race. Many top mushers do not run the dogs more than 10 to 12 mph.

## 4. Snow!

You may have to load up the team in your truck and look for snow to train with a sled. A good rule of thumb is to be able to run **60 miles in 8 hours in good form by the first of January.**

The Quest has a lot of hills, so it is a really good idea **to train in hilly areas** when you can.

Do not rely on just a couple lead dogs. **Continue to develop leaders.**

Don't just train for distance, **train for what you will experience on the trail.**

**Take care of their feet.** Many snow conditions require the use of booties. Watch for splits, also called fissures, in the webbing of their feet. There are a good many powders and ointments as well as dietary supplements available to help keep feet in prime condition.

**Snacking** during runs helps keep a good level of energy and aids in hydration. Raw meat and fish contains nearly 80% water. Fat metabolizes into water.

A general rule for snacks and meals is: the colder the temperature the warmer the food and vice-versa. Snacks can be meat, fish, lamb, dog-sausages, soaked kibble, chicken, whatever the dogs like. Their desires may change with the temperature or for some reason known only to them. The snack is not a meal, keep the size and shape easy for them to eat.

**Enter some mid-distance races such as the Copper Basin 300.** The CB300 is similar to the Yukon Quest in temperature, terrain, and the use of a truck and handler.

**A note about gastric ulcers:** studies have shown that dogs running 100 miles often develop gastric ulcers. You may consider giving 20mg famitodine when your training reaches this level. You should certainly give it when racing. This medication can be bought at Costco for a good price. Look for the generic label. It can be given with food.

**Simulate the race:**

Snack your team during runs, camp often, run at all times of the day, bootie their feet, and pack your sled for training runs as though you were running the race. Get into the habit of drinking water while running the team.

**Sample routine for camping:** Secure the team – snow hook or snub-line both the sled and the front of the gangline. Remove the tugs from the harnesses. Remove the cooker from the sled; fill with snow or water and light. Remove the booties and examine each dog. Treat as needed. Periodically check on the cooker. Pick up the booties. Put coats on the dogs if needed. Feed the dogs and start another cooker of water. Pick up the bowls. Put down straw. Feed yourself. Thaw or soak food for the trail in the cooler. Sleep. Get up, offer dogs water, pack sled, bootie the dogs and go.

Note: Do not use the cooker for anything but boiling water! Keep it clean! Use the cooler for soaking, thawing, mixing etc. Many mushers line the cooler with trash compacter bags to keep it sanitary, as well.

## 5. The Sled

**Sample of what is in the sled:**

Mandatory gear: (sleeping bag, snow shoes, ax, cooker, booties, and vet book and promotional gear)

Cooler to keep things from freezing, dog food appropriate for the run, dog snacks, people snacks, meals, and thawed drinks, fuel for the cooker, matches, napkins, dog coats, flank protectors, dog bowls, extra tugs and neck lines, an extra harness or two, two snow hooks and a front-end hook, a snub line, two headlamps, batteries, cold weather clothes, emergency clothes and dog food, spare boots, spare runner plastic, straw as needed, blankets if you use them, and a vet kit with the following: wrenches and bolts, drill bits, hose clamps, baling wire, extra pins and cotters for the runner plastic, seine line, and hockey tape. Plus, antibiotics: amoxicillin, cephalexin, metronidazole, - anti-diarrheals: blue heron, tylenol powder, immodium, and pain relievers for the musher, famitodine, stapler, vet wrap, safety pins, spare bulbs for headlamp if not LED, moleskin, wrist wraps, algyval or equivalent, thermometer, space blanket, zip ties, rabies certificate copies for the entire team, foot ointments and antibiotic cream, and latex gloves for

handling ointments and dog food. Remember your prescriptions and pack spare glasses or contacts if you need them.

## **6. Your Race Plan**

The Yukon Quest generally breaks up naturally into 50 mile runs between checkpoints, dog drops, good camping spots, and hospitality cabins. Some of these runs are tougher than others because of hills or jumbled ice. Birch Creek and the Yukon River are notorious for being cold.

Your team may run 50 miles in 5 hours at home, but do not count on them to do that in the race. Research some times from past mushers that have comparable teams to yours to get an idea of what to expect. Be very conservative, because you do not want to cut yourself short on dog food and supplies in your food drop. Base your feeding on the energy requirements of your dogs. Consider the distance, conditions, and difficulty of each segment. If in doubt, put in extra. You should count on 60% of the dog's calories coming from fat. However, do not mix the fat with the meat beforehand. Add fat as needed.

Do not use any food on the race that you haven't tried in training. The same goes for gear.

Read Schandelmeier's guide to the Yukon Quest – located on the Yukon Quest website for detailed information about the trail.

If you plan on staying in hotels – especially in Fairbanks, Dawson and Whitehorse, book the rooms several months in advance.

### **Food Drop**

- Pre-cut and pack meat in porous bags to keep the meat from going bad if it thaws.
- Protect everything else from leaking meat bags.
- Freeze any pre-made musher meals in flat seal-a-meal or zip-lock type bags, the flatter the better so it thaws and heats up much quicker. Note: you may hear that there is food available at the checkpoints. This may be true, but do not rely upon it.
- Powdered drink mixes are easy to add to a thermos of hot water. Pack in single serving baggies.
- Clearly label everything inside the drop bags.
- Use woven poly bags, and load no more than 40# in each.
- Be consistent when packing. For example, bag number 1 has everything you need for the checkpoint, bag number two has the first run of the upcoming leg and number three has the 2<sup>nd</sup> run and so on.
- Write your name and the checkpoint name on the bag large enough to find it when you are brain-dead. Mark bags for each checkpoint 1 of 4, 2 of 4, and so on.
- Securely close the bag with tape and zip ties, leaving no sharp points or edges.
- Do not forget to send extra food for the dropped dogs, and pre and post race meals for the team!

- You may want to keep a list of what is in each bag.
- You receive one bale of straw at each checkpoint, but you may want to order extra.
- Remember that you will not be able to send/take meat across the border in your truck. Use the Yukon Quest food drop for all your meats.

## 7. Your Race Handler/s

**Your handler can make or break your race** so choose your handler wisely. This person should be adept at handling the dogs and be willing and able to give medication and any other therapy, such as massage, stretching, and light exercise in addition to feeding and watering. This person should also be skilled in winter driving and able to do all of this in very cold (minus 50) weather. This person must be level-headed, and they should support you mentally. It may take more than one person to fill this role. Encourage your handler/s to cooperate with the other handlers and race personnel. There may be times where it is a good idea to convoy or car-pool.

Your handler will need a headlamp, tine rake, leaf rake, 55 gallon size heavy duty trash bags, and a toboggan-style kids' sled to clean up the team parking spots at the checkpoints. They will also need a bucket or jug for water, bowls for dropped dogs as well as drop chains. For Dawson they will need a snow shovel and the materials to build an open-ended shelter for the team, such as a large tarp and a lot of light-duty rope. You should also have pickets for the dogs in the shelter. Some mushers use ½ of an airline kennel to bed their dogs in. You may want to include a tent for the handler and/or yourself.

You should put together a guide book for your handler/s. It should cover each checkpoint: where it is, how to get there, where to get fuel, and where the actual checkpoint is, if known. Note that some gas stations are not open 24 hours in the winter. Include a copy of the current race rules and handler guidelines.

Include instructions for Dawson: what type of shelter you want, what schedule you want for feeding the dogs, how to care for the team, where to take the sled for thawing and repairs, and yours and their accommodations, etc. Expect to be very tired upon your arrival in Dawson. A good, well-informed handler can allow you to get a lot of good rest. Above all, remember that the team is your responsibility; anything the handlers do for you is a bonus. Be sure to treat this person like gold!

## 8. Dog Truck

Your truck should be outfitted with a battery heater, oil pan heater, and block heater with 100' of winter grade extension cord. Other essentials are quality winter tires, tow strap or chain, snow shovel, jumper cables, battery charger, spare belts and head light, spare tire

with tire iron and jack, road flares, ice scraper, maps, extra fuel and fluids such as oil, power steering and transmission fluids, and antifreeze. Have emergency gear such as a sleeping bag, hand warmers, gloves, plus food and water for all the people and dogs on board. Be sure to carry a set of rabies certificates for the team in the truck. Have your truck is in top running condition.

## **9. VETERINARY INFORMATION/DOG CARE**

The veterinarians' goal is to help you and your team do your best. They are not "race police". Use the vets to your advantage!

- In the 2011 Yukon Quest, mandatory veterinary evaluations will take place at Braeburn, Dawson City, Eagle and Two Rivers. While these evaluations are mandatory, veterinarians will also be present at all checkpoints and mushers are encouraged to use them to further evaluate your dog team.
- TIP: Try to extend short mandatory layovers in your race strategy in order to maximize efficiency. For example, because it is required to stop at Mile 101 to see a vet, have the vet see your dogs as soon as you reach the checkpoint and then because you are already stopped, schedule a rest period after the vet check.
- TIP: If possible, attempt to seek veterinary evaluations as soon as possible in your checkpoint routine. If the vet's are able to evaluate your dogs before they go to sleep there will be little interruption to their rest period or your race strategy!
- Veterinarians will be mainly examining your team's hydration, appetite, and weight. Heart and lung exams are also normal procedure for veterinary checks.
- If you have noticed a specific problem with your dogs, it is best to mention it directly to the vet. This is especially important with orthopaedic issues.
- TIP: Be sure to be on schedule with all vaccines and deworming! Have these obligations out of the way well in advance of the Quest.
- When asking for help with a problem, remember that they are in charge of the health and safety of hundreds of dogs. So, don't be afraid to ask for help with real issues, but in cases where you are able to help yourself, do it!
- Quest Veterinarian's medical supplies are limited. They should not be relied on for all medical material. Take note of what medical supplies you require on long training runs, and bring your required amount for the Quest.
- TIP: Trim all toenails a week before the race.

### **A. Diarrhea**

- Metronidazole is a common drug used to treat diarrhea in dogs. It is important to remember, though, that if a dog does not respond to regular dosages, higher doses should not be used. Overdoses of Metronidazole can lead to neurological damage

and even seizures in a dog. A good rule of thumb with all drugs is to speak to a veterinarian before use.

- TIP: If you see signs of diarrhea (soft stools) immediately begin treatment instead of waiting for the actual diarrhea to come.

## **B. Salmonella**

- Due to the raw nature of the meat that is fed to the dogs, mushers are at risk of becoming ill due to Salmonella bacteria that is present in the food.
- Use clean gloves when preparing the dog food, and be sure to wash your hands when finished- especially before you eat. Alcohol based sanitizer is an effective and convenient cleanser to use.
- Be especially careful with meat that looks as if it has been thawed and then frozen again. This can occur with food in food drop bags, and it increases the levels of salmonella in the meat.

## **C. Myopathy**

- Myopathy is a rare, but deadly, condition that can lead a sled dog to sudden death.
- Myopathy affects rested dogs and therefore usually happens at the beginning of the race, and after the 36 hour rest period in Dawson. It involves the breaking down of muscle proteins, which leads to the most obvious symptom of the condition: Brown urine (coffee coloured, sometimes with a burgundy tinge). If this occurs:
  - Immediately stop running the dog. Load him in the sled and DO NOT unload him to run until he is seen by a veterinarian.
- If a dog stumbles while running and no orthopaedic problems are observed, pull the dog until it can see a veterinarian; it could be myopathy.

## **D. Gastric Ulcer**

- It is important to watch for dogs that vomit while on the Quest. This can be dangerous as the dogs may aspirate as they vomit; they may also have a gastric ulcer.
- Other signs of ulcers include not eating and pain in the abdomen.
- Use 20mg of Famotidine daily while racing, to help prevent ulcers.

## **E. Temperature**

- A thermometer should be on hand
- 105° Fahrenheit is a normal temperature for a dog that is just finishing a run. 107° Fahrenheit and up is an unhealthy temperature.

## **The Race**

Be on time or even early to all the vet checks, meetings, etc., to reduce stress.  
Avoid over-feeding your dogs before the race and for the first day or so, especially.

Tip: It is easy to attach the race tags if you put them on new collars. Buy a light colored collar, mark the dog's name and your name on it, attach the tag, and then put it on the dog. Be sure to adjust the collar so it is not too loose.

Be smart on the first day. Keep your team to a pace they can maintain for a thousand miles.

Ask race personnel for weather forecasts and reports on upcoming trail conditions.

Do not over feed the dogs on the first day.

Remember to run your own race, not someone else's race plan!