

Sunset Trail District Klondike Derby Participants Guide

February 28th – March 2nd



Revised: 12/11/13

Introduction

A Klondike Derby is a competitive event amongst Scout patrols, Varsity teams, and Venturing crews. The course is laid out with approximately 11 stations that will require participants to demonstrate their Scouting spirit, outdoor skills, and teamwork.

This derby like others is based upon the unique challenges faced by early settlers in the Yukon Territory. These challenges include transportation, mail delivery, and general survival. This is an opportunity for Scouts to complete advancement requirements, meet Scouts from other units, and compete in an exciting event!

Expectations

Registration for this event will be by team. Each team will consist 4-6 youth, male or female. Units without enough interested youth should contact the Event Director to arrange for multiple-unit teams. Teams do not have to consist of youth from the same unit, patrol, or program (i.e. Boy Scouts, Venturing, Varsity, etc.). Additionally coed teams are permitted so long as YPT guidelines for camping are followed.

A list of required equipment for the event is provided on page 7. Teams who do not have items on the list will have a penalty applied to their overall score, based on the number of items not present. Teams must demonstrate appropriate Leave No Trace camping for winter conditions, and be prepared for the weather, as you will be sleeping outdoors in either a constructed shelter (e.g. tent, tarp structure) or snow cave.

Teams will be provided with a bundle of mail to deliver along their route. Mail must be delivered in the correct quantity to the correct location. Some towns may give you mail to deliver to other towns.

Teams should arrive no later than 2100 on Friday February 27th. Teams must camp in the designated camping area Friday night (Whitehorse). Friday night campsites will not be scored as part of the event, but should follow Leave No Trace principles. Sites must be inspected by the staff before you may begin the event Saturday Morning.

Teams will camp in the field Saturday night, and should prepare for this accordingly. All teams will be given a common signal to stop their travel for the evening and begin preparing their campsites. These Campsites will be scored and higher scores will be awarded to teams camping outside of "town" and to teams choosing to utilize snow caves.

Scores will be based on a combination of total travel time, station completion, accuracy of mail delivery, and adherence to the spirit of the competition. An awards ceremony will be held Sunday morning once all teams have completed the course.

Additionally teams will need to construct and use a “dog sled” as their primary means of transporting equipment and mail. Plans for a possible sled design have been included on page 8 of this manual. While scouts are not limited to this sled design it is recommended. Store bought sleds will not be allowed, and will result in a lowered team score.

Arrival Procedures & Check-In

Plan to arrive Friday between 1630 and 2130. Park all vehicles in the main parking lot, just to the right of the camp entrance and unload. All gear will need to be loaded onto sleds/backs and carried down to the parade grounds (Whitehorse), where you will make camp for the evening.

Team Check-in Instructions

Once you have made camp please send your youth team leader and a buddy to the Baldwin dining hall (Post Office) with a copy of your team's roster and medical forms. The post office closes at 2200 hours and teams not having checked in by that time will lose vital points, and will have to check in Saturday morning.

Staff Check-in Instructions

One leader should check-in all participants from their units at the Post Office upon arrival to camp. Adults will receive special instructions for station operation and campsite setup at this time.*

Check-out Procedures

Units Leaving Sunday

A staff member will check your campsite and issue you a final clearance. You may not leave the event prior to receiving said clearance. The team's patches and awards will be distributed from the Registration area upon clearance.

Units Leaving Saturday

Units wishing to leave Saturday must inform the Program Director Friday evening at check-in so that arrangements can be made to score their Friday campsite. Note campsites scored Friday night will receive a scoring penalty for camping "in town". Additionally there is a possibility that not all stations will be completed Saturday and they may carry in to Sunday. Units leaving Saturday will receive a score of 0 for any uncompleted stations.

Health & Safety

Medical Forms

All persons must be covered by Parts A & B of the BSA medical form. Unit leaders must bring copies of the unit medical forms to the event. Additionally team leaders must have a separate copy of team member's medical forms to be carried with the team. Medications must be kept in a secure locked box or in a unit leader's car. If your unit does not have a lock box or does not wish to store medications they can be secured by the camp medic who will then administer them for the duration of the

weekend. Medications secured by the camp health officer will be returned at the end of camp.

Medical Facilities

Camp Baldwin is an isolated camp more than 20 miles from the nearest EMS post, and over 60 miles from the nearest trauma center. Response times will be reliant on prevailing weather and road conditions. As such our camp health officer, an Emergency Medical Technician – Basic (EMT-B), will be on station to treat all serious and acute medical issues. It is the responsibility of the teams and their leaders to treat minor wounds and injuries. All medical concerns regardless of severity must be reported to the camp health officer within 30 minutes of onset or treatment. Arrangements have been made for emergency medical transportation should it become necessary.

Water

We are in discussions with the Camp Baldwin property ranger regarding water availability. We will send an email to registrants prior to the event with further details.

Gray Water

We are in discussions with the Camp Baldwin property ranger regarding gray water dumping. We will send an email to registrants prior to the event with further details.

Lake Access

Absolutely no one will be allowed around, near, or on the ice that is the lake. Persons found to have broken this rule will be required to leave the property, and their team will be disqualified from the 2014 Klondike Derby.

Radio Communications

Due to the inherent risks involved in an activity of this type and the relative isolation of teams from other competitors, all teams will be required to bring and carry a GMRS capable radio (e.g. Motorola Talkabout). Radios will be set to channel 19.26, and will be used as a means of emergency communication between the event staff and teams.

Stations

Stations will be located in “towns” of the Yukon. Each “town” will be located at a different campsite or program area onboard Camp Baldwin. Please be aware that this event will be utilizing the entirety of the Camp Baldwin summer camp, and that towns will not all be centrally located. Prepare accordingly. Below is a listing of stations and general idea of what each station will involve.

Survival Rope Throw

One of your team has fallen through the ice during a river crossing. Rig up an appropriate rescue throw line and rescue your comrade. Once rescued, carry out appropriate first aid for submersion in the icy waters. Teams will be judged for their rescue technique, total rescue time, and actions taken to provide first aid to their injured comrade.

Pioneering

You must lash together a ladder from found materials to get your team and sled across a chasm in the snowfield that is too big to go around. Lash together an appropriate structure, using proper technique. This event is timed, and your ladder will be judged for structural stability, dressing of lashing and knot work, and appropriate construction.

Knot tying

You have found a village whose leaders need assistance learning to tie knots so that they can construct sleds. Using the EDGE (Explain, Demonstrate, Guide, Enable) model, instruct your students in how to tie a given list of knots. Each member of your team will be expected to participate in at least one instruction session.

Snow-blind

All but one of your team has been blinded by reflections off the snow watching a beautiful sunrise. Your uninjured comrade must lead you through construction of a shelter from materials on your sled. Shelters will be judged for construction stability and time.

Signaling

Using visual Morse code, you must communicate a message with a ship offshore and receive their response.

Orienteering

Demonstrate your team’s ability to navigate a given course using map and compass.

Search and Rescue

You have come across a skier requesting assistance in finding his friend who was lost in an avalanche. He has the search tools required, but has never used them before. Assist them in locating their friend and providing appropriate first aid.

.22LR Shooting

To supplement your supplies, you must hunt for food. Using an event provided rifle and ammunition, fire at a given target for score. Teams must utilize two shooters, and the team must work together to identify targets and adjustments to shooting technique. Rifles and ammunition will be provided for this station, please do not bring your own.

Fire building

Your water supply has run dangerously low. Construct a fire and boil a liter of water from the snowpack.

Snowman Build

Your team has some down time between mail deliveries and has decided to pass the time by building a snowman.

**Please note this is the first time this district has put on this particular event and as such all stations are subject to change, removal, or addition based upon the determination of the planning committee. Additionally please make note that partial scoring criteria will not be available for team planning until mid-February, with full scoring criteria only available onsite Friday February 27th. **

Required Equipment List

- Navigation
 - Map
 - Compass
- Sun Protection
 - Sunscreen
 - Sunglasses
- Insulation
 - Jacket, vests, gloves, etc.
- Illumination
- First-aid kit (One per team)
- Fire
 - Matches/Lighter
 - Fire Starter
- Knife
- Food
- Water Bottle w/extra water
- Emergency shelter
- Dog Sled (One per team)
- Water proof / Water Resistant boots
- 100' x 1/4" Rope
- Whistle
- GMRS Radio (One per team)
- Snow shovel
- Notebook and pen/pencil
- Sleeping Bag

Klondike Sled Recommended Design

Cross-country sled races deliver adventure, endurance and a wilderness challenge. And these plans are your ticket to that world. This sled is specially designed for Klondike Derby races in which boys—not dogs—provide the pulling power. Even though this sled is fast and strong, you don't have to be a master carpenter to build it. Cost of materials is about \$100.

How to Use These Directions

The instructions are divided into four parts: Building the Runners, Installing the Floor, Adding the Rails, and Finishing Up. Read everything at least once before you begin so you know how it all fits together. Then focus on each section as you work. Also, be sure to read “Prepared for Safety,” which follows. What's the point in building a Klondike sled if you get hurt in the process?

Building the Runners

The runners take more punishment than any other part of the sled. That's why they need to be made of tough wood. Ash is the material of choice here—the same wood used for snow shoes and old-time cross-country skis. It's tough and flexible, and the open grain holds wax well—an important detail that'll help win races.

If you can't find ash lumber where you live, oak, maple or hickory is good, too. Just don't use pine, cedar or any wood soft enough to be dented easily by your thumbnail. These are fine for other parts of the sled, but softwood won't last long as runners or runner blocks.

When professionals build dogsleds they cook the ends of the runners for about an hour in special steam cabinets, then clamp the softened wood to form curves when it cools. Sound complicated? It's really not. Since you need to curve only the ends of your runners, you can easily make your own steam cabinet using short lengths of galvanized duct pipe and an electric kitchen kettle. The plans show how. Make sure an adult is on hand to help you.

There's another option for runners. The plans show how to slice partway through the ends of the runners to make the wood flexible without steaming. This is called kerf bending, and it works O.K., though it does weaken the runners. They don't look as cool, either. Use this method only if nothing else is possible.

The fastest, easiest way to get your sled on the snow is to use a pair of old downhill skis as runners. Even though they're usually made of fiber-glass, skis can still be drilled and fastened easily to the rest of the sled. They're tough, too.

With runners ready, it's time to drill them for the No. 12 x 2-inch screws that fasten them to the runner blocks. The plans show where each block goes and how the screws are positioned. Because they're hardwood, you'll need to create pilot holes using a

$\frac{5}{32}$ -inch-diameter drill bit, to ease the entry of the screw. The plans show how to use screws as they extend through the runners to mark the runner blocks for accurate drilling. Also see “Drilling and Gluing” for more help.

Revised 12/11/2013

Installing the Floor

At this stage, you have two separate runners with four blocks attached to the top of each one. Now it's time to join these into a single unit using the four main floor supports. Cut these to length, then drill screw holes and fasten them to the runner blocks using glue and just one No. 10 x 1³/₄-inch screw per joint. Even though the front floor support is the same size as the other floor supports, leave it off for now. The plans show how the edge of the front floor support needs to be angled a bit, but that's a job for later.

Pretty easy so far, right? Don't get too confident because there's trouble lurking ahead, something that could make your sled crooked if you don't avoid it. Luckily, there's a slick trick to do just that:

With the two runners joined by the four floor supports, measure the length of diagonal distances taken from the outer corner of one floor support to the diagonally opposite corner of another. The plans show how. If your growing sled is square, then these measurements will be equal. Trouble is, they're probably not going to be, though that's no reason to panic. Remember how you put only one screw in each joint? That lets you push and pull the runners until diagonals are equal, plus or minus ¹/₈ inch. Once they are, the base of your sled is square. You can count on it! Now add the second screw to each joint to lock everything in place. Then fasten the floor boards with glue and screws.

The plans include a close-up view of how the front floor support, floor boards and runners come together. Take a close look at this now. You'll need to use a hand plane to angle the leading edge of the front floor support so the floor support and runners are in full contact where they meet. This is the hardest part of the project, but even this isn't a big deal. The plans show the angle to be about 35 degrees, but it will vary depending on the curvature on the ends of your runners. When all looks good, clamp the front floor support in place and drive screws through the runners into it. More screws will be added later through the sloped top rail to secure the floor boards. Adding the Rails

The sled's rail assembly is made of 8 uprights, 2 angled tops, and a hand rail. Like everything else on the sled, these parts fit together in strong, simple ways with screws and glue. Cut the four kinds of rail uprights you'll need now—two of each type—then fasten them to the runner blocks, straight up and down, with glue and two screws per joint. The rail uprights are listed longer than necessary so you can trim along the sloped top rails with a handsaw to remove a triangular block of waste after installation. Follow the plans for the location of these parts and fasten them now. You may be tempted to trim all the rail uprights now, but don't do it. Trim only the back rail uprights so you can install the rail handle, also using screws and glue. Leave the other rail uprights until the glue dries.

Finishing Up

Your sled's looking pretty good by now, right? But there are still a few things to take care of. The plans show the two ⁵/₈-inch-diameter holes you'll need to drill

through the floor boards, behind the front floor support, for the tow rope. You should also sand the sharp corners off the rail handle and sloped top rails, so no one gets splinters. Painting or varnishing your sled is optional. It'll look better if you do, but it is a lot of work, and it won't make the sled last any longer. Whatever you do, don't coat the underside of the runners. See "Wax Works" below for a speed-demon trail-tip.

Materials List

For the Runners Assembly

Runners	hardwood 1/2"-thick x 3 1/2"-wide x 89"-long	2
Runner Blocks	hardwood 1 1/2" x 3 1/2" x 3 1/2"	8

FOR THE FLOOR

Floor Boards	softwood 3/4" x 3 1/4" x 73"	5
Main Floor Supports	softwood 3/4" x 3 1/2" x 18"	4
Front Floor Support	softwood 3/4" x 3 1/2" x 19 1/2"*	1

For the Rail Assembly

Sloped Top Rails	softwood 3/4" x 3 1/2" x 82"	2
Rail Handle	softwood 3/4" x 3 1/2" x 19 1/2"	1
Front Rail Upright	softwood 3/4" x 3 1/2" x 14"	2
Short Middle Rails	softwood 3/4" x 3 1/2" x 22"	2
Long Middle Upright	softwood 3/4" x 3 1/2" x 31"	2
Back Rail Upright	softwood 3/4" x 3 1/2" x 40"	2

Trim front edge to fit curve of your runners, about 35 degrees.

Sled Plans Courtesy of Steven Maxwell, Len Churchill, and Boys' Life Magazine

PREPARED FOR SAFETY

Woodworking is fun—it may even become your career one day—but there's one thing you must remember. Always be careful. You must wear safety glasses when using any wood-working machinery, even if an adult is helping you. And don't forget ear protection. Earmuffs or foam earplugs work fine. And if you're ever uncertain about how to use any tool, ask for help.

WAX WORKS!

You can build the best sled in the world, but it'll never win races unless you've treated the runners right. It's a make-or-break detail, and wax is the key. The best kind is cross-country ski wax—the hardest type you can find, rated for 30 degrees below zero temperatures. Rub the wax onto bare-wood runners (not varnished) when the sled's indoors, smoothing the surface with a piece of cork to get rid of the lumps. Your runners won't feel slippery after this, but that's O.K. Once they get outside, on the cold snow, they'll slide along the trail like a lightning bolt. And the guys pulling will certainly appreciate that. Just remember to let your sled cool down before setting it in the snow. Warm runners can melt snow, forming water droplets that freeze, making the runners rough and slow.

DRILLING AND GLUING

Glue and screws hold this project together, and both are easy to use if you understand a few key points. First of all, don't use ordinary white, yellow or brown carpenter's glue on this project. They're great for indoor projects but are guaranteed to turn to mush when they get wet outside. Even some brands rated as water-resistant on the label won't last long if the snow turns to slush. What you need is something called type II wood glue. It's weatherproof and available under brand names like Titebond II and Weathertite. Polyurethane glue works well outdoors, but it's more expensive. Drilling screw holes is always more accurate if you hammer a nail lightly into the wood before you bore each hole. This makes a little crater so the drill bit won't wander off the mark as the bit starts spinning. After drilling holes in the runners you'll need to flare out the bottom end with something called a countersink bit chucked into your drill. This creates a cone-shaped pocket for the screw head, so it doesn't extend below the underside of the runner and drag on the snow. Holes drilled in soft wood parts don't need to be countersunk because the screws draw themselves level with the surrounding wood.

Directions to Camp

