



Yukon 1000 Canoe and Kayak Race

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Why is the race structured like this?

This race goes through some very empty territory, and we expect the tail of the pack to take a couple of weeks to make it to the highway bridge. The last boat might take much longer.

At the time of year that the race is being run, there is real night: it gets dark, and the river is absolutely not safe to be run in the dark. We want to stop overenthusiastic racers from paddling in the dark. The "conventional" way to do that is with checkpoints sufficiently close together that the tail can be sure to get there before nightfall. That would imply about 20 checkpoints, some of which would have to be staffed for a couple of weeks. That clearly can not be done. And that does not take account of boats being stormbound etc.

No. The only way to run this race is to use technology instead of people. Hence the [Spot devices](#). That then drives the rest of the structure of the race.

What maps are there for the river?

The Rourke map that should be familiar to people who have done the Yukon River Quest is good as far as Dawson. There is

another Rourke map that takes you as far as Circle. Past Circle, there is a problem. The USGS maps are OK, but dated, and the river channels gently change. The aerial photos on Google Earth are pretty good. If you print them out on waterproof paper, perhaps 12 to 20 pages to cover the river from Circle to the highway bridge, you should be in good shape. You will still have to watch for sandbars, slow channels, and so on. It should make for an interesting race.

And related to maps, here are some waypoints for the river: first as a [.kml file](#) which will load them into Google Earth, and again as a [text file](#).

What safety cover is there?

There isn't any. That might be a shocking answer, but it is the truth. It would be foolish even to pretend that we could patrol the river in the Flats in a useful way. There are too many channels. But we do require that you take those magic Spot devices, and you can press the panic button if there is a real emergency. If you run into a problem that does not constitute an emergency, you ought to be equipped to deal with it. It would be unwise to set out with less than three weeks worth of food, and plenty of warm clothes, and all the sorts of things you would expect to take on a three week trip. You should anticipate what would happen if you are stuck for a week because of weather, or injury, or who knows what. You can bail out at Carmacks, Dawson, Eagle or Circle. Fort Yukon has an air strip, but no roads. All these communities have some (limited) medical services.

There are also other boats on the river. This time of year you will meet other paddlers on the river before Dawson who can relay messages. Past Dawson you encounter little traffic until you get past Circle. In the Flats you will see river boats from time to time as people go to tend their fish camps.

What if something goes wrong?

It depends who is asking the question.

If you are a paddler, then you have to start making choices. There are communities along the river. At drifting speed you may be several days away from the nearest one. Unless there is an acute emergency you should be able to get to a village even if you have lost all your food and most of your ability to paddle. That doesn't help if you have lost your boat. (note: always tie up your boat)

There is river boat traffic on the river, more past Circle. If you are on a main channel, you can expect to see a couple of power boats a day. If you are in trouble you may be able to attract attention. There are also other teams out on the river who are **required** to give assistance to teams who appear to be in difficulty.

It is up to you, the paddler, to decide whether or when to push the HELP or 911 buttons on your Spot device. It is up to the paddlers and their emergency contact to decide ahead of time what HELP messages actually mean. Do they mean "we are not making anticipated progress", or do they mean "we can not make progress but do not need medevac"? But remember, your HELP status will appear on the web page and will be propagated out to other boats if they phone in.

Do **NOT** push the 911 button unless you have a real emergency requiring urgent action. the 911 message will be relayed by Spot directly to the RCMP or the Alaska State Troopers and is likely to result in a helicopter being despatched to pluck you out of the wilderness. In all likelihood they will leave your boat and gear behind. Unless this is what you want, use the HELP button instead.

Note: it is very hard to push any button on your Spot device if it is attached to your boat, you are on shore and your boat has drifted off. Make a habit of having the thing attached to you when you are not in the boat.

For the emergency contact, it is much harder. This is the worry position in the team. However confident the paddlers are, and however confident the emergency contact is in the team, they will dream up bad scenarios. Rule 1: Don't Panic. Remember that if it was urgent they would have pressed the 911 button.

There are really only two situations you have to handle: a HELP message, or a long silence. As discussed above, the meaning of a HELP message is something you should decide with your paddlers ahead of time. Similarly you should decide with your paddlers what a long silence means. There could be lots of reasons for a silence: equipment failure, battery failure, lost Spot device, lost boat, or worse. We can not tell you when to worry and when not to worry.

If we encounter a long silence or a HELP message, we will want that relayed to any boat that has a satellite phone. No boat will keep a satellite phone turned on: their stand-by life is too short. But we expect that some boats will phone in each night if for no other reason than to check the position of other boats. We ask that if a team shows up on the web site as status HELP, or status "OUT OF CONTACT", that you relay that information to your team on the river at least if your team is upstream of their last known location.

OK, suppose that you decide you need to take action. Now what? Well, if you want to pull the trigger on an emergency response then you need to contact the RCMP if your team is in Canada, or the Alaska State Troopers if your team is in Alaska. The contact numbers are as follows:

Location	Phone Number
Whitehorse, YT	867 667 5551 or 911 in Whitehorse
Carmacks, YT	867 821 5555
Dawson, YT	867 993 5555
Fairbanks, Alaska	907 451 5100 or 911 in Alaska

The RCMP and the Alaska State Troopers will know that the race is on. You will need to tell them the last known location of the team, when that was, and a description of the boat and the paddlers.

If you decide to start a search and rescue, please, please make sure that we are also kept in the loop. Phone us first. Keep us up to date with any developments. Especially tell us when the situation is resolved. Obviously we will tell you if any new information comes in. Let us hope we never have to worry about all this.

What is the river like before Dawson?

The river is generally pretty flat, flowing at about 7 kph on average. There are some minor riffles in a few places, notably in the section called the 30 mile River between Lower Laberge and Hootalinqua, and there are two rapids, Five Fingers and Rinks. Neither of these rapids should pose too much of a challenge. Rinks, for instance, is totally avoidable by going to the extreme River Right. That is not obvious as you approach Rinks: the river bends slightly to the right and you can not see the gap until you are quite close.

Five Fingers is more famous than threatening. It looks quite imposing, but if you run it right you shouldn't even get your deck wet. It is described in some detail [here](#).

Much of the time the river flows between fairly high banks, but camping spots are not hard to find.

There are a few sections where the river is wide and there are multiple channels. This is especially true just before Yukon Crossing, just after Rink Rapids, approaching the confluence with the Pelly, and from the confluence with the White to past the confluence with the Stewart. This is a foretaste of what the river is like in the Flats.

The preamble of the Rourke map talks about the river, as do the Gus Karp books.

There are places where you are a couple of hundred kilometres by river from any settlement. That means that if anything goes wrong, you are very much on your own. Think about that before taking any risks.

What is the river like after Dawson?

From Dawson to Circle the river is much like it is on the last 60 miles into Dawson. There are some high banks, some less high banks. There are a couple of places where the river widens out and there are islands and a choice of channels, but mostly just a big river making its way very sensibly downstream.

At Circle there is a change. The whole terrain changes. The Flats are, well, flat. By the time you get to Fort Yukon you will not even be able to see hills on the horizon. The river is broad and multi-channelled. If you choose the wrong channel, you will find the water is very slow. Or you may find yourself wading alongside your boat for a bit. But there are also reasonably fast channels if you pick them right.

Often the river is not very deep. You will find that in places even the fast channels are littered with snags. Beware of the weather. The river is sufficiently big and the channels sufficiently broad that the wind can whip it up like a lake, so you can find yourself contending with wind and waves as if you were on a lake, but with a current and snags to deal with as well. If you really like Big and Empty, you will like the Flats. This section of river is even more remote than the earlier section of the river. Do not take avoidable risks.

What sort of camping gear should I take?

Well, light, obviously. You need a tent — a real tent. It can rain, or hail, or even snow quite heavily. Best case, you are going to be on the river for 7 days. You want a tent that keeps you dry as you are not going to want to waste time getting things dry. The tent has to be free standing. You are not going to be cruising down the river looking for the best camping spots, you will take what you can find. That will almost certainly be sandbars or islands covered with willow. The bigger willows can hold a guy

line but that is all.

Bring a decent sleeping bag. You will be tired, and tired means cold.

Bring bear spray. The salmon are running this time of year. If you are lucky you will see a bear, but probably not in camp. Use sensible bear precautions: cook away from your tent, keep your food separate from your tent and away from your boat, etc. Last time I paddled through the Flats I had a black bear come into camp and he was very interested in my stuff, and it took some time to make him go away. Eventually he got a small shot of bear spray in the face.

A lesson I learned from that trip is that if you store your food and boat some distance from your tent (like you are supposed to), then you should have bear bells attached to them so you can hear if someone ursine is making whoopee with your stuff.

What sort of clothes should I take?

Clothes are too idiosyncratic for any specific advice to be useful. However, some general advice is possible. It can be hot. It will be cold. You have to assume that it might be raining and cold for days on end.

So you will need clothes for all those eventualities. Wool or fleece for the warm layers, quick dry synthetics or something like that for base layers. You will want to try to reserve a set of clothes to keep dry to wear overnight. Your warm clothes have to be adequate even when wet as you will not have time to dry them once they get wet. You will want rain gear. You should take a sun/rain hat and a warm hat. Several pairs of wool socks.

I find a fleece touque very useful overnight: It keeps my head warm and I can pull it down over my eyes and pretend it is dark.

What's with this enforced stop. Why and How?

There is a lot of daylight this far north even towards the end of summer, and August is towards the end of summer. But it does get really dark. The river is too big and remote to paddle in the dark. So we have this scheme where you have to check in with your Spot device as you stop for the night, and again in the morning as you leave. This enables us to monitor when you stop. We have been around the houses a few times on this, and the idea is that we want you off the river early enough that there is no real chance of getting benighted, but also give you some flexibility if you can not find a suitable, safe camp immediately.

Here is a table showing the sunset, end of twilight, start of twilight, and sun rise times for Whitehorse, Eagle, and Fairbanks for the 27th of July and the 3rd of August. That's one week and two weeks after the start.

	Sun Set	End of Twilight	Start of Twilight	Sun rise
Whitehorse				
27 July	22:48	23:57	04:17	05:23
3 Aug	22:30	23:32	04:38	05:40
Eagle				
27 July	22:50	00:51	02:12	04:10
3 Aug	22:25	23:53	03:03	04:34
Fairbanks				
27 July	23:16	01:36	02:20	04:36
3 Aug	22:52	00:20	03:20	05:00

To give people a chance to find a half-way decent (and safe) campsite, we are giving you a bit of flexibility. You MUST stop by 23:15. Note that if you leave it that late you are paddling after the sun has set. That is OK as the sun sets very slowly, but not optimal. If you stop any earlier than 22:15, you may be fumbling around in the dark as you break camp, leaving things behind and breaking things. Not to mention being nithered. Of course you can sleep longer than the required six hours, but it is a race.

Make a habit of starting to look for a campsite about 22:15, and become less and less fussy as 23:15 approaches. This gives you about an hour to find a camp in the evening. That should be plenty of time. Maybe you will have to be not very fussy, but it is a race.

The Spot devices can take a while to send a message after the OK button has been pushed. We have seen it take anything from less than a minute to nearly 15 minutes. We will take that into account when enforcing this rule, but do not push your luck on this.

What happens at the end of the race?

You land on the North (Right) bank of the river just past the bridge. You press the OK button on your Spot device for a final

checkin, go to the hotel (maybe 50 metres away up the track) and phone in. You shower. You eat. You move on. Pat yourself on the back.

What about prizes, awards, ceremonies?

There will be an awards ceremony the Friday night about 12 days after the start. This will probably be back in Whitehorse. You will get a race finisher certificate, a trophy, and if you are good, some prize money.

If you take longer than that to finish, you will get a "course completion" certificate, and we may have a consolation party the following Friday.

How do I get to Whitehorse?

Whitehorse has an airport with real aeroplanes. There are daily flights from Vancouver on Air Canada and Air North. There are also flights several times a week from Edmonton and Calgary on Air North, and during the summer, flights from Frankfurt on Condor Airlines. You can also get here by car or bus up the Alaska Highway, which is not what it was back when: it is now a high class paved road. Actually, it is shorter to come up the Cassiar Highway: that road is mostly paved.

We have arranged a deal by which you get 10% off Air North Tickets. Contact info@yukon1000.com for information on how to take advantage of this deal.

How do I get back from the Dalton Highway bridge?

This is a very good question. I suspect there will be all sorts of arrangements. There is a bus service from the highway bridge to Fairbanks run by The Dalton Highway Express. This bus runs leaves the highway bridge at 19:00 on Wednesdays and Saturdays. You have to book. For an additional \$50, they will take a canoe.

There is a bus service from Fairbanks to Whitehorse run by Alaska Direct Bus Lines. They run a bus from Fairbanks Wednesdays, Fridays and Sundays, leaving Fairbanks at 09:00, getting to Whitehorse at midnight. They can carry Canoes, but only a couple at a time.

Air North flies from Fairbanks to Whitehorse in the summer. They will probably not be that impressed if you show up at the gate with a canoe, but if you are using a rented boat, or are using Up North's or Kanoe People's shuttle to bring boats back, this could be a useful option.

I suggest that your best option is to use the forum to coordinate travel with other teams.

Do you have any guidance on using the Spot Device that far North?

There are pretty good instructions on how to use the features on the spot web site.

However, these instructions leave out a few points (Note that these instructions are for the "old" Spot device).

The device can take a while to get synched up with the various satellites. It can take, they say, up to 20 minutes. Either leave the device on (the batteries last a long time: they say one year or 1900 OK messages) or turn it on and put it in a place with good visibility of the sky well before you want to use it. IN general, the device can work out where it is very quickly unless it has not been used recently or if it has moved a long way since it was last used. Turn the device on and leave it outside with a clear view of the sky for half an hour after you get to Whitehorse.

They leave out some subtle information presented to you by the indicator lights. If any outbound message is pending (Checkin, Help, Spot-cast or 911) then both the ON/OFF light and the light over the relevant function button will flash. If they flash together you have GPS sync. If they do not flash together, you do not have GPS sync. When a message is actually being sent, both lights stay on for about 5 seconds.

The satellites used by Globalstar have an inclination of 52 degrees. This means that they are always in the southern half of the sky when you are as far north as we are. In fact, the orbital geometry means they are never more than 51 degrees above the southern horizon when you are 65 degrees north. Trust me on that — you don't want to see the math. This means that if you are in a section of river that is flowing east (like some sections of the 30 Mile river between Lower Laberge and Hootalinqua) or west (much of the river) and that has high banks, you may have problems sending messages, especially from the south side of the river.

The Globalstar satellites have some known problems. These problems affect voice calls. They do not affect the messaging

function used by Spot.

This should be your procedure for using Spot during the race:

- The morning of the race, well before the start of the race, turn your Spot device on, wait for the light over the on/off button to flash a couple of times, then put the device into Track mode by pressing and holding the OK button. The light over the OK button with light green. Hold the button until that light goes out (about 5 seconds).
- When you start looking for a camp, take the device out of track mode by pressing and holding the OK button until the light over the OK button lights red. It will flash red a few times, then go out.
- As you arrive at camp, press and release the OK button to send an OK button. Press the OK button again after 20 minutes have elapsed as a precaution.
- In the morning press the OK button first thing, then again a minute or two before you leave.
- After you have been on the river for 20 minutes or so, you should see that the light over the OK button has stopped flashing, indicating that the device has finished sending its OK messages. Make the device start sending Track messages by pressing and holding the OK button. The light over the OK button with light green. Hold the button until that light goes out (about 5 seconds).
- Avoid trying to send a message when you are under tree cover. The device will have difficulty seeing either GPS or the Globalstar satellites.
- Mount the device on the deck of the boat. I have observed that OK messages take longer when the device is in the bilge, and I have seen a lot of Track messages lost when the device is not on deck. I estimate that the Kevlar deck of my Sea-1 is dropping the signal strength by about 75%.
- Power the device on, and put it in a position with a clear view of the sky 20 minutes before you want to send a message. Do not wear the thing around your neck: even GPS devices lose track of where they are is worn like that. It is important that the thing be kept face up. The antenna is just behind the Spot logo. Make sure the spot logo has a clear view of the southern sky.

It can take a few minutes after you press the OK button before the message is actually sent. The message that is eventually sent carries the time and location that are current at the time the message is sent, NOT when you pressed the button. This has implications for how you should use them as you stop for the night and how you use them in the morning.

You MUST do a "dress rehearsal" with your Spot device well before the race starts or you will be withdrawn from the race.

With the newer Spot device, you will need to change the batteries at least once during the race. This introduces the risk of getting grit in the O-ring seal which in turn increases the risk of a water leak. It may be worth keeping the Spot device in a small map/iPod/cell-phone bag to act as another layer of water protection.

While the Spot device is almost pure magic, there is a small but real risk that an important data point may be lost or delayed. To make sure that no penalties are assessed erroneously, or more accurately, to make sure that such penalties are rescinded, make sure your GPS is recording everything and has useful timestamps associated with your tracks.

All GPSs are different. But for the Garmin eTrex, each time it starts a new track segment it records a time stamp. So, make a habit of doing the following:

- As you stop for the night, turn your GPS off and on again. As soon as it knows where it is, turn it back off again.
- Turn your GPS on just before you leave, allowing it time to acquire satellite lock before you push off.

If you do that, then we can upload your tracks and see the timestamps and rescind any penalties you may have been assessed but not actually deserved.

What happens at the Canada/US border?

US border formalities are completed at Eagle, which is only an hour or so paddling downstream from the actual border. Eagle got badly damaged by the ice in the spring breakup in 2009, so the procedure here has changed.

At Eagle, the river is making a sweeping turn to the right. Eagle is a small village on the left. For its population (about 150), Eagle is geographically quite big. At the far upstream end of town is the dock used by the "Yukon Queen", a tour boat that makes daily trips between Dawson and Eagle. This boat is in Eagle between 12:30 and 3:00pm each day.

The border formalities will take place either at the "boat landing beach" or at the dock used by the Yukon Queen. Both locations are upstream of the town itself, and before the river makes the bend to the right. The Queen's dock is at 64°46'58"N 141°10'35"W. The boat landing beach is about 250 metres downstream at 64°46'58"N 141°10'55"W.

You should be know if the Queen is in Eagle. She overnights in Dawson, and if you didn't see her in Dawson, and she didn't

go past you on the river, she is in Eagle.

The US border agent, Chuck, will be tracking the race if his internet connection is working. He will know when to expect you and will be as quick as possible clearing you into the USA.

If you are not American, not a US resident, and not Canadian, then you will need either an I94 or I94W (the little form they staple into your passport when you enter the US). If you do not already have one, you will have to get one in Eagle, and that will take time. It is in your interest to get one ahead of time.

Is there much traffic on the river?

Canoes and kayaks can be hard for power boats to see, especially if there is any chop on the water. So it pays to be a "defensive paddler". Even power boats can be hard to see, especially if they are coming up behind you. It is important to be able to hear them coming. Using an iPod or similar makes that harder, and puts you in more danger.

There is little power boat traffic before Carmacks, and not a lot before Dawson. What there is is small, and more of a safety feature than a hazard. There is a barge that crosses to and fro for the mine at Minto, and another barge that travels up and down the river from Dawson. Both these are fairly small.

The *Yukon Queen II* operates between Dawson and Eagle. See the next FAQ about this.

River boat traffic picks up at Circle, and the river becomes almost busy by the time you get to Beaver: you might see as many as two boats a day.

There are serious barges on the Yukon River, but they are mostly downstream of the Dalton Highway Bridge, so do not affect us in the race. However, they do occasionally go upstream as far as Fort Yukon. These are big barges and need treating with respect. This is a picture of a barge I encountered near Steven's Village (about 40 km from the end of the race)

I have spoken to the barge companies, and they say they very rarely operate upstream of the bridge, and when they do the barges are loaded going upstream and empty going downstream. This is good to know. A barge going upstream is moving very slowly and the only threat it poses is its wake. The wake I saw was not very high, but did go on and on. A barge going downstream is moving much faster and is a more dangerous proposition. But an empty barge can be slowed or stopped quite quickly. Getting in the way of one will probably make you seriously unpopular with the pilot of such a vessel, but that is better than being underneath it.



Remember that these vessels are constrained to the deep channels and can only manoeuvre with difficulty. Get out of their way. They are piloted by very experienced and very skilful pilots, but that does not mean that they understand the difficulties you may have getting out of their way. The operators suggested to me that on encountering one, a small boat should immediately go to the shore and wait. That may not be an option if the nearer shore is an undercut bank with sweepers, and you probably do not want to paddle across the river in front of a barge coming up behind you.

Nearer the time, I will be able to get schedules from the two operators. With a bit of luck there will be no barges on the river when we are running the race.

Should I wear aluminum foil on my head when paddling across the border?

OK, this isn't a frequently asked question. But it has a very surprising answer. The answer is "yes". And now I will tell you why.

The *Yukon Queen II* operates between Dawson and Eagle. It leaves Dawson at 09:00 each morning, getting to Eagle at 11:30 (3:30 hours later), and returns starting at 14:00 and reaching Dawson at 20:00 (5:00 hours later). It kicks up quite a wake, and can travel through the water at up to 60kph (37mph). It tends to stick to the deep water channel, not because it needs the draft, nor even because it is more efficient there, but to mitigate the effects of its wake on the shore.

The operators of this boat try to minimise their impact (wrong word) on small boats. But visibility is an issue. They ask small

boats to carry radar reflectors. But it is difficult for a kayak or even a canoe to carry a radar reflector in a position where it will do any good. A report, www.maine-seakayakguides.com/radar_report.pdf, shows that the most effective radar reflector that can practically be deployed by kayakers, and by implication canoeists, is "scrunched up aluminum foil taped to a broad brimmed hat".

It may look bloody silly, but I would rather cause a few chuckles for the occasional moose than have a close encounter with the *Queen*.

Timetable for Yukon Queen II (2001)		
Downstream Time	Place	UpStream Time
09:00	Dawson	20:00
09:15	Fort Reliance	19:30
09:30	"Rocky Point"	19:00
10:00	Fifteenmile River	18:45
10:30	Cassiar Creek	18:00
10:45	Fortymile River	17:30
11:15	Old Man Rock	16:45
11:30	Ship Rock	16:15
11:50	Poppy Creek	16:00
12:05 / 11:05	US/Can Border	15:45 / 14:45
11:15	Eagle Creek	14:30
11:30	Eagle	14:00

How will I get my boat back from the middle of nowhere?

I don't know. And it really isn't my problem. But that is not a very helpful answer. I will be at the highway bridge with a trailer capable of holding about 8 boats. I will be leaving there in time to get back to Whitehorse for the finishing do on Saturday without having to drive like an idiot. If you get to the bridge late, getting your boat back reverts to being your problem. There will be a charge for this service: I'm renting the trailer, and so on.

Where can I rent a suitable boat?

I don't know. And it really isn't my problem. OK. [Kanoë People](#) and [Up North Adventures](#) have a number of suitable kayaks for rent, Seaward Passats, etc. Canoes are another issue. I have a couple of boats I can rent out, and the [Yukon River Quest](#) have a number of eminently suitable canoes, and they are available for rent for this race. They want \$800 per boat. Contact them at info@yukonriverquest.com.

What about bears?

Bears are a bigger risk on the Yukon 1000 than they are on the Yukon River Quest. On the River Quest, you are camping with other people either in a village or a homestead. On the Yukon 1000 you are camping by yourself in the wilderness.

There are bears, and they should not be dismissed. There are grizzly bears and black bears. The black bears in the lower 48 states may be a limited threat. The northern black bears require respect. Some will run off if you say "boo", just like the book says. Some of the northern black bears have not read that book, and are reluctant to take no for an answer.

Grizzly bears are bigger and more confused about their position in the food chain: they do not seem to know whether they are above us or below us. All bears need taking very seriously. The basic rule is to keep a clean camp (and a clean boat, which is easier said than done in a race). The normal advice is to have your tent, boat, food preparation area, and food storage some distance from each other. That way if the bear eats your food, it does not also eat you or destroy your boat by accident at the same time.

All bear encounters need to be taken seriously. Bear encounters are divided according to the bear's mind set.

If the bear is defending its food, young, or perceived you as some sort of threat then the bear thinks it is defending its stuff, and is likely to act aggressively towards you. This may escalate to dummy charges with the bear charging you and veering off at the last moment, or even a real charge with intent to harm. The key, when dealing with a bear that sees you as a threat is to defuse the situation, tell the bear that there is nothing to be afraid of, that you think he is very nice and you have no interest in his

food or cubs, that it is all a big misunderstanding. Do not retreat until the bear has calmed down, and never, ever, even think of running. Use your bear spray as a last resort.

If the bear is non-defensive then it is probably either opportunistic or curious. It may be just poking its nose into your camp to see what is going on, or it might be interested in your food, or it might be looking at you as food. The standard advice is to back slowly away, but that advice sucks in that it means leaving your camp, your tent, your food, and your boat to the bear. If the bear seems just curious, the best plan is to raise the stakes: you start acting aggressive. Raise your voice, and act assertive as you would a big recalcitrant dog. Explain to him about how objectionable his habits are, and how socially unacceptable all his ancestors were. Stand on a log to look bigger. If need be reinforce your position by throwing driftwood at the bear, or even give it a short burst of bear spray.

Be aware that if the bear is already into your food, the bear thinks of it as HIS food, and you are dealing with a defensive bear.

If the bear sees you as food, fight back with all weapons available. Use your bear spray, use logs, kick and scream. In this situation the bear does not understand the concept of surrender. Do not despair. Just because the bear is bigger and stronger and perhaps better armed than you are does not mean you are automatically dinner. The object of fighting back is not to win, but to persuade the bear that there is an easier dinner somewhere else. Point him at the kayakers in the next camp.

Some people like to carry fire arms. I don't. It is only legal in Alaska or the Yukon to shoot a bear in self defence, and if you do, you MUST recover the hide and skull. In the Yukon, you are also required to recover the meat. This means transporting it to a community. You can not take animal pieces across the border, so if you shoot a bear between Dawson and Eagle, you are required to take it back upstream to Dawson. Seriously.

The river flows through the Yukon Charley National Preserve. They have rules about food storage. One choice is to hang all food 10 feet above the ground and 4 feet from the trunk of any tree. That is fairly hard to achieve. The alternative is to store your food in approved bear resistant containers. We will require you to sign a piece of paper saying that you will comply with these requirements. If you are not using bear canisters, we will have you sign a piece of paper saying that you will hang your food. These precautions make sense on the whole of the river.

Information about the "approved" bear resistant canisters can be found at http://www.igbconline.org/BEAR_RESISTANT_Mar2010.pdf. Up North and Coast Mountain Sports in Whitehorse carry suitable bear resistant containers, but do not carry a huge stock. I have a number of bear canisters I can rent to people. I suspect that each tandem boat will require about 6 of the things: I need to do some experiments.

Another piece of advice: if your food and your boat are some distance from your tent (as advised) I would suggest attaching bear bells to your kitchen box and your boat. You do not want a bear pawing over them, and the tinkle of a bear bell will alert you to mischievous ursines so you can take action.

How can I watch the race?

The position of the racers will be shown on the results page of this web site. The information there should be no more than 10 minutes behind the telemetry we get from racers' spot devices. The more often they update, the more interesting the race will be to watch.

There are only so many places along the river with road access. These are:

- Whitehorse, pop 22,500
- Takhini Bridge about 1:30 hours paddle down river
- Policeman's Point 3-4 hours down river, just before Lake Laberge
- Little Salmon, 3-4 hours paddle upstream of Carmacks
- Carmacks, pop 411
- Tachun Creek Campground
- Minto
- Dawson, pop 1770 (more in the summer)
- Eagle, pop 125 (more in the summer)
- Circle, pop 100
- The Dalton Highway Bridge

If you are really keen to see your team go past, you can fly into Fort Yukon (pop 600), and even into Beaver (pop 84).

It is well worth while going to either Takhini Bridge or Policeman's point to watch. You get a better view from Policeman's Point, but the road is unsuitable for some vehicles. If it is wet, the road can be unsuitable for anything except a 4WD truck.

For Takhini Bridge, take the Klondike Highway north from Whitehorse (towards Carmacks and Dawson), and turn right about 50 metres before the bridge. You come round a gentle right hand bend, and as soon as you can see the bridge there is your turn. There is a reasonable track with a fair bit of parking. It is easy access to the Takhini River, and a reasonable view of the Yukon.

For Policeman's Point, turn on Policeman's Point Road. There is a fairly large sign advertising Sun Dog Retreat. Policeman's Point Road is towards the north end of a long straight section of the Klondike Highway. The road starts as a good gravel road and becomes a good dirt road to sucker you in before becoming a quite difficult, narrow, deeply rutted dirt track that is almost impossible without a 4WD truck, especially when wet. Outfitters will not do pickups from Policeman's Point. Don't say we didn't warn you.

Little Salmon is a good place to watch from. It is only a half hour or so drive from Carmacks to there. Depending on your team's timing, this might be a good place to cheer them on their merry way.

To get to Little Salmon, go to Carmacks and turn right on the Campbell Highway. Drive for about half an hour. There is a turn to the right (towards the river). There is a sign some distance down this unconvincing track. It is hidden by the trees and can not be seen easily from the road. If you see a sign for Frenchman's Lake you have overshot, but only just.

Carmacks is a good place to set up camp to wait to watch the race. The Coal Mine Camp Ground, despite its unprepossessing name, is very pleasant, is right by the river, has wireless internet, and serves good hamburgers etc.

Five Fingers Overlook has good stairs (lots of them) leading down to a viewing platform just over the rapids, but there is no access to the river here

Tachun Creek Campground is not really a good place to see the race, but it is a road access point only a couple of km downstream from Five Fingers.

Minto Landing is about 6 hours paddling downstream of Carmacks. Do not take the road to "Minto Resort". Take the road to "Minto Mine". The mine is over on the far side of the river, well out of the way, but there may be big trucks on this little road. There is plenty of room along the bank with easy access to see you boat go by.

Dawson. Internet access at the "TastyByte" on Front Street. Camping is on the far side of the river. Hotels, restaurants, etc.

Eagle. Teams have to stop here. There was a hotel here, but it got destroyed by ice last spring. There is also a Campground, but that is some distance from the river. I do not know how to achieve internet access from here. There also was a restaurant but it too got destroyed by ice in the spring breakup 2009..

The Top of the World Highway from Dawson to Eagle is well worth doing. It is not paved, but Holland America get their massive buses along it, so it can't be that bad. Keep telling yourself that as you drive along it. It is really only the last 30 miles or so into Eagle that is a bit exciting.

Circle. To get here you have to drive to Fairbanks and back along the Steese Highway. You probably can not make this trip much faster than the boats can paddle the distance between the two villages. Limited facilities.

Do I need to worry about wind and such?

Yes you do. Wind and rain are possibly the two biggest hazards on the race. Rain because it can make you cold and wet, wind because of that and more.

Getting cold is a much bigger risk in this race than any other you might have entered. It is not a matter of gritting your teeth and pressing on to the end: it is too far for that. You must keep yourself and your equipment warm and dry. Hypothermia is pernicious. Watch each other.

All rain in this part of the world is cold. A rain shower can take the air temperature from 20°C to 10°C (70°F to 50°F) in no time at all. Hail is also a possibility. I have seen a more vicious hail storm in the flats than any I have seen in Colorado or Nebraska (I had pulled off the river having seen a thunderstorm coming, and I put up the tent and cowered in it. I was almost scared because I had almost decided to press on)

Wind carries with it another risk. On the first day of the race, you will paddle up Lake Laberge. Lake Laberge is a long lake (about 30 miles), and not very wide (a couple of miles). Both ends of the lake are fairly shallow. If the wind is from the north, the south end is very nasty. If the wind is from the south, the north end can get exciting. The shore in the northern half of the lake has sections where rock cliffs come down to the water. The waves can go from nothing to 6 feet high with little warning. You must watch the sky and the lake and be prepared to pull over and take shelter if necessary.

Do not be fooled by the wind. It is all too easy to think "I do not need to worry about that thunder storm, the wind is blowing it

away from me". Surface level winds are *always* towards forming thunderstorms: they suck air in from all around to support the strong updrafts that make the big thunder clouds. When a thunder cloud becomes unstable, the vertical winds in the cloud reverse and the ground level winds become away from the active thunderstorm. By the time the wind changes direction at ground level, you may not have time to put on waterproofs, let alone run for cover. Consider only the distance to the thunderstorms, not the direction of the wind.

After the Lake, you are on a fairly big river. If the wind is against you (isn't it always?) then the river can be kicked up into 18" or more waves which are nasty and sharp with the wind against the current. Watch for thunderstorms in the area: they can cause sudden localised squalls that can churn up the river from nothing. I have been taken by surprise how quickly and suddenly that can happen.

After Circle you are in the Flats. Here the river is very big, and there are no hills to shelter the river from any weather system. You can get big storms here. In places the river is wide and shallow. You can see waves pick up as if the Flats were a lake, but worse as you can have wind against the current making the waves sharper than on a lake, but just as big. Add to this a current, snags, and sweeper-laden banks, and you have potential for a real disaster. The wind can pick up quickly, and the waves with it. The river is very wide in places, over 1Km wide. If you are in the middle when the wind picks up, you may be in very serious trouble. Watch the clouds so you are not taken too much by surprise. Remember that you are alone, there is no patrol boat, no one to help you, and act accordingly. When in doubt, take shelter. You will not win the race by drowning. You will not win the race by exhausting yourself pushing against a head wind: it is probably good race strategy to rest when mother nature tells you to.

What advice can you offer on camping along the Yukon?

Almost anywhere on the Yukon you are at most 30 minutes from a reasonable stopping place. The Y1K is held in late July, so the river has dropped from its peak, which helps.

There are some places which are obviously poor candidates for camp sites: rock cliffs, high cut banks, places where the bank is guarded by sweepers, piles of logs.

Some of the best camp sites I have ever found on the river have been in pretty unlikely places: places where there is little or no beach, where there are a couple of metres (or more) to clamber up and willows to push through before you find yourself in open woodland with plenty of space to pitch a tent. But you are not looking for picture perfect camp sites, you are looking for a place to put up your tent and crash for 6 hours.

Let's look at the requirements on a camp site: you have to be able to get to it, you have to be able to land and leave safely, and there has to be room to put up a tent. Preferably nearly horizontal space. And you want to avoid places that are attractive to bears, and you want to avoid pitching your tent on game trails (been there, done that, but it was over 30 years ago, and I've not done it since: watching a couple of moose walking over the end of your tent like it isn't there is not an experience I want to repeat).

Vegetation is a guide to camp sites. You will see several different sorts of trees: Jack Pine, White Spruce, Black Spruce, Poplar, and Willow.

Pine trees have longer needles than the spruce, a couple of inches, rather than 1 cm. You will see White Spruce up until just south of Dawson, then black spruce. Pine likes drier conditions than spruce. You won't see much pine by the river, but it generally indicates pretty good camping conditions.

White spruce forest can make good camp sites. You can find yourself lying on a soft bed of 8 inches of moss. Wonderful. Except for the black fly. More likely you will find that spruce forests are too dense, too filled with dead wood, and have an undergrowth of wild rose. The roses are very bad for the tent, and also attract bears. If you are in a hurry, and not looking for the perfect campsite, I'd avoid spruce forest.

Black Spruce forest almost always makes for bad camping conditions.

Poplar is a broad leaved tree/bush. They grow with multiple poles growing from a common root. They grow sufficiently close together that they tangle. You can hardly walk through a poplar stand, let alone camp in it.

Willow bushes range from the size and structure of the poplars to pathetic little stalks less than a metre tall, so flimsy you can easily ignore them as you put your tent up. They do make for bony bits under your mattress pad, though. You may be misled by the willow. It often is growing only a metre or so deep hiding perfectly good camping behind.

You will find yourself looking for clearings in the forest by the banks of the river. Even useful size sandbars are generally covered in willow, so even on sandbars you will be looking for clearings. Luckily clearings are relatively common: they are

formed each spring when a pile of ice gets pushed through the bush clearing it. You will often see gouges in the gravel where this has happened, and piles of dirt and cleared brush looking to all the world as if someone had attacked it with a bulldozer. Sometimes you will find what looks like a cleared road cutting through the willow: this is either a high water channel (muddy) or an ice cleared path. The vegetation then slowly reclaims the land. The first colonisers are the horsetails (almost anything you see from the river that looks like green grass is that primitive horse tail stuff), and willow. Be prepared to plonk your tent on top of this year's or maybe even last year's willow growth. In some places you will find real grass and meadow flowers growing a couple of feet tall in one of these clearings. That can make for a good camp site too, but beware: anything you drop will be lost forever in that sort of vegetation.

The dirt underlying the vegetation varies. Generally you will have silt overlying pebbles (which makes pegging out a tent a real pain). If you are in a slow moving section of river, the banks may be muddy: the faster the water, the smaller the particle size that drops out. One good reason for stopping the race at the bridge is that if you go down stream any further the banks become muddier and muddier.

Approach and landing: a flat sandy beach on the inside of big meander will work, but you may find yourself half carrying your boat over 10 metres of mud before you get to the shore. And the shore itself might be more mud than anything else.

A typical place you might look at landing, then, will be willow with clearings. The banks will be anything from a foot to a couple of metres high. At the sort of water levels that we should be looking at there are likely to be little (maybe as little as one foot) beaches below the banks. Beware of how you approach any bank where you cannot see even a little beach sloping into the river: the water might be very fast and very deep. Even where there is a visible beach, the water may drop off so you are up to your waist, or over your head, only one step away from dry land. ALWAYS turn your boat to face upstream as you land. Use the change in speed of the current to let the river turn the boat. If your boat does not turn, you are still in fast and deep water and landing may be difficult, especially if you are tired. You should be tired.

If you see a low cut bank that has no vegetation of any sort on it, that is probably because it is actively being eroded. I have had chunks of Yukon bank land in the water quite close to me. I'm not stupid enough to be in a position where it might land in my boat, but a great crashing sploosh just behind you can scare the bejesus out of you.

Do not be put off by bear prints in the sand. They are everywhere, and last a long time, even through rain showers. Do look at the bear prints though. Note the difference between black bear prints and grizzly prints. The toes on a grizzly bear are more or less in a line across, making the foot print look rather like that of a monstrous human. With claws: you can often see the marks from the tips of the claws a couple of inches in front of the toes. Yes, the claws are that long. The foot prints of the black bear are much more rounded. But they still have big claws. If you can see the indentation from the heel of the back foot, it is more likely to be a grizzly.

A much better guide to how recently bears have been in the area is the bear "scat". Poop. Shit. Bear shit is rather like dog shit, but bigger, and quite different from the pellets left by moose and such. The diet of the bears in July will be mostly berries, and this shows in their shit which is less well formed than it might otherwise be, and full of seeds. If the shit you find is still steaming, you are in the wrong place. If it is dry and falling apart, you have little to worry about. If the bear shit is reasonably fresh, you need to think about it. Or leave. If there is fresh(ish) bear shit, but the rose bushes in the area have been stripped of the berries, then the bear(s) may have come and gone. Or not. The race is a little early for the roses to have been fully harvested by the bears. If you see a big patch of rose hips, perhaps you should consider camping somewhere else.

Use your nose. If something smells (other than your paddling partner) it may indicate a bear kill/food cache in the area. Leave.

Be "bear aware", but remember that bears are probably a smaller risk than making a cock-up of landing or leaving.

Think like a bear. Is your camp somewhere that a bear is likely to frequent? In some sections of the river, the banks are fairly high with the occasional creek cutting into them. If you were a bear and wanted access to the river, you would come down one of the creeks, especially bearing in mind that salmon spawn in those creeks in July and August. Similarly, if you were a bear



Not a good stopping place

and wanted to cross the river, you'd want to go island to island rather than swimming the whole way across in one go. So if you have a section of river with high banks, a creek on river left followed by an island on the left, and island on the right then a creek on the right, you have a beautiful bear crossing. I know someone who camped on such an island, and had lots of fun with lots of bears. They were not happy paddlers.

When camping be aware that the weather and river can change overnight. There have been many reports of canoes being blown around, cart-wheeling over a campsite. Tie your boat up well. The river is unlikely to change height much. But, especially on the first half of the race, assume that the river could rise a foot overnight if it puts its mind to it. Pull your boat up well, and make sure your tent and gear are high enough. Do not assume it will remain dry overnight. At best it is asking for trouble. At worst you are inviting rain for yourself and everyone else. Or Hail. Or Snow. Assume anything left out overnight will get wet or blow away. Or both.

You should not have problems finding a camp each night, but be aware of the potential hazards.

Can I fly to the communities along the river?

Many of them yes. There are scheduled flights between Fairbanks and most of the communities on the river in Alaska and from Whitehorse to Dawson and Dawson to Fairbanks.

Air North has flights Monday to Friday between Whitehorse and Dawson, and Tuesdays and Thursdays between Dawson - Old Crow - Fairbanks. (867) 668-2228 or (800) 661-0407

Everts Air Alaska Fly weekdays between Fairbanks and Eagle. (907) 450-2350

Wright Air Service Fly twice a day weekdays, once a day on weekends, between Fairbanks and Fort Yukon. (907) 474-0502

Warbelow's Air Ventures Fly weekdays between Fairbanks and Circle, three times a day between Fairbanks and Fort Yukon, once a day between Fairbanks and Beaver, and once a day between Fairbanks and Stevens Village. (800) 478-0812

Is it really 1000 miles?

Well, the short answer is no. It is more like 986 miles if you take all the right channels. On the other hand, if you don't concentrate all the way, it is likely to be further than that.

The distance according to the old steam ship charts is 996 miles. That involves taking all the deep channels, rather than the short channels, and anyway, the river has changed hugely, especially in the Flats since the "official" mile marks were established.

Oh, and while we're on the subject, the distance from Whitehorse to Dawson according to the old steam ship charts is 440 miles, 708 Km. Actual paddling distance, if you take the canoe route, rather than the power boat route, is several miles shorter than that.

The distances quoted seem to be all over the map, as it were. It is close enough to 1000 miles, and you will be very happy to see the Dalton Highway Bridge.

What about bathroom breaks?

Well, you aren't going to want to stop to pee. That, you might say, is what the bailer is for. All right for me to say, as a male canoeist. But I am reliably informed that solutions are available for females and kayakers too.

But there will come a time when you have to deal with having to do what bears do in the woods. In fact exactly that. So what is the "local advice"?

Well there are two mostly separable issues: what is sanitary and what is aesthetically required. They are not the same. It may seem unlikely, but almost anywhere you stop there is likely to be signs of humans, footprints in the sand, or whatever. This means that leaving your offerings lying around (like a bear would) is not really an option, which is a shame as it biodegrades fastest on the surface (Hey, these bears aren't stupid). And you have the TP to deal with too.

The right thing to do is to bury it. But not to bury it deep. The biologically active layer is very shallow up here, so the advice is to bury it no more than 6 inches (15cm) deep. If you are trying to do this on what appears to be a silty beach, you may run into difficulties. The dry silt can be remarkably hard, and it is often full of stones just below the surface.

The easiest solution is to look for a nice moose print that was made when the silt was wet and use that as a pre-dug hole.

Then kick some silt over the top. Maybe drop a stone on top to make sure the paper stays put and out of sight.

Or if you stopped where it is forested and there is a mossy carpet, kick the moss back to make a hole, do your business, and put the moss back. This is the best option as this is an active biological area and the evidence will be gone quite quickly.

If you want to be an environmental purist, be aware that the official advice on TP is to burn it or pack it. That is not really realistic on the race. But you could use moss instead. Just be aware that the moss may contain little twigs, pine cones, pine needles, and such, that are a little scratchy.

What should I do about drinking water?

You are not going to be carrying 10 day's worth of water with you, that's for sure. So the question breaks down into "Is the river safe to drink?", "If not, where do I get my water from?", and "What do I do to make it safe?". The river is fairly clean. In August you are unlikely to find anything in the river other than giardia. I would be a little more dubious of water directly downstream of the communities. Whitehorse is a significant place, and I do not trust the water until I am well out onto Lake Laberge. Dawson's sewage system is notorious and embarrassing, and I don't trust the smaller communities either. But it is a big river, and as they say, "Dilution is the solution to pollution", which like a lot of things "they" say is only partially true.

So treat the water for giardia and avoid taking river water for some distance downstream of communities. "What about side streams?" I hear you ask. Well the side streams are generally a lot clearer than the Yukon (difficult not to be), but you do not know what current or abandoned mining operation is upstream of the creeks. Your beautiful crystal clear water could be full of heavy metals. Better to deal with the Yukon water.

So what are the options for purifying the Yukon water? I advise strongly against using a filter pump. Once you are past the confluence with the White river, the Yukon carries a huge silt load that will clog your filter in no time at all. This means you are down to chemical purification.

Everyone has their own favourite, and most despised, purification method. My favourite is Pristine. This stuff is tasteless and effective. The down side is that it is fiddly and time consuming: you have mix so many drops of part A with so many drops of part B, wait 5 minutes then add to the water you are purifying, then wait several hours. That ought to rule it out of contention, but you can store the mixed stuff for a few days if it is kept cool (like in the bottom of a canoe). You can mix a day's worth and use a suitable size squirt of it as needed. Alternatively, you can purify sufficient water overnight to last the whole of the next day. That has the added advantage that once treated with Pristine, the silt will drop out of suspension overnight so you won't get that unique Yukon River experience of slightly gritty teeth.

How do I measure my boat to see if it is legal?

Well first let me say that You may not want the narrowest boat that will fit the rules. You will be carrying a heap of gear and food, and those naaoy kayaks may be overloaded. They are also more tippy, and you will be tired by the end of the race. You might be really glad of a more stable boat.

OK, having said that, let me answer the question: [Read this](#).