Wilderness Canoe Association
WCA
nastawgan

Fall 2013 Vol. 40 No. 3 Quarterly Journal of the Wilderness Canoe Association

*Lower Garry Lake: bugs!*

# Lower Back River, 2005

## Story by Allan Jacobs

## Photos by Marilyn Sprissler

**Dedication:** To the memory of Bob Bignell and George Drought, generous friends and paddling companions on many trips, sorely missed.

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**Summary:** Back is a four-letter word, as are *rock, sand, wild, bare, cold, rain, wind, wait, bear, bugs, deer, oxen, wolf,* as well as *home* (sixty years ago, to the native people).

**Background:** The Back deserves great respect because of its isolation and its many rapids and falls (roughly 80 over about 1,000 km); so, errors in judgement and lack of attention can have serious consequences. The native people have left many traces of their past occupation of the area; it is forbidden by law to remove or disturb any articles.

Wildlife is plentiful; we saw several thousand caribou, several muskox herds, so many wolves that we stopped telling our companions when we saw another, but no bears.

*Mission Island hike*

Weather: due to the proximity of the Arctic Ocean, the weather can turn bad quickly. The upside is that the bugs are not nearly as bad as on the Kazan and Thelon. As I mentioned previously (*Nastawgan*, Vol 33, No 2, Summer 2006, pp 18-20), the water was very high in 2005; we found some rapids very different (for example, an island was completely under water) from those described by George Drought, who kindly loaned us his annotated topos and provided much other information. Correspondingly, the Back was more dangerous than usual.

**The Bromley - Calder tragedy:** Graham Peter Bromley and Ian David Calder died on the Back River in 1967; Bromley's son Bob survived. I learned later that the trip had been intended as a Centennial project. Before our trip, I had tried unsuccessfully to learn more about the tragedy. Even then, though, I was convinced that the location given in the Polar Record article is wrong. (By the way, that article makes another two incorrect statements, one regarding the source of the Back and the other regarding the history of recreational canoeing on the Back.) Much later, through Hugh Westheuser and John Stephenson, Bob Bromley provided the coordinates of the tragedy; please consult the CCR thread at: http://www.myccr.com/phpbbforum/viewtopic.php?f=125&t=12422

*Lower Garry Lake: lots of sand*

**Allan comment:** I expect that *Nastawgan* readers would prefer quotes from the journals of Back and Anderson, and so I limit mine to satisfy the space limitation. Solely to compare comments from the three sources, I provide some coordinates. These are in easting/northing format, either NAD29 or NAD83 depending on the map; the precision is 50 m but the accuracy is often poorer. Coordinates for campsites, rapids, etc, are provided at: http://www.myccr.com/phpbbforum/viewtopic.php?f=126&t=31348

**Memories:**

— A juvenile caribou, likely injured, standing motionless beside the river, easy prey.

— A herd of 3,000 to 4,000 caribou passing perhaps 30 metres from our campsite at Rock Rapids, followed by a wolf keeping pace.

— Trout devouring rafts of dead black flies on Lower Garry Lake.

— A diagonal curling wave breaking over our heads in Rock Rapids.

— Trying to figure out how to get through Escape Rapids.

— Tent circles, "fences," and other reminders that the native people had lived here for generations.

— A wolf trotting past our last campsite, giving me (the others had gone for a hike) barely a passing glance, not even breaking step.

— Above all, the beauty of the Barrens, the feeling that one could see forever, the feeling that there were no other humans within perhaps two hundred kilometres.

**Regrets:** We did not start from Sussex Lake and so I did not stand on the hill (between Sussex and Aylmer lakes) from which Back first saw the river that now bears his name, the river he sought heading north. On the other hand, we were spared much difficult travel; thanks to George Luste for advice. We did not climb Mount Meadowbank, the hill at Wolf Rapids and several others. We did not reach Chantrey Inlet, the mouth of the Back. This was my last visit to the Barrens.

## Abridged Journal

Daniela Kosch has already described the first half of our 2005 trip on the Back River (*Nastwagan*, Vol 33, No 4, Winter 2006, pp 8-16). I pick up the story at Upper Garry Lake (a beautiful spot), where Linda Gordon joined us at what I call Mission Island (it holds the remains of Father Buliard's cabin, plus a more modern structure). She brought food, supplies, and a message not to be concerned if the group paddling the lower river ran into abandoned canoes and packs near Sinclair Falls. That equipment belonged to a Minnesota group whose evacuation, set off by activation of an EPIRB about 10 days earlier, had cost Canadian taxpayers $70,000 or so; the kids should have been equipped with something else.

Daniela Kosch, Doug Bell, Bob Bignell, Gene Chorostecki, and Stephen Catlin flew back to Yellowknife, as did a few hours later the "Hansen" (Hans Baumgartner and Hans Schneller). We had met the latter much earlier on the river; they were paddling kayaks and, not being able to spot the correct channel, had lost too much time to make it to Chantrey Inlet. By the way, Hans Schneller spoke several years ago at a Wilderness and Canoeing Symposium about his paddle from Greenland to Baffin Island (hope I got it right). Those who heard that talk may remember his photo of polar bears and, as I recall, a remark about imposing Canadian Customs officials.

It was very quiet after they left, in part perhaps because the four of us (Linda Gordon, Marilyn Sprissler, Hendrik Herfst, and I) knew that we had a demanding trip ahead, especially with the high water. We paddled the three Garry lakes in the next few days. As elsewhere on the Back, we found many abandoned Inuit sites; a people had lived here for generations but now are gone. Lower Garry stayed almost dead calm and so we made the big traverse. On the way, we passed through rafts of dead bugs, left over from the breakup about a week before (source: Levi Waldron), heaven for the many fish feasting on them.

Back commented as follows on the Garry lakes (I should remark that he had no maps to guide him and that he spent considerable time exploring bays, all the while in ice): 19 July 1834: .. *our hopes were again blighted by the startling sight of extensive and unbroken fields of ice, stretching to the extremest point of vision. It was with indescribable sorrow that I beheld ... a firm field of old ice, which had not yet been disturbed from its winter station.* 20 July 1834: ... *we ascended the highest hill near; but only to see one wide and dazzling field of ice extending far away in every direction ... we continued to creep slowly to the south, sometimes wedged in the ice, at others cutting through it with axes ... lifting her with fenders ... wade and carry pieces to lighten the boat ... portage ... she was absolutely lifted ... benumbed as they were from being so long in the water ... in sixteen hours we had only come fourteen miles.* 21 July 1834: ... *the main body of ice commenced again, and stretched to an undefinable distance ... in four hours we were lucky enough to have advanced eight miles ... a portage was immediately made, and the boat lifted over into the water ... we were again stopped by ice, so thick that all our endeavours to cut a passage with the axes ... were utterly in vain ... landed and made a second portage across the rocks, which brought us to a sheet of water terminating in a rapid; and this, though seldom a pleasing object to those who have to go down it, was now joyfully hailed by us as the end of a lake which had occasioned us so much trouble and delay.*
(Allan comment: The rapid was the one between Lower Garry Lake and Buliard Lake.)

Anderson (who had Back`s map) commented as follows on the same reach: 23 July 1855: *We were ... retarded by cutting through ice 2 feet thick ... Either we are very stupid or the map in Back's work is very incorrect.* 24 July 1855: *It*

***Father Buliard's cabin***

*was near midnight before the men were laid down last night. I therefore allowed them to sleep until 5 1/2 a.m. … we were … much retarded by cutting our way through the ice … from 2 to 3 feet thick … We at last reached the rapid at the end of L. Garry to which we joyfully … bid adieu. … This rapid was easily run.*

We ran the exit rapid into Buliard Lake and camped at the gorgeous esker there. The next day saw us struggle through several tough rapids, then pass through a shallow lakey area.

Back's remarks (22 July 1934) on Buliard Lake: *Long ranges of conical and cliff-broken sand-hills extended irregularly nearly round the compass ... gigantic boulders were strewed in every direction, and in two instances were seen on the summits of ... sand-hills ... One of these was very conspicuous ... thus forming an excellent mark for the rapid in any direction.*
(Allan comment: That hill, easily visible from Lower Garry Lake, is a nice guide to the exit rapid.)

Back's remarks on the rapids below Buliard: *... a swift current ... brought us to a strong rapid, the descent of which looked exceedingly like going down-hill ... plunged into the midst of curling waves and large rocks ... one towering wave threw us on a rock, and something crashed ... we escaped from this without other damage than a broken keel plate ... but rapid still followed rapid in disagreeably quick succession, and I was not a little rejoiced when we were again fairly in smooth water.*

Anderson's remarks (24 July 1855) on the same rapids: *The rapids ... — 5 in number — are all strong and dangerous with the exception of the last one, a little below which we encamped at 8 1/4 p.m.; 2 decharges were made — at most of these rapids there are several channels. Capt. Back's map … is on so small a scale as to be utterly useless in these large bodies of water.*

After paddling Upper and Lower MacDougall Lakes, we started Rock Rapid on 1 August 2005.

Anderson, 25 July 1855: *... we reached an easy rapid ... this led into an extensive sheet of water where the current became imperceptible; it ran on either hand N. and S. in deep bays. Land was seen in every quarter ... Tho distant.*
(Allan comment: I identify the *extensive sheet of water* as Upper MacDougall Lake.)

Back, 22 July 1834, on Lower MacDougall Lake: *Still keeping south, we threaded a zigzag path through a bar-*

*rier of ice, and were then led by the increasing noice [sic] to the end of the lake.*

Anderson, 25 July 1855: ... *we struck due south to the end of L. McDougall ... The map is perfectly useless.*

Partway down Rock Rapids, we saw abandoned boats and packs on the far shore. We heard later that all the gear had since been recovered. I found the lower end of the second part of Rock Rapids rather unpleasant but Linda, my paddling partner on so many trips, is imperturbable. After passing a herd of 300-400 caribou, we turned into a bay and camped. The water there was badly silted from caribou passing through. Then the previous herd came through. A bit later, it was followed by another, much bigger herd of 3,000-4,000 that took about half an hour to pass our campsite. Hendrik said it for all of us: that sight alone was worth the expense of the trip. And then a wolf trotted by, ignoring us, just keeping pace. The next day, a muskox herd of 25 or so strolled past on the caribou trail. We portaged much of the third part of Rock and lined the rest. I was greatly relieved to get back into the boat and paddle again.

Back's comments (22 July 1834) on Rock Rapids, the start of which was choked with ice when he arrived: ... *in a comparatively contracted channel, the whole force of the water glided smoothly but irresistibly towards two stupendous gneiss rocks, from five to eight hundred feet high, rising like islands on either side ... succession of falls and cascades and whatever else is horrible ... impetuous and deadly fury ... the remaining keel plate was entirely stripped away.*

He ascended (23 July 1834) ... *the highest of the rocks, which had a smooth table of quartz ... The Esquimaux had here erected a small obelisk of slabs. ... Scarcely had we pushed from the shore, when we were in the midst of rapids. Two were run; but the third was too dangerous to allow the attempt ... The opposite shore was then discovered to be an island, round the western extremity of which another branch of the river cut a broad channel, and joined the one we had selected by a fall of ten feet.*

***Lower Garry Lake: Allan eating lunch***

After more rapids, we portaged Sinclair Falls. Not complaining (I never do that), but the only ice we saw on the entire trip, apart from that on the flight in, was immediately below the falls. We did another rapid, then camped at a wet place before the turn to the left. Next day, the north wind was up and the rain was coming down; we stayed put and rested from the effort of the previous two days.

Back, 24 July 1834: ... *having followed the turn to the north, and got down the rapids, we made a portage at Sinclair's Falls. ... . The river was now near a mile broad, full of small rocky islands, with falls between each.*

Anderson, 25 July 1855: *We ran part of the Rock Rapids (3) but a decharge was*

***Lower Garry Lake: Phlox mound***

***Lower Garry Lake: reflection***

*made at the last one, after which we ran 3 Rapids and carried over the cascades and falls. We encamped at the foot of the latter (Sinclair's Falls). All these rapids are strong and hazardous.*

On 4 and 5 August 2005, the north wind was still up, just as strong as on the day before, but we took off anyway, getting shelter where we could. We sailed down the channel, then soldiered on to the north, passing two wolves that appeared to be chasing supper, and pulled over to camp. Next day, we took off into a headwind, rounded the corner, had lunch, and scouted the upper part of Escape Rapids.

***Rock Rapids***

Back, 25 July 1834, describing Escape Rapids: *... a mile of heavy and dangerous rapids ... in the most imminent danger of perishing by being plunged into one of the gulfs formed in the rocks and hollows of the rapid ... singular and dangerous spots, which partake of the triple character of a fall, rapid, and eddy in the short space of a few yards ... The power of the water so far exceeded whatever had been witnessed in any of the other rivers ... that the same precautions successfully used elsewhere were weak and unavailing here ... it seemed uncertain whether the boat and all in her were to be hurled into the hollow of the fall, or dashed stern foremost on the sunken rocks ...*

(Allan comment: The crew, one of whom *began to cry aloud to Heaven for*

*aid, just missed being buried in the frightful abyss,* good enough reason for the name Escape.)
Back quotes McKay as exclaiming, in response to the above, *Is this a time for praying? Pull your starboard oar.*

Anderson, 26 July 1855, on Escape and Sandhill: *Made a decharge at the Escape Rapid and at two of the Sandhill Rapids, but ran the others with whole ladings; all these rapids are strong and long.*

My opinion of Escape: nasty, brutish, and long. But Rock was worse in all three respects. We lined (tracked?) down the right side of Escape (tiring), then paddled through nasty whirlpools and eddy lines to the bay on the right and scouted. The smooth rock island mentioned by George Drought and used by his party to get through that part of Escape was well under water. The right side was unrunnable, requiring a lengthy portage. The left side, though with unrunnable pieces, was easier. But getting over there required a tough ferry. Marilyn and Hendrik ferried across and worked their way down. Linda and I had intended to follow them, but, after more thought, I decided that the ferry was too risky for us; they are the stronger paddlers. We portaged about 1.5 km on the right and camped. I stress that it was my doing that the group got separated. We rejoined Marilyn and Hendrik in the morning.

***Rock Rapids***

Another day or so got us to the head of Sandhill Rapids; we pulled in on river left. The others scouted while I stayed in the boat out of concern for my feet. I had hurt them (cut off the circulation) in the first half of the trip, kneeling while cooking. I was rewarded by a head of about 50 caribou that came down the hill and crossed to the south shore. We ran Sandhill, then Wolf; I wish that we had taken time to climb the impressive hill at Wolf. On reaching the lakey area by the mouth of the Meadowbank, we were exposed to the full force of the wind and so pulled in and camped.

Back, 25 July 1834: *... a line of heavy rapids, which more than once made me tremble for our poor boat. ... we ... flew past rocks and other dangers with a velocity that seemed to forbode some desperate termination ... we escaped; though only to begin another series.*
(Allan comment: I identify the *line* as the rapids starting at 560/224, the *series* as Sandhill.)

***Large caribou herd***

***Sinclair Falls – compressed snow patterns***

Back, evening of 25 July 1834, above Wolf: ... *a detached mountainous rock dipping to the eastern shore of the river, in which quarter the descent, now manifest, as well as the hollow roar, plainly indicated something which at that late hour it was prudent to avoid.*
Anderson, 27 July 1855: *The Wolfe and 9 other rapids were run with whole cargoes; they are all strong, some with whirlpools which must be dangerous in high water. ... We encamped late about 3 miles below the Rapid with whirlpools and Esq. marks.*

Back, 26 July 1834: *Several other rapids (for there was no end of them) .. ..* He then refers to *high rocks* on the east side of the river; these must be the hills near the mouth of the Meadowbank. Back continues: *Some more rapids led farther to the north.... a picturesque and commanding mountain ... the most conspicuous eminence we had seen ... and I called the hill Mount Meadowbank.*

We didn't know it at the time, but the Bromley-Calder tragedy occurred between the mouth of the Meadowbank River and Mount Meadowbank. As we passed the island on the left (following George Drought's advice), I chanced to glance upstream and saw the ledge on river right, not knowing its significance. It was here that the Bromley-Calder canoe overturned and was lost.
More wind the next day, a bit weaker, but paddling into it was still difficult. After more rapids, we entered the lakey area above Mount Meadowbank. We stopped at the cabins on the left, had lunch and did some sightseeing; there are tent rings on the hill above the cabins. Again it would have been nice to have had more time here to climb Mount Meadowbank. We sailed a bit down the lakey section, pulled over to the left shore, and camped at a tacky site. We finished the lakey section in a moderate tail wind. After running more rapids (most of them very trying), we checked out the water survey cabin, which was locked. What next? More head wind, of course. Worried about our recent slow progress, we got up at 5 a.m. the next day, as we did for the next five days. We passed the mouth of the Hermann River (where George, Barbara, and party were forced to terminate their 2003 trip); George's maps for the remainder of the river were not annotated.

Back, 26 July 1834: *After a course of six miles to the south-east, the river again veered northerly, rushing with fearful impetuosity among rocks and large stones, which raised such whirlpools in the rapids as would have put the strength of a canoe in jeopardy.*
After 050/304, he passed more rapids (likely 205/386 and 322/540), and *encamped under the lee of a high rock ... It was opposite to a solitary bank of sand, that formed the western entrance to a small river.*

Anderson, 28 July 1855: *4 rapids were run, 3 of them very strong. The eddies or whirlpools strain the canoes very much.*
(Allan comment: the three are likely 864/320, 050/304 and 205/386, the fourth 322/540. Anderson *encamped late a little above Montresor River.*)

Back, 27 July 1834: ... *on the right bank of a second one, more intricate than the first, we observed the marks and traces of three circular encampments, the inner portions of which were divided into sections ...*

Anderson, 29 July 1855: *Ran a bad rapid above Montresor River, in which Mr. Stewart's canoe was completely ungummed.*

Next day, after a lengthy scout, we ran a short but nasty rapid at 738/715; a monster low brace as we hit the eddy line got Linda and me through (there but for the brace of God go I). Our progress was stolidly witnessed by a herd of muskoxen on the cliff above, unimpressed by our skill and daring. Identification of 738/715 with Backs's *second one* and Anderson's *bad rapid* is certain. We passed the mouth of the Montresor River, which drains both Bromley and Ian Calder lakes. The wind came up and we gave up.

The next day saw a stiff headwind, of course. After a scout, we ran Whirlpool Rapids, a non-event; even the whirlpools below weren't much, and this in very high water. The wind continued to strengthen; to no avail, we tried both getting wind shelter on the right and riding

the big waves in the centre (where there was a good current). Then my seat broke. Marilyn did a good job in fixing it but by then the wind was really bad; we pulled over to a bad site and camped, expecting the wind to be up again in the morrow, dreading having to paddle against it on the wide part of Franklin Lake and much concerned that we would miss the pickup.

We woke to no wind! We made over 20 km before stopping where the river turns right toward Franklin Falls. With no wind and with warm weather, black flies swarmed us and so we ate lunch on top, finding, of course, that the Inuit had camped there many times. We had heard conflicting stories about the difficulty of the falls; Hans Baumgartner had run it (I recall him saying that he had 'sledded' it), but others reported that it involved a lot of lining and portaging. We decided on a lengthy portage on the right, along what appears to be a spring channel; at least one other party had had the same idea and had marked the first portage route with cairns. We didn't know it at the time, but it was this day that we passed the site where the explosion had injured Barbara and George.

***Across from Mt. Meadowbank***

Back, 28 July 1834. He turned right and *followed the stream, which, as usual, soon broke into a rapid; this was safely passed; but the next, close to it, demanded more caution.*

That day, at the rapids starting at 782/286, Back's party first met the Inuit, who helped his party ... *in carrying the boat below the fall; so that, in reality, I was indebted to them for getting to the sea at all.* Then too the Inuit used this spot to fish; then too the hills were

***Inuit caribou fence***

*Allan's stern seat*

crowned with inuksuit. Back's party reached the mouth on 29 July 1834.

Anderson, 30 July 1855: *The rapids at the outlet of L. Franklin were partly passed by a portage and partly run. At their foot we saw 3 Esq. Lodges ... We ran the last falls—they were only an easy rapid at this stage of the water.* (Allan comment: I expect that the *easy rapid* is 782/286. Anderson reached Victoria Headland in the morning of 31 July 1855.)

Next day, we stopped halfway through the second rapid (last of the trip) to look at the impressive line of stones on the hill to the right; I expect that they formed a "fence" for guiding caribou to the killing site. We didn't cross to look at the cabins on the left. We continued downstream but soon lost our shelter from the wind, gave up, and pulled in. By sat-phone with Boris at Baker Lake Lodge, we arranged to be picked up by float plane. I was to phone in coordinates after picking a site where it could land. This was great news, for George Drought had marked a pickup point on the right shore about 7 km downstream.

15 August was our last paddling day. After paddling north into a stiff wind, we crossed to the right side and worked our way through small islands and rocks, eventually reaching the Drought site. We pulled in at the beach but found it to be wet clay, unsuitable for camping. Unable even to round the point against the wind, we dragged the boats about 100 m downstream to a sandy area and set up camp. As arranged, I phoned Boris and gave our coordinates. We took the PakCanoes apart and settled in. I noticed a tide of about 0.3 m.

After another talk with Boris the next day, we figured that we would be there another night. Supper was almost ready when Aklak Air's Twin Otter arrived; arrangements had changed. This is when we learned that Barbara and George had been burned in the explosion and evacuated; we learned also that a party had been attacked by a bear on the Thelon and also evacuated. We threw things together and arrived in Baker Lake at 10:30 p.m. Boris was very accommodating about the extra cost of the Twin Otter. Elizabeth had a great supper waiting for us at Baker Lake Lodge (highly recommended), where we stayed the night.

We had breakfast at the lodge. After notifying the RCMP of our return, I hoofed it to the nursing station at the other end of town to get my foot looked at. The others wandered around and shopped. By the way, despite being served by scheduled flights, Baker Lake is dry, i.e. no alcohol. I imagine that I see the difference that makes.

In the afternoon, the lodge people drove us to the airport (runway is rather slanted) from where we flew to Rankin Inlet. John Hickes and Page Burt (she spoke at WCS a good many years ago, about her tundra book) picked us up and drove us to their Nanuq Lodge (another great place) where we had an excellent supper with them and Martha (Innu, John's sister?); she had flown out with Barbara Burton (arm burned badly in the explosion) earlier in the month.

Marilyn left the next day. While the others explored the town, I looked at Page's books. That was how I encountered Tammarniit (translated incorrectly, according to Martha, as Mistakes). I had known already about the Ennadai Lake famine but not about the one on the Back; had I done so, I expect that I would have felt differently when we

passed those places. According to the authors of Tammarniit, Farley Mowat got the essential fact correct, namely that Inuit had starved to death in Canada, in the 1950s! Martha's mother (and also her aunt?) were the last to be evacuated from Garry Lake in 1958; I think they had been given up for dead. In the afternoon, Page drove Linda, Hendrik, and me to the Thule site at Iqalugaarjuup Nunanga (Meliadine River) Territorial Park. Later, I spoke with Martha, trying to interest her in speaking at WCS; she explained that such talks may be given only by the elders. Should have known that.

Next morning, Page took us sightseeing around Rankin Inlet. Linda and I then flew to Winnipeg, where we were stranded because of the big storm in Toronto; we got home the next day, via Calgary. Hendrik stayed in Rankin another night, then left for Churchill and his polar bear project.

**Epilogue**: In later years, I paddled again with Linda, Marilyn, Daniela, Doug, Bob, Gene, Stephen, and Hendrik. And I paddled also with Barbara and George. Daniela and Doug visited Hans and Hans in Germany; the latter had paddled the Back again, this time getting to Chantrey Inlet where they got frozen into the ice. Hans Schneller died a year or two later, paddling his kayak. To all these people and to many others, thanks for sharing these trips with me, nay, making them possible.

**Bibliography**:


— My CCR posts at http://www.myccr.com/phpbb-forum/-view-topic.php?f=126&t=31348 provide an extensive bibliography on the Back. The journals of George Back and James Anderson are especially worth reading; their parties were the first, other than the native people, to travel the river. May you too be humbled by their pace, perhaps commonplace in those times, but extraordinary by modern tripping standards; for example, Anderson's party covered in 19 days (travelling upstream) the reach that we paddled downstream in 41 days.

— Anderson, James. Copies of his Journal (*Back River expedition of 1855*) are published by Barr and Clarke. Of necessity alone, his party used birch-bark canoes, unsuited for the purpose, namely searching for remains of the Franklin expedition.

— Barr, William (editor). *Searching for Franklin. The Land Arctic Searching Expedition: James Anderson's and James Stewart's expedition via the Back River, 1855*. Hakluyt Society (London), 1999.

— Clarke, C H D. *Chief Factor James Anderson's Back River Journal of 1855.* The Canadian Field-Naturalist. Please consult my CCR posts for explicit references.

— Back, George. *Narrative of the Arctic land expedition to the mouth of the Great Fish River, and along the shores of the Arctic Ocean, in the years 1833, 1834 and 1835.* A and W Calignani, Paris, 1836. His party used a large boat.

— Tester, Frank James and Peter Kulchyski. *Tammarniit (Mistakes); Inuit Relocation in the Eastern Arctic, 1939-63*. University of British Columbia Press, Vancouver, 1994. I learned only after the trip that, in 1958, Inuit had starved to death on or near Mission Island (Upper Garry Lake), likely also at the Pelly Lake site where we had lunch and at the site (mentioned by Anderson) between Pelly and Upper Garry.


***Allan, Marilyn, Hendrik; the three who completed the whole Back River***

Wilderness Canoe Association
WCA
CPM #40015547
ISSN 1828-1327
**Published by the Wilderness Canoe Association**
**Nastawgan is an Anishinabi word meaning "the way or route"**

The WILDERNESS CANOE ASSOCIATION is a non-profit organization made up of individuals interested in wilderness travel, mainly by canoe and kayak, but also including backpacking and winter trips on both skis and snowshoes. The club publishes a quarterly journal, *Nastawgan*, to facilitate the exchange of information and ideas of interest to wilderness travellers, organizes an extensive program of trips for members, runs a few basic workshops, and is involved in environmental issues relevant to wilderness canoeing.

## Events Calender

Fall Meeting will be held at the Madawaska Kanu Centre on 5 and 6 October 2013.

Wine & Cheese Party will take place on 16 November 2013 at TSCC.

## George Luste Lecture

First George Luste Lecture will take place on Sunday 27th October between 2-4pm at the Canadian Canoe Museum in Peterborough. WCA member John Lentz will share his lifetime paddling experiences in a presentation entitled "Five Decades of Wilderness Paddling: People and Places", followed by book sales, signing and refreshments. WCA members can attend for free under the complementary WCA-exclusive CCM membership deal arranged earlier this year. Registration required.

## Contributors' Guidelines

If you are planning to submit any material for possible publication in *Nastawgan*, you would do the editors and certainly yourself a great favour by first consulting the WCA Guidelines for Contributors to *Nastawgan*. These guidelines should be followed as much as possible by all contributors, so that the editorial team can more effectively edit your contribution to make it fit the *Nastawgan* style. The latest draft of the guidelines is available on the WCA website.

# A Sad Farewell

Jay Neilson, a longtime paddler and one of the WCA's most characteristic members, accomplished much of what she wanted before cancer took her on 30 June 2013. A WCA member since 1987, Jay was very active in the club. Many members benefited from the numerous outings that she and husband Frank Knaapen organized. Along with multiday paddling trips in the Ottawa Valley and elsewhere, they also introduced members to the joys of winter camping in Algonquin Park. Jay's photography skills were abundantly evident in the beautiful trip reports she contributed to *Nastawgan*. Toni Harting, former editor of *Nastawgan* and distinguished photographer, notes that "Jay was a gifted photographer who published many of her insightful pictures." We will greatly miss her and all her actions. Thanks, Jay, for all you have done while being with us; you were a truly unforgettable blast!

# 2014 WC Symposium

Date and location for the 2014 Wilderness Canoeing Symposium are yet to be determined. Monarch Park Collegiate may not be an option next year, although we're trying hard to return for another year. We'll make every effort to avoid Family Day long weekend this time. If you have suggestions for a possible WCS location that meets the criteria of being close to public transit, having ample parking, and seats for 600, please contact me at aleks@wcsymposium.com. Volunteers are again required. Your program suggestions are very much appreciated and can be addressed to the same email. Thank you.

Aleks Gusev

# If You Cook It, They Will Come

**by Barb Young**
**Photos by the Ashton family**

As Ray Kinsella proved in *Field of Dreams*, if you build a baseball field, the Black Sox will come. So too, Doug and Lisa Ashton have found, if you cook up a storm, WCA members will come. The Ashton Family Annual Grand River Outing broke records this past June with 30-plus members attending along with one dog. The day began on the banks of the Grand with some pretty amazing organization. In order to maintain some sort of order, Doug divided the group into two teams. We were given coloured tape for our canoes (yeah Orange Team!) along with instructions for our day on the river and a map to the Ashton home for the following barbecue. This section of the Grand River (Cambridge to Paris) is very scenic with abundant birdlife. We were also treated to a tour of the ruins of a historic mill, which Lisa organized. Along the way there were some intentional and unintentional dunks in the river. One member quipped that regrettably she had worn "quick wet" clothing rather than "quick dry" clothing. After an enjoyable day on the river, which included a lunch stop at Glen Morris, we packed up and headed back to the Ashton home. There we experienced the *Pièce de résistance* with an incredible meal prepared by chef Doug along with his sous chefs - Lisa and sons Tyler and Robbie. Thank you to the Ashton family for once again providing WCA members with this fabulous outing.

***Master Chef at work***

# Bob Bignell 1948 - 2013

Bob grew up in England spending his time fishing and caving, which was the foundation of a life-long love and appreciation of all things outdoors. His skills, combined with his qualifications in photography, brought him to McMaster University in Hamilton, Ontario in 1970. Bob immediately recognized that life in Canada was full of opportunity and would fulfill his dream of adventure. He quickly returned to England, married Jan, and together they set off for a new life in Canada. Bob thoroughly enjoyed some 10 years of caving and assisting on field trips throughout North America with students and faculty, while adding a degree to his formal education. It was in the early 1970s that Bob fulfilled another dream: fishing in Algonquin Park. Initially, these were solo trips, often with his dog, in a heavy, clumsy,15-ft Grumman.

After several solo northern canoe trips, Jan became concerned and suggested Bob find a group with which to paddle. It was likely in the late 1980s that friend Herb Pohl at McMaster introduced Bob to the WCA. Bob became a WCA Board member for 1997/98 and again for 2004/2005. Actually, Herb and Bob had much in common: a penchant for solo canoeing, undaunted by the weight of gear, and a lust for lifting up large rocks for a fire-pit or in lieu of tent pegs. Unlike Herb, Bob was happy to take almost anyone as a canoeing partner.

Bob's first major canoe trip was a student adventure on the Nahanni in 1992, remarkable because of the five participants, Bob was the only accomplished paddler. From then on, and later with the more practical folding Pakboat, he added 11 major northern river group-trips, including the Kazan, Thelon, Coppermine, Horton, to name a few. These are mostly recorded in Nastawgan, and he surely was dreaming of more. Jan has records of those many trips.

After retirement in 2003, Jan and Bob extended their travels to overseas hiking and safari's, and they explored the Canadian West Coast by making use of the friendly B.C. Ferry services that ply the Pacific coast to get into Alaska which they loved.

In 2010, what started as an innocuous sinus infection led to a losing battle against lymphoma and in May of this year Bob Bignell peacefully passed away.

It is said by canoeists who shared Bob's trips, they have nothing but the best memories of the many long days spent paddling with Bob. He and his wonderful good humour, good spirits, and exuberance will be greatly missed.

Rob Butler

# Sprit Sailing

## By C.K. Macdonald

**Introduction**

Rectangular-shaped sprit sails have powered canoes in Canada for over 350 years. Their use extended from coast to coast to include sea-going dugout canoes of the Haida on the Pacific Ocean and the birch canoes of the Micmac on the Atlantic Ocean. The popularity of sprit sails in the fur-trade canoes was due to their ease of rigging and the performance of these sails in quartering winds without lee boards or rudders. By the late 1800s most fur-trade canoe brigades had completely abandoned the square sail in favour of the more easily managed sprit sail.

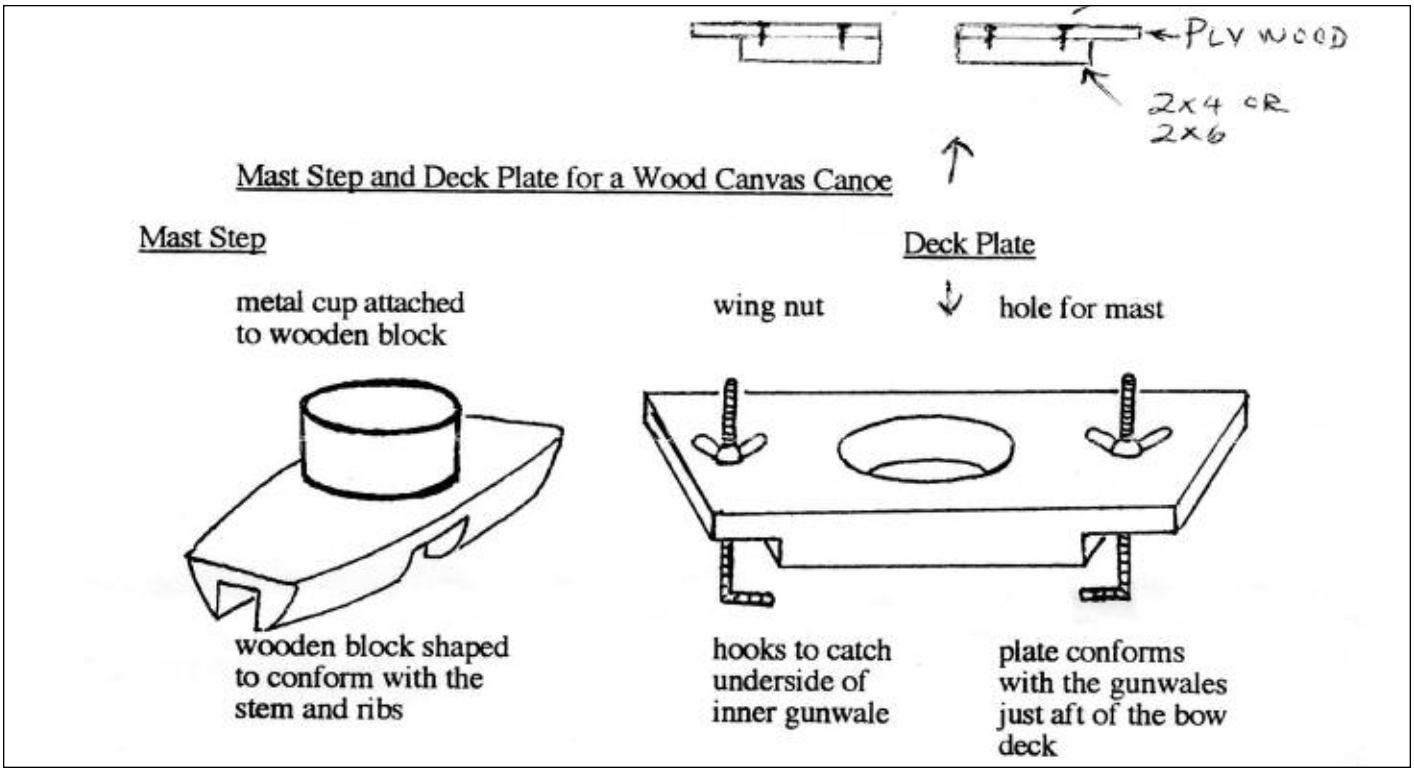
Sprit sails are suitable for use with most canoes over 15 feet long. Canoes between 15 and 18 feet long are usually stable enough to carry a 5 ft. x 7 ft. sail safely in moderate winds. If desired, canoes 17 to 20 feet in length can carry a slightly larger sail of 6 ft. x 8 ft. dimension to take advantage of lighter winds. The greatest danger to canoe safety is not necessarily the wind strength, but the size and steepness of the waves. On large lakes wave size can quickly build to a height dangerous for small canoes.

A canoe can be sailed in a following wind through much rougher waves than it can be paddled. This difference can cause trouble for the inexperienced. When paddling, there is a brief loss of forward power when all of the paddles are removed from the water with the return of each stroke. This provides an instant when the canoe can be turned sideways by a large wave passing under the hull. Often the canoe will take on water during this broach and could capsize. Therefore, when dangerously rough conditions develop, it is often safer to sail into shore than it is to take down the sail and mast and attempt to reach safety by paddling.

Despite the need for caution in rough water, sprit sailing can eliminate hours of exhausting paddling. At the same time it is often possible to increase the speed and distance that one can travel by canoe in a day. For example, voyageurs commonly extended their daily distance from 60 to 90 miles. In July 1995 my son Colin and I in a fully loaded 17-foot-long "Cronje" cruiser Chestnut Canoe, sailed twelve and one half miles upstream on the French River in 49 minutes. During a canoe trip when the right conditions present themselves, it is often worthwhile to cut poles from the forest and rig a sprit sail. The sail itself takes little space in the pack and being rectangular it can also be used for a variety of other purposes such as a spray cover for the cargo in the canoe or for a protective shelter on land during inclement weather. If it is intended that the sail will be used in this way, it should be waterproofed with paraffin-based canvas waterproofing compound. It is best if the product contains a small quantity of zinc naphthanate to inhibit the growth of mould and mildew. To waterproof the sail, hang it up in a well-ventilated place and simply paint the waterproofing compound into the cloth with a paintbrush.

**Rigging the Sprit Sale**

In canoes under 20 feet long, it is best to position the mast of the sail as far forward in the bow of the canoe as possible. It is far easier and safer to put up or take down a mast in this position than from further back in the canoe when the water is rough. A small deck plate and step for the bottom of the mast greatly simplifies and hastens the installation of a mast. Serious sailors should carry these aids.

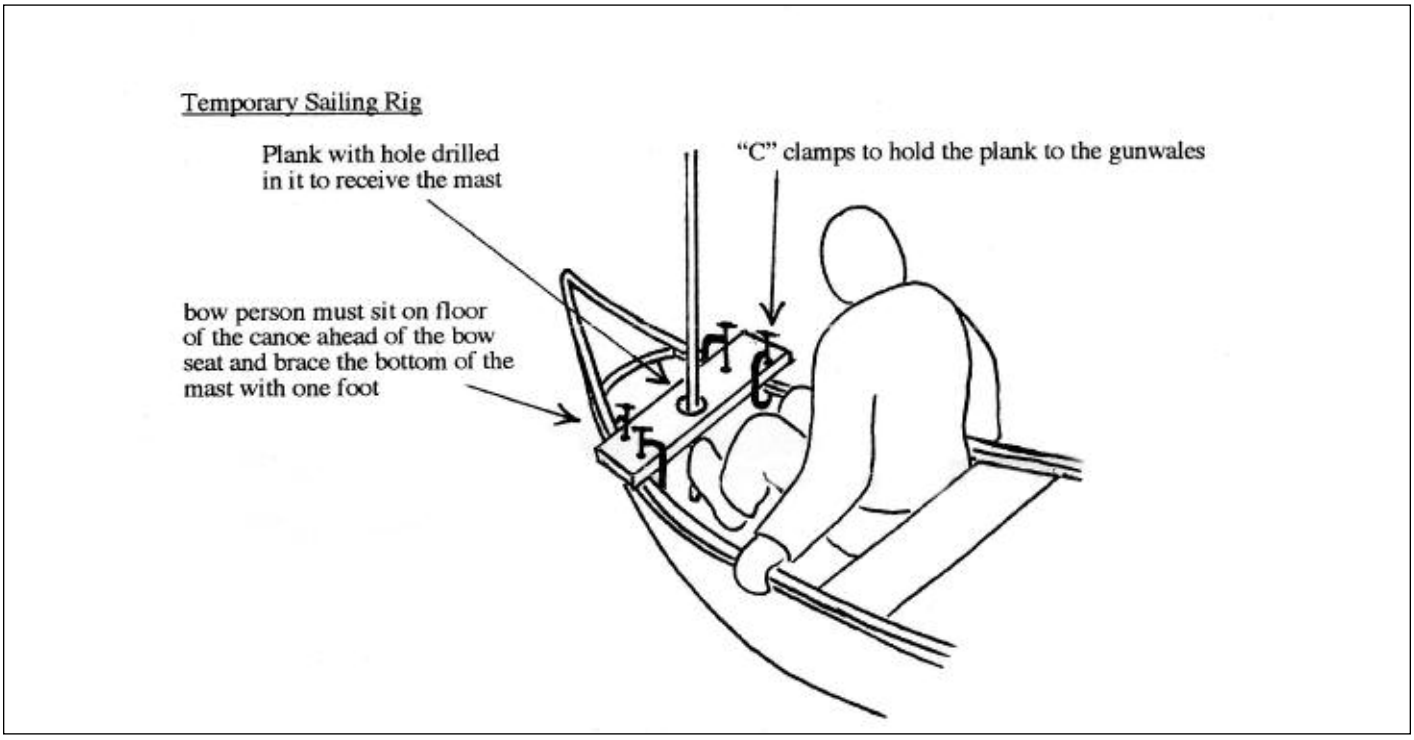


This equipment does not require the modification of the canoe in any way, not even a screw hole. The deck plate is held in place by removable hooks. A thin mast can be held from wobbling in the two-and-one-eighth-inch-diameter hole in the deck plate with a small wooden wedge driven in from the top side of the plate. The mast step is shaped to be held in place by a simple pressure fit. The metal cup of the mast step is held securely to the wooden block with a pair of wood screws. This cup can be made from a two-inch seamless copper pipe soldered to a circular copper plate, which forms the bottom of the cup. This diameter will allow the cup of the mast step to fit into the hole of the deck plate so they can be carried as a compact unit when not in use. Unfortunately there is so much variation in canoe design, that these aids must be fashioned to fit individual canoe models.

In place of the deck plate, a simple plank or even a piece of half-inch-thick plywood can be used. A two-inch-diameter hole is cut in the middle of the plank to receive the mast. Removable "C" clamps can be used to secure the plank lo the gunwales.

Some people prefer to permanently install a mast step in their canoe. To save weight and to securely anchor the bottom of the mast, the hole to receive the mast is often made square shaped. The bottom of the mast is hewed to taper on four sides with an axe so it will fit into the small square hole. For a wooden-block mast step, the square hole can be cut out with a chisel. On wood-canvas canoes the mast step is usually attached to the bow stem by two screws angled inwards towards each other so the step will not easily pulled from the stem. In fiberglass canoes, the mast step can be fibreglassed into the canoe hull. An alternative method is to make a metal cup out of a one-inch section of square-sided tubing of dimensions one inch by one inch. A square-shaped plate is welded to the tube to form the bottom of the cup. In wood-canvas canoes, this can be held to the bow stem by a single wood screw. For aluminum canoes, the square-sided cup can be made out of aluminum and argon-welded to the keel line a short distance back of the bow flotation tank.

For a temporary sprit sailing rig, it is not necessary to have a must step. A shoe, boot towel, or even a clump of moss can be used to protect the canoe hull from the bottom of the mast. However, the bowman will have to use his foot to push on the bottom of the mast so that it does not slip backward with the force of the wind on the sail.

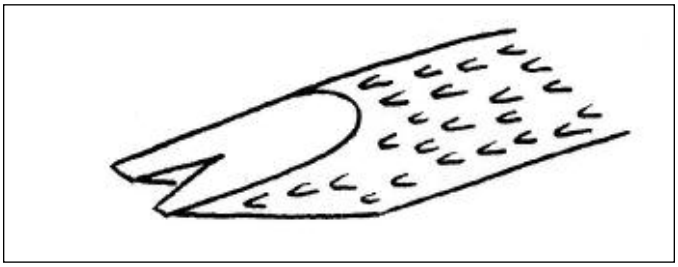



The usual way of rigging a sprit sail is not to use stays or guys to support the mast. This allows the mast to be taken down quickly if conditions become unsafe. Also during sailing, the sail can be quickly swung from one side of the mast to the other without interference.

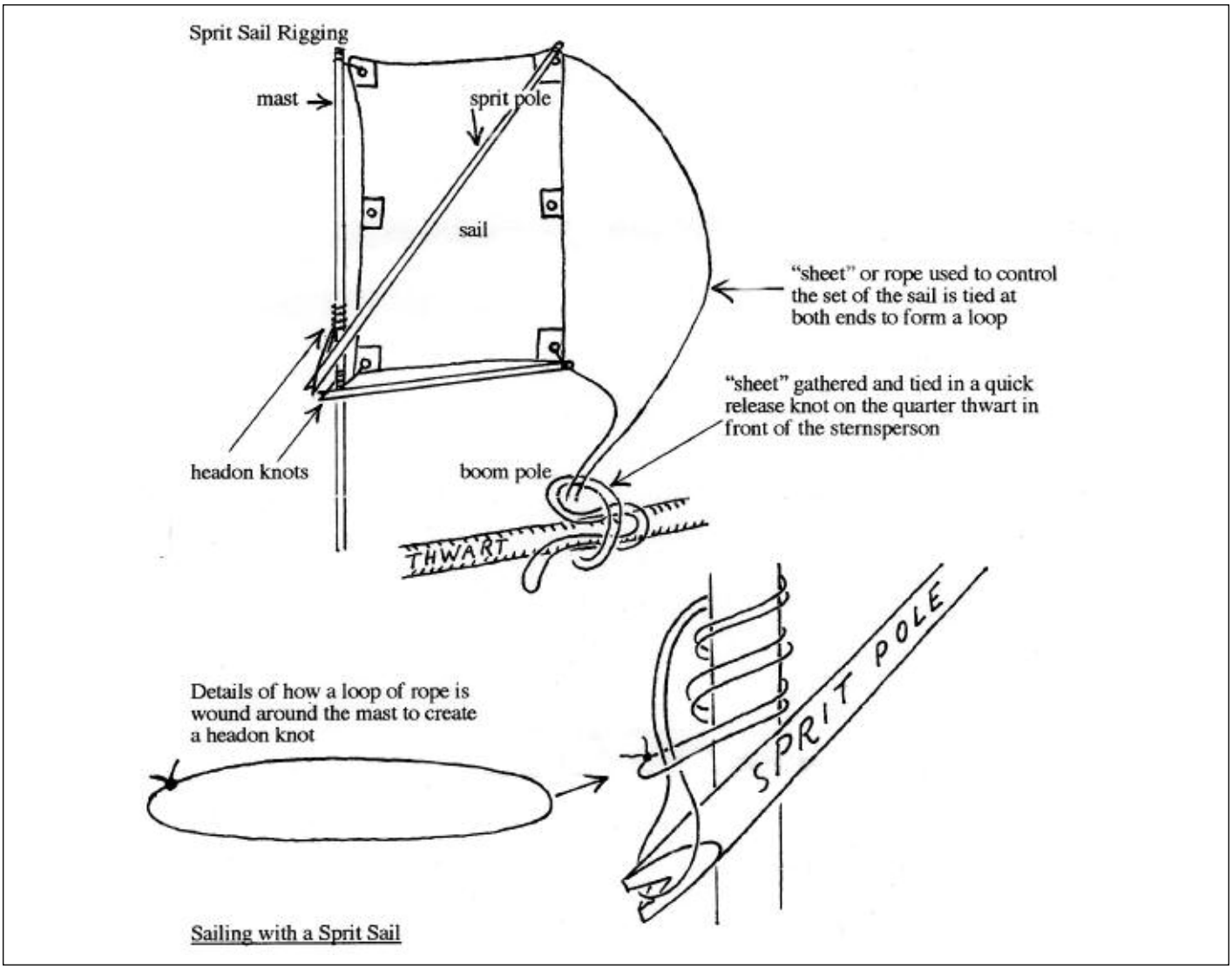
Before leaving shore, it is best to tie the sail to the mast and to prepare the rest of the rigging because these tasks are difficult while out on the water in a canoe. Tie in a headon or prussic knot to the lower portion of the mast to create a small rope loop that will receive the lower end of the sprit pole. A second loop with headon knot should also be tied to the mast just below the first to receive a boom pole. The ends of both the sprit and boom poles should be sharpened on two sides with an axe, then notched in the center of the point to receive the rope loops. Next, one end of a long rope is tied both to the top outer comer of the sail and to the top of the diagonally oriented sprit pole. The other end of the rope is tied to the lower outer comer of the sail and to the outer end of the boom pole so that a large rope loop is created. This large rope loop serves as a "sheet" to control the set of the sail. It is easiest to lay out the sail and poles on the ground in their proper positions and then to install the poles in loops to determine if the knots are tied at the correct loca-

tions. When practical, install the mast in the canoe before embarking. However, if there is some distance to paddle before sailing, all the poles and sail can be bunched together and encircled by a few winds of the large rope loop or "sheet." The sail and rigging can be carried on top of the load in the canoe furled like this until needed.

The poles used for sailing are best made from white or black spruce trees of approximately two inches diameter at their bases. Balsam fir poles are too gummy and are easily broken under strain. Hardwood poles are too heavy and too crooked. The bark should be peeled off the poles just after they are cut, when the bark is easiest to remove. It's best to paint the poles with boiled linseed oil, which will reduce the amount of checking as the wood dries, especially if you intend to keep the poles for any length of time. Here is a detailed view of how the lower ends of both the sprit and mast poles are sharpened with just an axe to receive the rope loops.



The following drawing provides the details of the rigging and how the headon knots are tied to the mast to form the necessary loops, which hold the sprit and boon poles. Either headon or prussic knots are used because they can be easily adjusted up or down the mast when loosened, but provide an excellent grip on the mast while under tension.



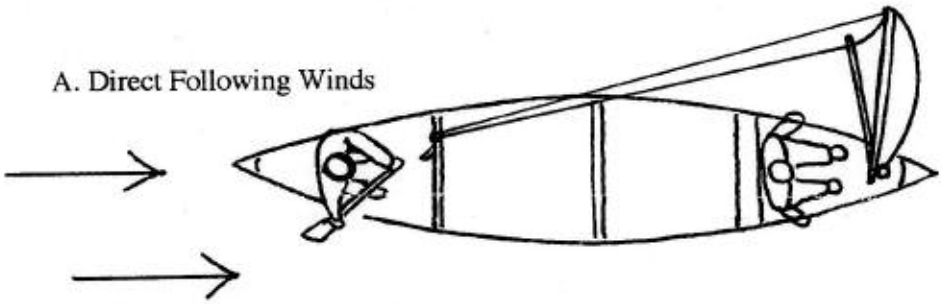
**Sailing with a Sprit Sail**

It is best to always sail with a minimum of two persons. For safety, the person in the bow should sit on the floor of the canoe just ahead of the bow seat to increase stability by lowering the center of gravity in the canoe. Some rearward adjustment of the load in the canoe might be required if the canoe becomes too bow heavy. The bow person's job is to raise and lower the sailing rig and to assist with flipping the boom across to sail on the other side of the canoe when required. Since the stern person's forward vision is partly blocked by the sail, the bow person can also help the stern person by warning of dangers lying directly ahead. The stern person's job is to steer the canoe and to control the sail with the sheet.

The sail configuration and stern paddler's position for the various winds that can be sailed are given below.

It is usually a bit faster to sail and easier to maintain control

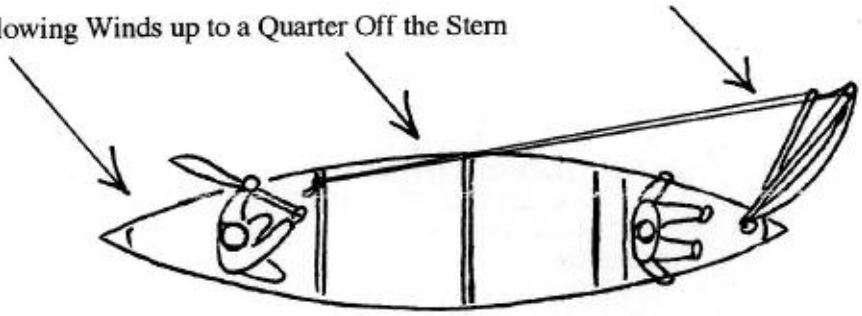
A. Direct Following Winds



stern person steers preferably on the same side as the sail

sail on either side of the mast, using boom to spread the lower half of the sail

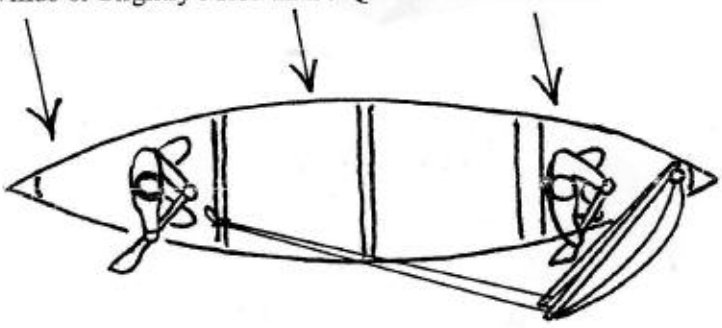
B. Following Winds up to a Quarter Off the Stern



stern person steers on upwind side (this minimises the amount of corrective steerage pressure that must be exerted on the paddle blade)

sail on upwind side of mast, using boom to spread the lower half of the sail

C. Following Winds of Slightly More than a Quarter Off the Stern



stern person steers on down wind side to reduce side slip by prying off the gunwale

sail on downwind side of mast with bow person using paddle as a lee board on the downwind side (no boom required)

of the canoe in large waves in configuration B, than it is to sail and maintain control in configuration A. Configuration C results in much slower sailing than either A or B. Considerable side drift can be experienced as well. Crosswinds coming from a direction any closer to broadside than shown in configuration C, require full lee boards and a large rudder. These are impractical to carry on a canoe trip so one must consider either altering course or taking down the sail and paddling the canoe.

*The most important rule of sprit sailing is, if the wind increases and you are starting to lose control, quickly release the sheet at the quarter thwart and let the sail luff harmlessly like a flag in the breeze in the bow until danger passes.* This will eliminate most of the wind pressure on the canoe and slow its forward speed. If wind and waves are still building

***Dick Irwin sailing with a sprit sail on Faber Lake in 2004 ("Nastwagan" Winter 2012: "On Dogrib trails with Dick Irwin")***

dangerously, you have left it too late to sail into the safety of shore under full sail, consider the following. First, have the bow person take the ends of both the sprit and boom poles out of the loops and place the ends of the poles as far astern and as low in the canoe as possible. This will both lower the center of gravity in the canoe and reduce the swaying of the poles to improve stability so the mast can be safely taken down. The lower outer edge of the sail now will be close enough to untie the sheet from both the sail and the end of the boom. With the removal of the boom and lowering of the sprit pole, much of the weight will be taken off the must so it will be easier to lift out the must step and deck plate. Once the must has been removed, it should slid over the cargo und thwarts, preferably lower end first.

While the above is happening, the stern person must focus on using his or hers corrective paddle strokes to prevent the canoe from turning broadside in the waves. lf this ever occurs, it is important to lean with each approaching wave crest. The canoe must be leaned in the direction that the waves are travelling. This lean reduces the amount of water that can pour in over the gunwale and decreases the chance of the canoe rolling over on the side.

If wind and wave conditions still worsen so that it is difficult to control the canoe, use a sea anchor to assist with keeping the bow of the canoe facing downwind. To do this, quickly tie the loose end of the sheet to one side of the stern seat and throw overboard the mast, sprit pole and sail. Hopefully these items remain tied together und attached to the other end of the sheet. The sail and poles will soon drag along behind canoe. They will dampen the crests of the incoming waves as well as provide enough tension to keep the bow of the canoe facing downwind.

Not only is it easier to tie the sheet to the stem seat rather then to the bow painter ring, but it is better. This point of attachment will cause the canoe to orient itself at a slight oblique angle to the wind and waves, which reduces the plunging of the canoe, making it more seaworthy. By now, both canoeists should be sitting on the bottom of the canoe to improve its stability and bailing out water like heck! Unless the canoe drifts into shore, one will have to ride in the canoe until conditions moderate.

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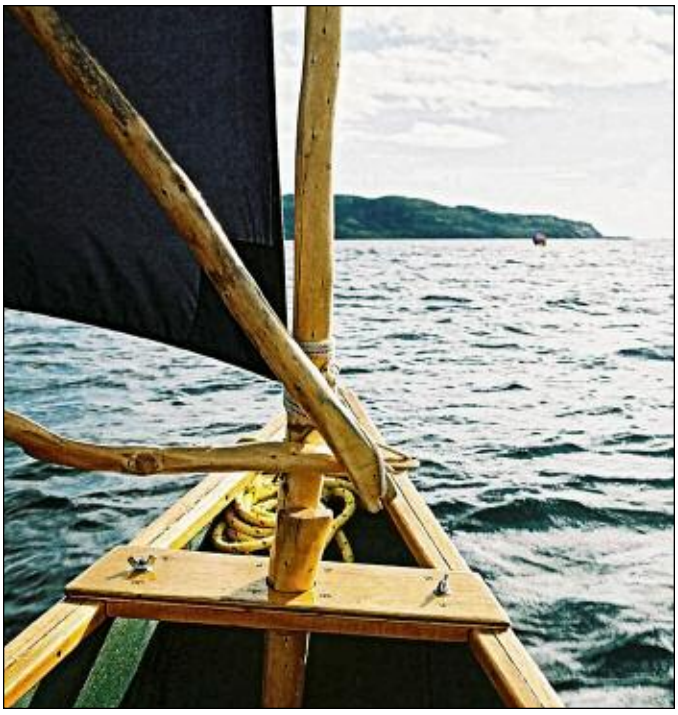
Craig Macdonald is a long-time WCA member. He started canoeing in the early ‘50s and paddled with the likes of Herb Pohl, Jim Greenacre, Bill King, Dick Irwin, and many others. Craig’s a Map Man like no other. He spent 26 years researching and documenting the nastawgan, Temagami’s traditional network of summer and winter routes (*The Historic Map of Temagami*). He did mapping and the original field info for the Frost Centre, compiled the Canoe Routes of Ontario, Algonquin Park, and many others. Craig’s passion for traditional winter travel knows no bounds. He’s still traversing Algonquin Park daily after 46 years of full-time employment. “I do it because I like it and not for the money” – Craig lives in Dwight, Ontario.

**Care of your sail**

Your sail has been made out of the finest non-synthetic sail cloth that has ever been produced – four and one quarter ounces to the yard, Egyptian long-fiber cotton woven in Scotland. Take care not to rip or abrade the cloth. If you plan to use it as a shelter tarp, keep it well away from open campfires because sparks can quickly destroy this material. Your sail should be thoroughly dried after every period of use and stored in a cool, dry place, away from plastics or any other materials which could condense moisture and promote the growth of mildew and mould. As suggested in the Introduction, the life of the sail can be extended by the application of a canvas waterproofing compound containing traces of zinc naphthanate.



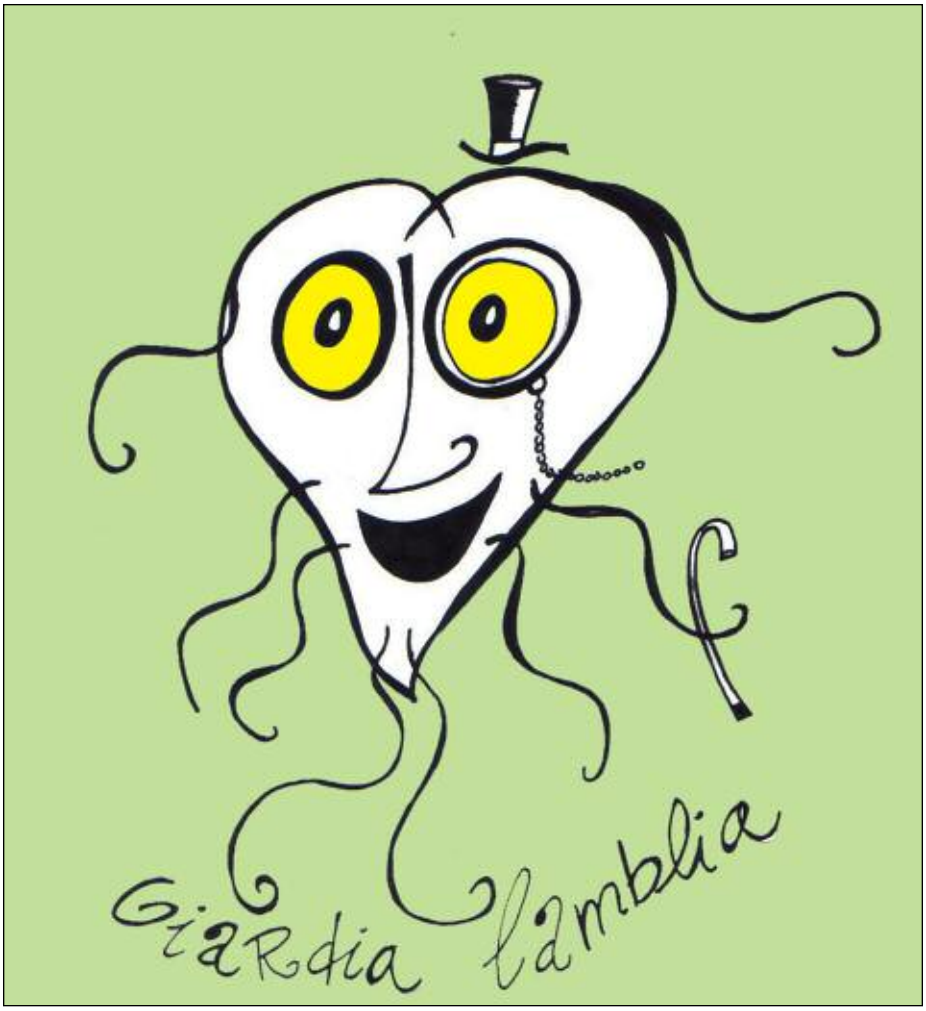
# Pathogens

## By Dan Perry

A number of years ago my wife, her brother, and I went for a long, leisurely paddle in Algonquin Park. We were two weeks into our paddle when, one night, I woke up sweating and trembling. I stumbled out of the tent and crawled on my hands and knees through the night. About 30 feet from the tent I wretched my guts out and collapsed into the detritus. For the next 24 hours I was weak and dizzy, running hot and cold and unable to travel. At first my brother in law thought I was being a wuss – I could tell – until it hit him too. After another day of being camp-bound we decided we had to travel. We were still a week away from our rendezvous. I soloed my boat, while my wife paddled her brother in his boat. He spent a good deal of time lying on his back on the packs feeling miserable. I remember how awful I felt under the hot sun, feeling weak, and that my paddling efforts were getting me nowhere. The rocking of the boat just aggravated my dizziness, and I constantly felt like I was going to pitch overboard.

We were going down the Petawawa River, which has a number of campsites along the way with "thunder boxes" at them. For the uninitiated: a thunder box is like an outhouse with no walls – a box with a hole in the top that you can sit on. Between the two of us, that final leg of our trip was a paddle from one thunder box to the next, as we went down the river.

Why am I telling you this? Because we need to talk about pathogens, toxins, and other things that can make you ill while you are in the wilds.




I will probably never know for sure, but I suspect that my brother-in-law and I had a bout of Giardiasis, commonly called Beaver Fever, which is caused by the Giardia lamblia parasite. Up until that time I had trusted the water from streams and lakes that were remote and untainted by human settlements and industry. Only once was I worried about the water I drank in the back country. A few years previous to the Petawawa incident we were travelling through Algonquin Park, and we crossed Grassy Bay. Grassy Bay is a massive bog that seems to go on forever. It was a hot, sunny day, and when we got to the end of the bog there was a beautiful, inviting stream with water tumbling over shining boulders, gushing down a hill. I was thirsty, so I took a long draft of water, and into about the third big swig I realized that something was wrong. The water was very warm, and it had an odd taste to it.

The portage followed the stream up a hill, and when we got to the top of it there was the stinkiest, stagnant beaver slew, full of reeking, gelatinous water, covered in scum, feeding the stream. Yum!

Fortunately I didn't experience any ill affects that time, which only reinforced my cavalier attitude toward water and its safety. If that didn't make me sick then I must be impervious. It wasn't until after the Petawawa trip I got really serious about staying healthy, and reducing risks in the bush. Tainted water is just one risk that we can avoid with a little knowledge and taking the right precautions.

Recently I was talking to a friend about camping food. He mentioned that he and his buddies took steaks on a canoe trip, and ate them on the fifth day. On this summer trip the weather was warm and, as on most canoe trips, there was no cooler. The steaks were marinated in Ziplock plastic bags. They started out frozen, but soon thawed.

They took a huge risk. Food poisoning is serious. Food poisoning can kill you. That is not the worst of it. Food poisoning can leave you permanently debilitated. Food poisoning can ruin your joints and cripple you with arthritis, which is

mild considering the fact that it can also paralyze or blind you. Food poisoning can also cause kidney failure, which leads to failure of other organs. It can also cause stroke and heart failure. While these consequences are very rare, do you really want to take extreme risks? Aren't you just begging for trouble if you do? We need to understand the risks and how to avoid them.

**Pathogens**

Pathogens are the tiny micro-organisms that can cause disease. Pathogens generally make you ill by invading your body and reproducing in it. Others make you ill from the toxins they produce. The toxins are either in tainted food or they are produced by the bacteria inside your body. The pathogens that you have to be worried about are bacteria, viruses, and parasites. Cross-contamination and the danger of allergic reactions are other things we need to be concerned with.

**Bacteria**

You might think that you can tell if a food has turned bad by the smell. However, pathogenic bacteria are odourless and tasteless. Bacteria grow when the conditions are right. It is astonishing how fast they can reproduce. They divide every 20 minutes, so one becomes two, and two become four, and four become eight, and so on. If you start with a penny, invest it, and double that penny every day, could you retire at the end of the month! At the end of thirty days you will have $5,368,709.12. Go ahead, work it out. Bacteria are like that too. It adds up really fast.

Bacteria need a few things to grow. First, they need to be in a certain temperature range. The danger zone is between 4°C and 60°C ( 40°F and 140°F ). Inside this temperature range bacteria will flourish. Second, they need moisture. Third, the pH of the environment has to be neutral. And finally, bacteria need time to reproduce. That was the problem with the steaks. They are a great source of protein, their pH is neutral, they are moist, and five days in a backpack gives them plenty of time for pathogens to flourish. That is by far enough time to breed food-borne illness. In fact, two hours at room temperature or above is enough time to make you ill. Remember, the pathogens we are talking about here are both odourless and tasteless.

One of the dangers of bacteria is, some can exist in a spore state. If they finds themselves in an environment that is not conducive to reproduction, they can enter into the spore state. Spores are very hardy and can survive extreme conditions. Viable 40-million-year-old spores have been found, meaning, in the right conditions they could become active living and reproducing bacteria again! If you ingest bacteria spores they are very dangerous.

Bacteria below 4°C do not die, but stop reproducing. They will also stop reproducing in environments between 60°C and 74°C. And temperatures above 74°C will kill most pathogenic bacteria. That is how you protect yourself from pathogenic bacteria in foods that potentially harbor them. Make sure your food is brought up to at least 75°C, and eat it soon after cooking.

The byproduct of bacteria reproduction can produce toxins, and not all toxins are destroyed by cooking. So cooking your food thoroughly is not foolproof. You cannot take food that has turned and purify it with heat. One toxin-producing bacterium that campers have to be concerned with is Bacillus cereus. It loves to reproduce in cooked rice. While rice is a staple on long-haul canoe trips, and safe to pack in its dry state, always eat it soon after cooking.

**Cross Contamination**

One of the things you need to be concerned about in the wilderness is cross-contamination. That fish that you caught and cleaned is not safe to eat until it is cooked properly. The knife that you used to clean the fish with has pathogens from the raw fish on it. Make sure you clean that knife well before you let it come into contact with other food. That is usually how people are infected by cross-contamination, when they transfer pathogens from one food to another with dirty utensils, or by placing food into a contaminated pot or dish.

Viruses are passed-on the same way bacteria are. One major difference between viruses and bacteria is, viruses can survive on inorganic surfaces for a long time. You only need one in your system to become ill. They invade a cell and turn that cell into an virus-producing machine. The best way to protect yourself from viruses is to keep things clean – your hands and your dishes.

**Parasites**

Most parasites, such as Giardia lamblia, get into you mainly through an unsafe water supply. Ever since my episode on the Petawawa, I have used a good water filter. I tried iodine pills, but they shut down my digestive system and that made me ill. Fortunately I twigged onto what was happening right away. Bringing your water to a full rolling boil is the best way to purify it of parasites. Boiling it more is not helpful. Why loose water to evaporation and also waste fuel?

It used to be thought that Giardia lamblia was not found in remote areas, but now it is known that it can be found everywhere, and it seems to be becoming more and more common.

To be very safe, make sure that you use clean water to wash dishes in, and for brushing your teeth. Parasites can dwell on your hands for an extended amount of time, so make sure you wash your hands, particularly if you are going to be handling food.

**Poison**

Iodine is a poison. Some people can tolerate it more than others. I can't. If you think you are going to use it, because filters are expensive and boiling water is a logistical hassle, try it before you leave home. If you feel nauseated after a couple of days of use or your tongue gets discolored, stop using it. Even if you decide to use it, make sure you use the right dose along the way.

Make sure your fuel bottles and medications are well labeled, so nobody ingests something poisonous by mistake.

When I was young and thought myself to be impervious to all things, I poisoned myself on a camping trip by eating a sandwich just after I had slathered myself with DEET. I didn't wash my hands before eating. That stuff is wicked.

**Allergies**

I have heard sad, sad stories of kids dying of allergic reactions on camping trips, because someone brought something that the group was not supposed to have. Many people think that if you have an allergic reaction you break out in a rash and itch a lot, that's it. I had a friend whose son was allergic to peanuts. If someone at his son's school sat at a desk and ate a granola bar with peanuts in it and then his son merely sat at that desk two days later, he would probably die within 15 minutes. The school had extremely strict rules about peanuts, as there were a few children that would react that way.

Whenever I go out with a group I survey everyone for allergies and inform the group of any concerns.

Parents, don't be shy. I took a big groups of kids down the French River once, and while I was doing my survey I kept on getting parents that would say, "Ya, well there is this little thing, but it is OK. We don't want to talk about it." It drove me crazy. Talk about it! We need to know! We are going to be in a place were there is no medical help. If there is the potential that you might have an allergic reaction to something on a trip, make sure the others know how to help you.

**Play It Safe**

When you are on a long trip, the safest food to bring are freeze-dried and dehydrated foods. If you have a dehydrator you probably already know about the wonders of dehydrated food. I was amazed when I discovered that I could dehydrate soup! Pour a puddle of soup on to a Teflon sheet and run the dehydrator until all the liquid is gone. You are left with a crust on the sheet. Gently scrape that crust into a Ziplock bag or into a vacuum-sealable bag and seal it. You have soup that will last for months, as long as it is kept dry. Remember, if you remove one of the things that pathogens need to thrive, such as moisture, you are safe. If you can dehydrate soup you can dehydrate just about anything. OK, you definitely can not dehydrate, butter, water, or beer, so there are some limits.

If you do take up dehydrating your own foods, study the subject and do it right. Again, temperatures need to be reached and maintained to kill off any pathogens just as you would if you were cooking, so make sure you know what you are doing.

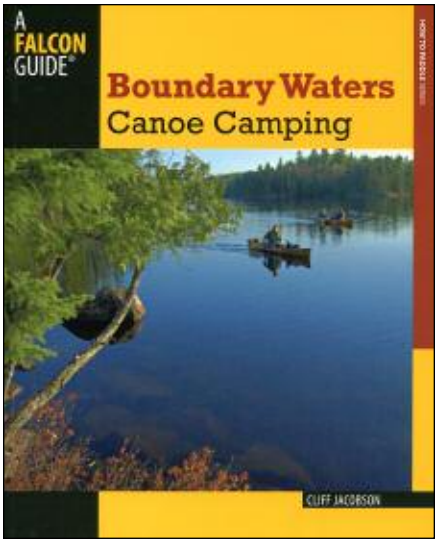
There also a great many freeze-dried and dehydrated foods available on the market, both in your supermarket and online. Knorr soups and pasta sauces are good examples of mainstream dehydrated products. There are also specialty meals for the back country that are produced by companies like Harvest Foodworks.

If you want to build yourself a menu of such foods and generate a shopping list of perfect portions for your trip you can go online and do that at several websites. You will have the added advantage of knowing how many calories each of the meals you design will provide and how much your whole package is going to weigh, once the surplus packaging has been removed, along with lots of other information such as the ingredients of each item. This is all useful information that used to be very difficult to get. It is a free service of Grub 'n' Gear (www.grub-n-gear.ca). All the foods that ends up on your menu will be safe to eat for weeks, even if you are travelling in hot weather without any refrigeration.

Certain things like pouches of mustard, relish, and ketchup, the kind you get at fast-food restaurants, have a good long shelf life too. That is because they have been homogenized to kill off pathogens and hermetically sealed while they are still well in the safe temperature zone. So if you plan a trip, start eating lots of fast food and grab extra ketchup and mustard pouches. (Did I just recommend eating fast food!?) You can also find a list in the Grub 'n' Gear Forum of various foods recommended for back country camping, along with the shelf life of each one. You are also able to contribute to that list.

So whether it is for just a couple of days or a month you plan to be in the wilderness, make sure you look after yourself. While serious and debilitating food poisoning and food-related reactions are rare, back-country travel can push the limits of what is safe. You are also in an environment where it is difficult to get help if you need it, so why tempt fate? Just do it right. It is so simple when it comes down to it. Wash your hands. Avoid cross contamination, and pack the right foods in the first place.

Stay safe. Have a great trip.




**Boundary Waters Canoe Camping** by Cliff Jacobson, published by Globe Pequot Press, Guilford, CT, softcover, 192 pages, 2012, US$18.95, Can$20.95. Review by Toni Harting.

Cliff Jacobson is probably North America's best-known and most prominent wilderness canoeist, having been a tripping guide, outfitter, and outdoors writer for more tan thirty years. He has written numerous books about the fascinating and demanding art of paddling and is now in the process of updating and revising a number of them. This beautiful book about the world-renowned Boundary Waters Canoe Area (BWCA), located in northeastern Minnesota just south of the Canadian border, is one of those revised books, now including more than 100 stunning colour photographs and much old and new content that is of great value to all wilderness paddlers, not just those visiting the BWCA. Among many other subjects, the book offers the latest information on: how to discover and enjoy the BWCA; selecting, outfitting, paddling, and portaging your canoe; paddling solo canoes and kayaks; equipment; trail meals; canoe camps; bothersome beasts and ornery stingers; dangers, safety, first aid; and much more. A very useful chapter is the one where several highly experienced tripping experts offer great advice to paddlers who are about to make their first canoe trip into the BWCA. An extensive Index is also available. This is a fine book that will enlighten the hearts of all dedicated wilderness paddlers.

# The Decline of Wilderness Tripping in the Modern Age

## By Dawne Robinson

*From the smallest amoeba to the grandest of galaxies, we define ourselves by our boundaries…. We cross borders, explore new frontiers: frontiers of the heart, frontiers of the soul; and if we're lucky, we come home again, having learned great lessons about our shared destiny. For the purpose of our travels, both inward and outward, is not merely to see the unseen, but to bring those visions home to share with those we love.*

I recently discovered this statement on a TV show called *Touch*. Notwithstanding my passion for its main character, Keifer Sutherland, it resonated deeply within the context of my passion for canoe tripping. So much of what I love about travelling by canoe is bound to the notion of pushing beyond familiar boundaries into new frontiers, be they figurative or metaphoric in nature. It's important to me to expand my comfort zone beyond what is offered by traditional tripping into wilder, less accessible landscapes, not limited by park boundaries and 'no trespassing' signs. For many trippers, it is difficult to explain the intensity of this primal urge to paddle into regions seldom travelled by others. Perhaps it is an evolutionary artifact of a genome bequeathed by long dead ancestors who came from someplace far away to discover a new world. It defines many of us even today. Herb Pohl eloquently described this compulsion in his wonderful book *The Lure of Faraway Places.* For me, it culminates in a pessimistic sense of urgency to explore these wild spaces before they disappear forever into domestication.

Every year, our annual pilgrimage 'into the wild' becomes more complicated. That is in fact the issue that I want to address. The logistics of remote river travel can be challenging, but until recently, the planning of it was a ritual that we anticipated every spring. I always took it for granted that we could simply mount our boats onto the struts of a float plane and fly off into the horizon. Indeed, for many years that was the case. There was always something innately Canadian about jumping into a Beaver or Otter and looking down to see our canoes riding the air waves below us. Our first inkling that this symbiotic relationship between paddler and bush plane might be changing occurred on the Stikine River a few years ago. We had flown into the headwaters of the Upper Stikine with our Beaver artfully adorned by two canoes but discovered that once in Alaska, it's illegal to carry canoes on the outside of a plane. We chalked it up to the events of 9/11, reserved a jet boat to haul us back up the river to Telegraph Creek in B.C. and thought no more about it.

A few years later however, we encountered a similar problem on the Romaine River in Quebec. We arrived at the float base in Havre-Saint-Pierre to be told that our original flight arrangements needed to change. Transport rules would no longer allow us to carry a canoe on each strut of the plane. That meant that we could either double the number of our flights and thus cost, or try nesting canoes. We chose the latter after some initial concern that our boats would not fit together. The pilot also seemed a bit perplexed by the new policies and could only offer up the suggestion that 'safety' concerns were the impetus for change. When we flew into the Churchill, the issue was resolved by stuffing three canoes inside the cabin of a Twin Otter. We have been told recently however, that even this capability has been undermined. Unless the plane has two doors in the cabin (most do not), it is unsafe to carry passengers with their canoes since the exit will be blocked.

It's obvious to me that a plot is emerging to keep wilderness trippers out of the wilderness! I'm not entirely sure of the reason behind these changes, and a perusal of the related government document, Advisory Circular (AC) No. 500-011 - Appendix A Aircraft Carrying External Loads (see below) did not enlighten me to any extent. Regulations seem contradictory to our experience at times, and I can only surmise that compliance varies to some degree with each company. Unfortunately, the story has recently become even more complicated and disturbing. When we began negotiations this year to fly into and out of the Hayes River in Manitoba, we assumed that our Romaine experience of nesting canoes would be repeated. Contrary to expectations, our pilot informed us that many companies, including his, no longer fly hard-bodied canoes at all. Sadly, older pilots are retiring and are difficult to replace. The few younger pilots that are available simply lack either the experience or the will to fly canoes in any configuration. With the advent of mining and petroleum interests in the north, they no longer need to accommodate paddlers. Transport fees are now harvested from more convenient industrial sources. It's simply about economics.

Is there a solution? Restricting trip destinations to places closer to home is not an answer in my book. The north exerts such a strong magnetic pull that it cannot be resisted for long. So, my husband and I have made the jump into PakCanoes to address the issue in a more practical way. A few years ago, the cost of flying canoes into and out of the Thelon was so exorbitant that we decided to rent them to try them out. These collapsible canoes may well become the standard mode of travel on isolated Canadian waterways. We just paid about $2500 to own one but it will pay for itself quickly. They pack well into the cargo area of a float plane making flight costs substantially cheaper. We were relatively satisfied with their performance on the Thelon. I discovered, however, that I'm a traditionalist at heart. The playful dance of a hard-shell canoe as it works its way through a difficult rapid cannot compare to the more mellow descent of its flexible cousin. The sound of water slapping against a soft vinyl hull lacks the same resonance. Something

has been lost. Nonetheless, one must keep in mind the end game. Despite my complaining, I count myself lucky that I can still extend my boundaries and get 'out there' to those rivers that remain buried deep within wilderness, even if it's in a folding canoe.

What does this mean for the future of wilderness canoe tripping? Well, maybe it's time for the Canadian bush plane museum in Sault Saint Marie to feature an exhibit of an Otter festooned with canoes on its float struts. This partnership may well be a thing of the past and, as such, may have earned its place in a museum. I fear that we're losing an integral component of the Canadian experience. These faithful work horses have provided such a vital portal between civilization and the land beyond. With new regulations, however, the next generation of voyageurs won't be able to afford canoe tripping in remote areas of the north.

What long-term effects will that have on their appreciation of this wilderness? Will our children even know what they are missing? Out of sight, out of mind? And what does it mean for environmental protection? Ken Madsen writes in frustration in his article *A Step-By-Step Plan to Launch Your Own Conservation Campaign* that *...wild places are being hunted down like passenger pigeons were during the 1800s*. Indeed, paddlers bare witness not only to the splendor of our wild places but to their abuse as well. We must be the voice of the land.

A famous Canadian once pronounced: *Space... the Final Frontier. These are the voyages of the starship Enterprise. Its continuing mission: to explore strange new worlds, to seek out new life and new civilizations, to boldly go where no one has gone before.* I don't

Advisory Circular (AC) No. 500-011 - Appendix A Aircraft Carrying External Loads (condensed version)

*Previous approvals included the following:

| Aeroplane Type/Model | Type of Load | Limits |
|---|---|---|
| Beavers | with 4580, 4930, or W6000 floats | with a variety of approved boat racks carrying canoes up to 18 ft or boats up to 14 ft in length weighing up to 260 lb. $V_{NE}$=135 mph. |
| Beavers | with 4930 or 4580 floats | carrying canoes up to 16 ft weighing 120 lb on the float struts. |
| Beavers | | on wheels carrying an 18-ft, 150-lb canoe on a carrier mounted on the left aft of fuselage. |
| Otters | with 7170 or 7850 floats | with boat racks or 7850 floats with a 15-ft boat weighing 220 lb or a 19-ft canoe weighing 120 lb on the struts on one or both sides of the aircraft at speeds up to 120 KIAS. |
| Cessna 180 | | with 17-ft canoe or kayak weighing 90 lb on one or both sides tied to the struts. |
| Cessna 185 | | with 18-ft, 120-lb canoe or up to 250 lb of stacked lumber against the float struts. |
| Cessna 206 | | with 14-ft, 175-lb boat on a boat rack (stern forward, with boat 18 in. aft of the prop plane). |
| Piper PA 12 | | (150 h) 17-ft, 90-lb canoe or folding boat on a boat rack, speeds up to 100 mph. |

really want space to be the final frontier. There's still room for that on this planet, at least for now, *if* we can get to it. Now, although the Enterprise might be overkill, if it can carry a couple of canoes on its docking clamps, I'm ready to beam aboard!


*Photo by Toni Harting*

**Current approvals state:** Emergency entry to or egress from the aircraft must not be unduly impeded by carriage of the external load, particularly in the takeoff and landing configurations. It must be shown that the position of the external load does not adversely affect the travel of the flight controls; the operation of the undercarriage or flaps; the airflow in the vicinity of the pilot or static air sources; the propeller or rotor thrust; and the airflow in the vicinity of any air intake or exhaust port.

When a boat or canoe is carried as an external load on an airplane, the performance requirements of this AC apply, except that takeoff, climb, and landing performance need not be addressed provided that the certified maximum takeoff weight is reduced by twice the weight of the external load. Where the basic approved maximum weight is 3000 lb and the boat weight 100 lb, the maximum approved takeoff weight, including the boat, would be 3000 lb - 2 x 100 lb = 2800 lb.

Carriage Of Passengers - Up to 4 passengers may be transported in an aircraft carrying boats or canoes as external loads if the airplane has not been used for operations with loads exceeding certified maximum takeoff weight in accordance with this AC in accordance with the following:

(a) the gross takeoff weight reduction is specified as a limitation or compliance with the climb requirements of the basis of certification has been demonstrated;

(b) the aircraft is operated by day VFR only;

(c) the aircraft is operated within an approved flight envelope wherein acceptable flying qualities have been demonstrated;

(d) emergency egress from the passenger compartment is not unduly impeded by a boat or other externally mounted cargo. There must be clearly marked escape routes, and the passengers must be briefed before each takeoff if alternate escape routes are required.

(e) An applicant must conduct flight tests of the proposed configuration and provide a flight manual supplement in accordance with this AC to obtain an approval.

# SAVING JACK

## By William Cormode

In August 1995, a group of 10 friends arranged a trip on the Mountain River. We flew on North Wright Air's Twin Otter on Floats from Norman Wells to our starting point on Willow Handle Lake. We spent the night there at an unused outfitter's compound, enjoying a pleasant first evening and a fresh fish dinner. Next morning we portaged about a kilometre to the headwaters of an unnamed creek where we were able to start our trip by pushing, pulling, and paddling.

On the second day, we stopped for lunch on river right where we rested and enjoyed a leisurely lunch prior to the final stretch of the creek that lead us to the Mountain River.

As we approached the confluence with the Mountain River the creek had overflowed its bank in the spring flood and left the channel blocked with fallen trees and other debris. We stopped to scout a way around this obstacle and immediately noticed that Jack was not wearing his PFD. His PFD was light green in color similar to his shirt. Most of the others of us had brightly colored PFD that attracted attention when being worn or left on a beach. No one offered to lend Jack their PFD. Paddling or hiking back to the lunch spot was not an option. What to do?

After much deliberation we realized that the only piece of surplus flotation equipment was Jack's Thermarest. Every one in the group searched their gear for straps of various sizes and we proceeded to tie Jack up. As the trip progressed every morning after jack relieved himself, Leila, his dutiful wife, strapped him in for the day, or until he required freedom for personal reasons. This answer to the missing PFD problem was quite satisfactory as there was an opportunity for a test in one of the rapids.

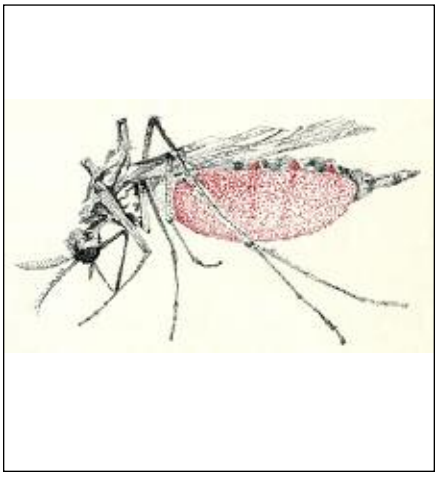
# MOSQUITOS

## By Rob Buchanan

Sometimes, if I'm quiet enough, I can hear them. Faint at first, but with my silence they grow more confident. From the far reaches of the northern Canadian forests they come together. They gather in secluded thickets and there they begin to sing. But their song is not beautiful; although there is harmony it is without variation, without rhythm. Their song is sinister. It is the unified voice of a thousand scraping antennae. Slowly it becomes a drone, an anti-symphony, a requiem of the natural world, and from a universal command governed by instinct the black legion will rise on wings of sanguinary appetite and seek prey: they crave blood.

These are the mosquitoes of northern Canada. And these resilient little pirates love people who walk with canoes on their heads. I take small comfort in the fact that I am not alone. There are two of us carrying the canoe. The mosquito horde will be forced to split.

At this exact moment my portage partner is on the bush side of the footpath, taking off layers of clothing, responding to the call of nature, betraying vulnerable skin - revealing white fleshy fantasy-targets to work the mosquitoes into a frenzied dive-bomb straight for his exposed cheeks. I can already hear his curses. Holding very still, I smile. For a moment, while the horde feasts on my partner, I enjoy respite.



# EMPTYING THE BAGS

Back home. Another wilderness canoe trip has taken place. Duffle bags placed in the garage because usually there's not a whole lot of time between returning home and returning to work. Should have more time for reflection of the magnificent country so recently travelled in, but life in big cities does not seem to permit it.

Every day after work spend an hour or two cleaning, repairing, and packing away the gear. Placed in the permanent spot assigned to it. To wait for the next canoe trip. Really enjoy this after-work time puttering in the garage. Allows still-fresh memories of a wilderness canoe trip to come flooding back. Can't help but smile when they do. With any sort of luck and a small amount of procrastination, you can prolong the unpacking so that it takes three to four weeks. Keeps the memory of the wilderness canoe trip with you that much longer.

To tell the truth, by stretching out both the planning and packing stage and the unpacking and storing stage, you can get three good months out of one canoe trip. Might be just enough to keep you from going over the edge when dealing with city life. Wife asks, "What do you do all that time in the garage?" Don't know how to answer her. Can I tell her that I'm afraid to let go of the trip? That I'm worried that this past trip might be the last one? Should I tell her of my fears that the wilderness is shrinking so fast that it might be gone before my children can enjoy it? Can't face those questions, so I tell her that I'm just putting away the camping gear.

What do I do in the garage? Holding a blackened pot brings back memories of the meals cooked over the campfire. Still smelling of soot and smoke. Needs a good scouring inside and out. Putting an edge on the filet knife dulled by contact with too many fish bones. Refilling the match container with future fires. Working in the tackle box is worth a week by itself. Sharpening hooks on all the lures, restringing reels, and making new steel leaders.

Three weeks after the trip has ended and I'm down to the last duffle bag. Can hardly remember what is in it. It holds the grill, the folding saw, the tube with the fishing poles, a half dozen empty Nalgene bottles, a roll of duct tape, and the trash bag. The trash bag is very light. Dumped it out on the driveway. It contains some crumpled aluminum foil and fourteen cans scorched in the campfire and stomped flat. Some of the cans still have ashes in them. A gift from the spruce trees of the Canadian north. Decided to spread the ashes in the flower bed. I like to know that both myself and the flowers have been rejuvenated by the trip to the Canadian north.

The cans are destined for the weekly trash pickup. But not today. I want to keep them and the trip with me for just a little while longer.

Greg Went

# FOOD FOR PADDLERS

The recipe below comes from Ron and Kelly Young. Members since 2012, they have become quite involved in the WCA, attending numerous outings and volunteering at Paddle the Don and the Outdoor Adventure Show. Dave and I first met Ron and Kelly at Doug Ashton's Grand River outing where they paddled with their young children, Laine and Wilson. We got to know them better when they came to our Fall hiking weekend and brought and shared their Snack Attack bars.

**SNACK ATTACK BARS**

These bars make a hearty snack, or even a quick breakfast or lunch when on the go. Feel free to substitute any of the items in brackets or combine them to make up the total measurement. These also freeze very well.

In bowl #1 mix the following and set aside:
6 oz frozen orange juice, thawed (about 2/3 of a can)
1/2 cup Quick Cook Oats (or Quinoa Flakes or Kamut Flakes)
1/2 cup chopped pitted prunes
1/2 cup chopped dried apricots
1/2 cup raisins (or dried cranberries)
1/2 cup chopped unsalted peanuts
1/4 cup chopped dates
1/4 cup wheat germ (or ground flax)
1/4 cup sesame seeds (or hemp seeds)

In bowl #2 (a large one, as everything ends up in this one) blend:
2 tbsp shortening (or butter), softened
1/2 cup white sugar (or raw sugar)
Then add the following and mix well:
1/2 cup Fancy Molasses
1 egg

In bowl #3 combine:
2 cups all-purpose flour (or whole wheat or sprouted spelt flour)
1/4 tsp salt
1 tsp baking soda
1 tsp ginger
1 tsp cinnamon

Add bowl #3 to bowl #2, mix well and then stir in the contents of bowl #1. Pour into a greased 13"x9"x2" baking pan and spread evenly. Bake at 325 degrees F for 35 minutes. Cool and then cut into 3" x 1" bars. Wrap individually in plastic wrap for the trail. Enjoy!

*If you would like to share your favourite tripping recipes, please contact Barb Young, 12 Erindale Crescent, Brampton, Ont. L6W 1B5 youngjdavid@rogers.com.*

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Ontario Trillium Foundation / Fondation Trillium de l'Ontario

WCA gratefully acknowledges the financial support of the Ontario Trillium Foundation in publishing this Journal