

# The Battle Bridge

A Recollection by Gene Miskiw



## Battle Bridge Story

By Gene Miskiw

*In the beginning* ...Stan Skirrow, was laying out trail routes, mapping them, and working with landowners regarding access and permissions. We had a situation in the area now known as Lowe's Crossing where the trail approached the Battle River and followed it upstream about half a mile to cross the river on the road bridge. Ideally, we would then double back downstream along the other bank of the river to pick up our trail at Lowe's Crossing and proceed eastward along the river. The landowner, Larry Lowe, had a dairy operation on the tableland above this area and a large, gas operated water pump near the river below to provide water from the river for his operation up above. Because the water supply was so crucial to his operation, he was very reluctant to grant us permission to pass by his pump for fear of any possible negative occurrences. We were quite welcome to cross his land anywhere downstream of the pump and when the idea of a bridge came up, he was quite agreeable to the idea of us building one there.

We wrestled with ideas for a bridge for some time, as in late summer the river is a mere trickle that one could wade across in some places, but in early spring it typically overflows its banks with spring runoff. It seemed that building such a bridge with volunteer labor and the heavy materials required would be nearly impossible for us. If equipment and operators were hired, the cost would be prohibitive. At about that time, someone in the club met an engineer, Richard Irons, who expressed interest in our project and thought he might have some useful ideas. Stan and I met with him and found that he had experience working with energy companies in the foothills where they often had to put up a heavy log bridge for trucks to cross a narrow mountain stream. He felt that their design could be adapted for our purposes and get approval. We thought that we would be able to get logs somewhere for the project but it also required steel rods to hold it together. Richard approached a

company in Calgary that he dealt with, Dywidag Systems International. He provided information about our trail system that we gave him and asked if they would be interested in donating the threadbar required for our bridge. They fortunately agreed and had it all shipped to the Suncor Yard in Sherwood Park at no cost to us. During this time we adapted the bridge design and Richard got it approved.

Meanwhile, we wrestled with possible locations for the proposed bridge. In 1979 we hiked around the area to check out the soil conditions and the high water levels in the springtime. During the preceding winter, Fred Vollo, who had snowmobiles, and I toured the area by snowmobile with landowner, Larry Lowe, for a preliminary check of the area and received valuable input about the nature of the river from Larry. There was really only one location that was appropriate and accessible for the project. We had to be as far before the curve in the river as possible in order to reduce problems with erosion in upcoming years and still have solid soil under us to support the bridge. It was decided that we would build the bridge on land in winter when the river is frozen and access with our tools and equipment could be gained by snowmobile. I contacted Calgary Power in Wetaskiwin to inquire about the possibility of acquiring any power poles for our project. As luck would have it, they were taking down and decommissioning a line just east of there near New Norway and said that they would be pleased to donate all the poles that we would require. Many of them would be only a few years old, they told me. I requested the number of poles that we felt that we would need and asked that they leave them for us on the river bank under the road bridge just upstream of our proposed bridge site. This they easily did as it was very convenient for them and along their way home to Wetaskiwin. Now all we had to do was get the materials to the bridge site. Our real work was about to begin.

At the building site, we cleared away some of the willows that were where we would build the bridge. In March of 1980 a work party of eight moved the logs from the road bridge to the building site by snowmobile. We used a converted VW hood as a sled for



the front end of the poles and just dragged the poles down the river one at a time.



Because it was a mild day and the snow was wet and sticky it provided a lot of resistance to the drag and we had to use two snowmobiles to tow them. Once at the site, the men had a very difficult time getting the large and heavy logs up onto the river bank. Much improvisation was done, but with winches and come-alongs with chains and ropes and much heavy pulling we managed to get them all up and stacked out of the snow. That was the largest and heaviest work required for the whole of the construction project.

In August of 1980 we moved the steel from Sherwood Park to the road bridge and lowered it down onto the river bank below, where the logs had been. The thirty foot rods presented a challenge for transport down the highway. I felt that they would be most safely moved closer to the roadway than on top of the van so

I modified the bumper of my van and laid them on the extensions close to the road.



En route, a police car followed me for a number of miles but apparently felt that things were well under control and turned off without pulling me over. That summer we moved a number of eight foot logs that were no longer required at Wanisan Lake over to the Battle location for later use.

In September of 1980, a work party used the short logs to make rafts on which to float the long steel down river towed by motorized canoe and steered at the back end by Stan Skirrow. Quentin Mix and I piloted the canoe and when we ran into difficulty at a bend in the river things quickly got interesting. Stan was persuaded to don a life jacket for the journey and it was found useful when the raft on which he was standing overturned, whereupon he discovered the deepest hole in the Battle River between its origin at Battle Lake and the Saskatchewan River.

Because the steel was now loosely slung under the raft, the whole transport system was compromised and as it was getting late in the afternoon the float trip was aborted at that point and the long steel left on the river bank. The logs and most of the short steel were towed to the site and we had to call it a day after



stacking everything on shore. Wading in the river to tie the rafts together and later to dismantle them, we were discovered by a number of huge, hungry bloodsuckers, which was not very pleasant. Stan and a crew carried and dragged the thirty foot long steel the rest of the way to the bridge site at a later date. It was a long, hard journey with the windings in the river and the rugged



terrain. All in all, moving the steel downriver was the second hardest job of the whole bridge project.

In anticipation of accessing the work site from above, I contacted the landowner on that side, told him about our project and requested his permission for access throughout the winter. I proposed taking the side road across from Bethany Home up to the field above and using the trail down to the bridge site. He heartily agreed, with the proviso that we not bother 'his' deer, which regularly grazed on the alfalfa field which would be our staging area. We assured him that we were not there to hunt and would respect his wishes.

In November, 1981, a work party moved materials from a vehicle above the bridge site down to the site for the construction of sawhorses to support the bridge assembly. I had scrounged  $\frac{3}{4}$

inch plywood and 2X6's from discarded concrete forms at a construction site. All we had to do was dismantle them and haul away whatever we wanted. The plywood would later be used for decking on the bridge. Once the sawhorses had been constructed and the logs and their arrangement selected, another work party moved the logs into position on the sawhorses so that, as



construction progressed, we would have a relatively easy time positioning and securing the logs to one another.

In February of 1982, assembly of the bridge was begun. Everyone was eager to come and help, but on most days there was work for only two people at a time and a third person would usually have little more to do than stand around and get cold. On occasion a third person could also work with us depending on just what we were doing that day. Meanwhile, I had purchased two snowmobiles and built a sled to haul our tools as that was the only way to get down to the site and back up that long steep hill. Even with the snowmobiles it was sometimes difficult to make the climb if we were hauling too much weight, whereupon we would have to downsize and make another trip. We could never leave any tools



at the site as the river was at times used as a snowmobile track by other users. As luck would have it, the landowner had a huge stack of hay which he was selling, in the middle of the field, so he kept a road open up to the site all winter. The semitrailers would pull in and load up and be off. We were fortunate to have easy access right into the middle of the field where there was plenty of room to turn around and park well out of the way of any trucks that might come in.

On one occasion, a blizzard blew up while Stan and I were down in the valley working and we were only vaguely aware of it. When we came up to the top to go home, we found that our tracks back to the truck across the open field had been obliterated and the only way to locate them was by feel. That was most easily done by a snowmobile without a load, so I borrowed the machine Stan was using and felt out the track back to the truck about a hundred and fifty meters away while he waited for me to return. Pulling the loaded sled and breaking a new trail in the deep snow was out of the question. We then followed the packed trail back to the truck. Visibility was very poor all the way home, even in daylight. The WTA meeting and most other events that night in Central Alberta were canceled due to the storm.

Assembling the bridge was slow, repetitious work and required many trips out to the site but it was very rewarding. We would, on occasion, catch sight of deer and twice we found one bedded down beside our bridge when we arrived. They got used to our comings and goings and did not feel threatened by our presence as I would dramatically discover later.

Many times Stan would have to sit with me on my machine for extra weight to get better traction up the steep hill. We would then unhook the sled at the top and drive back down to pick up the other machine. Later in the season when we would start to get icy conditions on the trail, we would have to take quite a run at the hill to make it to the top. One time when the going was a bit rough, Stan fell off and disappeared over the bank beside us. Fortunately he did not fall far and had a very soft landing in the deep snow. I



had to continue on my way to the top, and then pick him up on the way down for the other machine. He was still dusting himself off when I came back for him. Stan had many such interesting experiences (mishaps) working with me on projects over the years but he survived and was never injured except for perhaps his pride at times.

Unlike the construction of Mix Shelter and Wanisan Shelter with which I was heavily involved, we did have the benefit of power tools for the bridge construction. The main tool was a power auger with



long bits for drilling through the forty inches or so of log for the steel rods, and, of course, a chainsaw was very useful, too.

April of 1982 found the not fully assembled bridge still on the bank and the river in flood. Richard Irons and I went out to the site to have a look and found the bridge completely surrounded by water. Richard was able to see the bridge only from a distance from



across the river but was satisfied that it was up to spec. The river, however, was impressive, being at the high water mark at the time.

That summer several work parties were held to gather rocks from the fields above to dump into the cribbing that would be built to support the ends of the bridge when it was in place. We wanted to do whatever we could to help stabilize the cribbing during flood and minimize erosion problems. Rock was plentiful but getting any amount of it to the bridge site was a problem. We hired a local farmer with a front-end loader to haul some rock down for us once we had collected a pile at the top but that was only partly successful as he was able to haul only a limited amount down that steep slope due to its weight. He left it as near as he could to the bridge site below due to the soft, wet soil closer to the site, so we would still have to pack it by hand to get it to the cribbing and dump it in. We also considered bringing it down by snowmobile or quad but realized that there would be many trips for few rocks because of the weight and the slope. Ultimately we concluded that perhaps those rocks were not that important after all due to the inefficiency



of the whole operation. Once the cribbing was built, however, we did dump whatever rock we had into it and it did prove effective in reducing erosion inside and below the cribbing during high water flow.

In winter of 1983 the bridge was fully assembled and ready to move. I left the cross logs under the bridge full length to protect the bridge from the possibility of rolling over during the move. We chopped two basins in the ice near the opposite bank and then chopped a hole in the bottom of each so they would fill with water. Into each basin we set the end of a slide log and leaned the other end onto the bank where we were to place our bridge. Once the water froze, it would hold the parallel logs in place for the bridge to slide readily up onto the bank into position. Stan Peters, one of our members living in Wetaskiwin knew an equipment operator there who had equipment that he could use to move the bridge into position for us. We were fairly certain that he would have to use a tracked machine to move the bridge as we didn't believe that another type of vehicle could make it back up the slope from below. Naturally the man wanted to have a look at the whole area so he knew what to expect when he got here. He and Stan Peters were to meet me at our staging area one day to give him an opportunity to view the whole situation. When I got there, Stan arrived alone. The man was busy that morning and could not come out until later that afternoon. Stan and I offloaded the snowmobiles and drove down for a look around and do some final tidying up at the site. Later, Stan left to pick up his man in Wetaskiwin and I remained behind waiting for them to return. I ate my lunch and was reading the paper when I felt that I was being watched. When I looked around, I found deer in the field all around me, grazing unconcernedly. I got out of the van and they merely looked up and continued grazing while I counted nineteen of them scattered all around, some within a stone's throw of me. Remembering the landowner's caution, I hoped that the man who was coming out with Stan was not a hunter. Soon I spotted Stan's red car coming over the hill on the road about a half mile away so I got out of the van to chase the deer off the field and out of sight. I ran around, shouted and waved my arms but they paid little attention. In

desperation I started up one of the machines and roared around in circles, gradually moving the deer off the field just before Stan and his passenger arrived. The deer were so conditioned to our presence over two years that they felt no fear of us. They knew us and our vehicles by sight, sound and smell. They must have wondered what had gotten into me on this day with such uncharacteristically bizarre behavior. As soon as the men arrived we mounted our machines and drove down to view the situation as it was nearly dusk. On the way off the field, the operator, who was sitting behind me, soon pounded me on the shoulder and pointed out a large buck and several other deer silhouetted on a knoll against the skyline. I knew then that he had not seen any of the others leaving the field at the last minute.

The operator, having reviewed the terrain, decided that a tracked vehicle would indeed be best to move the bridge and then get back up to the top. We set a date for the move and all was set. He would have to truck his Cat to the staging area and then walk it down to the bottom. On the day of the move, quite a few members came out to watch the big event. Stan Peters, standing beside the Cat, was in radio contact with me during the move and we used hand signals as well. My great fear was that the bridge may not be able to withstand hanging over the bank on its belly, as it was designed to be supported by the ends.





I stood atop the bridge as it slowly moved over the bank and I had my fingers crossed as I listened for any loud cracks that could spell disaster. All went smoothly as it settled down onto the ice and then slid up the skid logs onto the opposite bank. Everyone immediately scrambled to assemble the cribbing under the end of the bridge while the Cat was still there to lift it for us. He raised it as high as he was able while the cribbing was put in place and secured with steel cables. Once it settled into position, his work was done and he left the scene to us. Everyone enjoyed crossing the bridge at least twice even if there was no decking or railing on it yet. It was a joyful event and everyone was in high spirits as we, too, left for home. Another work party later jacked up the other end of the bridge and placed cribbing under it as well because we were fearful of the high water during the spring runoff.

These jobs were always done in winter when conditions were clean and dry and we didn't have to contend with mud or mosquitoes and we could jack up the bridge from the ice below. That winter we also brought down from above the  $\frac{3}{4}$  inch plywood and asphalt roll roofing that we had previously stacked up there. There was not enough time to install the decking on the bridge before spring breakup so we stacked it as high as we could on the cribbing and hoped that high water would not take it away. The spring melt was upon us right away and I was shocked when I went down one day to check on the bridge. Ice and debris were pushing dangerously against the bridge and putting quite a sideways curve into it. Once again, we were fortunate that we didn't lose it to the forces of nature. Every year for several years after, a work party would go out to the bridge in winter and raise it even more and put more camber into it. When one looks at photos of the bridge that first year and later photos to note how much higher the bridge was eventually raised, the difference is very dramatic. In one photo taken in 1985, the bottom rods of the bridge appear to be about nine feet above the river ice.



When the official opening of the bridge was held in spring we had a large attendance. In anticipation of this, I had bundled up materials for the railing into small convenient bundles and almost everyone got a bundle or a rail to carry to the site. Once there, we had a small ceremony conducted by Stan Skirrow to celebrate the new bridge, the materials for the railing were waiting for installation, and then some people continued on the day's hike. The decking was still in a pile at one end at the time and, fortunately, it had been well anchored by several rolls of asphalt roll roofing which ultimately prevented the plywood from floating away during high water the previous spring.

In 1991 we became very concerned about the erosion in the bank below the cribbing on the west bank. It was determined that it was critical to try to prevent any further undermining of the cribbing. We decided to build a retaining wall to help deflect water



flow away from the bank. This was done in 1992 but the spring water got behind our retaining wall creating a void that once again threatened our cribbing. We decided to fill that void with something somewhat porous that would break up the water flow and perhaps save the river bank from further erosion. In 1993 we obtained loads of tires which we hauled to the site, dumped them into the void and laced them all together securing them with cable. This worked quite well and helped forestall further erosion for quite some time. By this time we had better sleds to work with so it was not a very daunting experience for the work crews.



The bridge served us well for many years during which time numerous work parties raised and repaired the bridge as required. By 2017 the west bank of the river had eroded to the point where it was no longer able to support the bridge which subsequently sagged at an awkward angle at that end. We were fortunate that



the new landowner had equipment, time, and the desire to help us pull it back up onto the bank and dismantle it for recycling in the fall of that year.

Gene Miskiw



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My apologies to any I have inadvertantly missed.

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