## Report, Caroline Hut repair.

Caroline hut was built in the 60's by a member of the Deer Stalkers Group using raw native timber donated by the Tuatapere saw mill.

It is now well riddled by borer beetle and the integrity of the hut was starting to suffer.

Several of the underfloor trusses were so borer ridden that they were cracked and broken and the whole hut had sagged in the middle.

The Southerly weather was blowing into the front porch and wetting any wood stored there.

The roof was starting to rust out and despite numerous attempts to patch it up it still leaked and was rotting the sarking and dripping into the hut proper.

DoC Te Anau gave us permission to add a porch to the end of the hut and it was decided to re-roof the hut, add a 3 metre skylighted porch out the front, line the ceiling, add a water tank, install a new cooking bench, add bunk ladders, renew 9 of the under floor trusses and paint the whole hut inside and out.

Our sincere thanks go to DoC in Te Anau for permissions to do what we did, the Backcountry Trust for the finance to undertake this task, and for the dedicated volunteers, Ross, Brian, Rob, Ian, and Alastair and also the 3 people who visited Caroline Hut while we were working and stayed to lend a hand, Michael and his mate and Clint.

In the finish we had 5 volunteers for the whole job and 3 extras for part of the job. We did 7 days in two stints, 3 on a June weekend (28-29-30) and 4 days the following week, (3-4-5-6 July). In all we did 328 man hours work on the hut.

It took us two loads with two boats to get all the material and gear over Lake Hauroko to the hut and assemble it ready for work.

We split into 3 parties with one tackling the roof replacement, one building the tank stand and the other constructing the front porch. We got these jobs nearly finished on the first three day weekend.

On the roof the old tin was removed then we placed building paper over the sarking and new tin placed. We used tin 300 mm longer than the old tin to get the drip line further away from the hut. The sky light was placed above the new cooking bench with a sheet of clear PVC placed under it to catch any condensation from off the sky light. The old tin was folded over the ends of the hut so we placed new flashing at each end and new ridge cap of which the folded over end was sealed with Sika sealing tape. The chimney was flashed with the existing flashing as it was reasonable new and had a good seal. All the new roof was screwed.

The tank stand was placed at the back of the hut and the posts concreted in the ground. An 800 lt tank was placed on top and plumbed to the guttering. The guttering was placed under the eves of the roof tin so no leaves would enter the gutter and it would not suffer snow damage. Holes were drilled into the tin above the gutter to allow water access to the tank. We carted up shingle from the beach to the hut for a dry path round to the tank. A kitchen sink was placed on the tank stand below the water outlet.

The porch was constructed by bolting and screwing a plate to the hut and putting posts concreted in at the other end then beams and purlins were attached. It was cross braced and the sky light attached.

Once we had vacated the hut we gave it a good spray with 'No more bugs'

On our second trip 3 days later we tidied up and finished the previous jobs and tackled the next three jobs.











We piped the sink and the tank overflow away from the hut and we put the flashing and fascia board on the porch. Then we made a new cooking bench and lined it with Stainless steel sheet with a 200 mm up turn against the wall.

We then placed netting on the steps up to the hut and made new bunk ladders and screwed them onto the bunks.

We then split into two crews and tackled the last two big jobs, lining the ceiling and placing new trusses under the floor.

The ceiling was lined with 7 mm treated ply screwed on and then given an undercoat. We lined out the sky light above the cooking bench and placed a strip along the apex of the ceiling.

The other crew worked on the under side of the hut. The hut had sunk in the centre because of the broken trusses so we jacked up the hut and placed 9 new trusses underneath next to the existing trusses, we tried as much as possible to place them above the existing piles. The trusses were then Z nailed onto the bearers. The under floor was sprayed with 'No more bugs' and painted with 'Metalex' wood preserver.

The only jobs that still need to be done is the painting which will wait for warmer weather. We need to fully paint the exterior and top coat the ceiling and walls on the inside.



























The crew Ross, Rob, Alastair, Brian, Ian.