first toilet at Vallis Veg

This was the first toilet I built here. At this point we had no campsite and we didn’t live on our land. Chris had started the market garden and it was mostly him working on it. We wanted a toilet that didn’t need much maintenance that would be pleasant for us and any visitors to use.

I decided to use an IBC (Industrial Bulk Container – approx. 1m x 1m cube made of very tough plastic, supported by a metal framework) to contain the faeces because it was cheap and seemed simple. I used only one because I was too intimidated by the prospect of building a bigger, more involved structure – I had my three year old with me most of the time and sometimes the three older kids and I was working several jobs and carrying things back and forth as we lived in town. Those factors influenced what I was able to do.

However, I was determined that it would be a source separating compost toilet rather than a pit toilet because it seems so crazy throwing away nutrients and potentially creating a pollution problem with them.

I used a Separett separator. The faeces went into the IBC and was covered with sawdust from a local sawmill and the urine went down a pipe at the front into a 25 litre container. The urine container could be changed when it filled up and when we had enough of them filled up we would empty them onto our woodchip windrows, (more on processing later).

Difficulties with the IBC in this toilet:

- The shape of it determines the dimensions of the toilet. That’s okay, but it makes it hard to have a toilet without lots of steps – not very accessible. It was terrifying watching my elderly father going up and down it!
- It was tricky getting the separator lined up well with the IBC and still having the toilet feel comfortable. I was keen to keep the relative heights and distances of the toilet the same as flush toilets so that it would feel comfortable to someone only accustomed to them, (almost everyone).

- It was hard to seal any holes in the IBC and I made no attempt to do this.
- A word on emptying it. I have cut a hole in the back, near the top to knock the top off the pile and I will get the compost out through this. I won't be able to get every bit of compost out easily, but I'm not too worried about that. It may aid decomposition starting with a bit already in it. The main aim is to make lots of space so there's a good volume to fill up again.

Difficulties with the Separett separator:

- Kids sometimes pooed into the urine part, which blocks it and therefore makes it un-useable until it's been sorted out – not my favourite job!

Other construction issues:

- I used Onduline roofing, which sagged very quickly. I realise I should have put in far more structure to the roof to support the Onduline – although I actually prefer using steel roofing as it's easier and longer lasting
- I raised it all up on rocks, but didn't put in any foundations. It has all moved slightly and the hole for faeces doesn't completely line up with the hole in the separator! Fortunately it's not for public use and it's hardly been used at all in the last 3 years.

Other comments:

I added compost and worms to the IBC and the worm population grew quickly, which means they have been helping break down the compost continually. It has had a lot of use over the years – it was the main toilet for the family and anyone else living onsite for two full years! That's about 9 years of use with an average of 5 people year round for over 1½ years and it still hasn't completely filled up! I think that's amazing. At times it seemed to heat up but there were also always worms in there – probably around the edges when the middle was too warm.

The 25 litre containers for the urine I got free from the local wholefood shop. I had about 20 of them so we could store up to 500 litres of urine before having to empty them. After a couple of years the wholefood supplier started reusing them so I couldn't get them. Not many needed replacing, but after about 5 or 6 years they did become more brittle. I moved to getting 20 litre containers from a large scale farm supplier. They had been used for things like iodine based teat wash – I chose not to use ones that had contained very noxious chemicals

in them. They were not so good because they were opaque, so it was harder to see when they were full. Also they filled up quicker because they were smaller!

One irritation was having to check when the urine container was full and change it over. It was awkward to reach and fairly frequently we wouldn't do it soon enough so it would overflow and then it was not a pleasant job, and urine went into the ground, which wasn't ideal.

We never had a fly problem. I did put a chimney in, but I didn't cover it with mesh – it seemed a bit pointless because it would have been difficult to fly proof the IBC.

I bought treated wood from the local builders merchant. Since then I have used green wood – larch, douglas fir, cedar and oak for different parts of different toilets. I buy from a local woodsman who buys timber from his clients and has his own mini sawmill where he cuts boards etc. It's very local and doesn't need treating.

I didn't put any windows in, just a stable door, which allowed light in at the top and bottom and allowed lots of ventilation. It was pretty chilly in the winters when it was our main toilet and we got wet walking to it when it was raining. Also, the path tended to get muddy in wet weather because it was used a lot so we needed to improve it with woodchips.

It's a pretty rough and ready toilet compared with ones that have to fit into an existing building. But it served our purpose and I learned a lot from building it.