

Our Composting Journey

Glenmore Lodge

Here at Glenmore Lodge we have one of the best back garden's in the world and we want to continue enjoying it for years to come. Glenmore Lodge is Scotland's National Outdoor Training Centre; our aim is to offer world class training in outdoor adventure sports and encourage more people to enjoy the outdoors more often.

"We understand the fragile and special nature of our environment and we will ensure that activities are sustainable. We are committed to making

environmental improvements to the site on which we operate and we will take a responsible approach to the efficient use of our resources and waste management. We will communicate high standards of sustainable good practice to our customers and students attending courses. We acknowledge our global and local social responsibilities, especially in the local area as an employer and purchaser of local goods and user of local services". (Glenmore Lodge Plan 2009-11).



Aerial view of
Glenmore Lodge

Big Hanna Arrives

Big Hanna arrived on the back of a lorry in November 2010 to be commissioned a few weeks later, unfortunately this coincided with a huge dump of snow so the commissioning was postponed until mid January.

If you haven't worked it out already Big Hanna is a composter designed for decomposing organic waste.

There are several different models but we have the T120 capable of taking up to 500kg of waste per week. Made of stainless steel she is expected to last at least 20 years.

The process is simple the kitchen staff separate the waste from the kitchen and dining room and put all non meat food waste into green caddy buckets, these are taken daily and weighed then emptied into the machine. A record is kept of the amount going in and also the amount of woodchip pellets to absorb moisture.

There a few quick checks to be made daily to make sure the fan is working, cleaning of the filter, checking the bag collecting the compost is secure, and emptying if required, checking of the temperatures on the control panel and checking the moisture content.

On a less regular basis the heating panel needs cleaned if it is in use and the drain-

age filter emptied. Both relatively simple procedures.

This whole process only takes around 10 minutes a day.

We are still in the start up phase which takes around 8 weeks and have so far had no problems with the operation of the machine.

There is very little smell as the bio filter takes care of that. This filter is a unit full of wood chip and enzymes with an outlet pipe which exits the building.

Best of all our food waste to landfill has reduced.

Thanks Hanna.



Big Hanna
Commissioning

A Change of Thinking

In Dec 2008 a new Principal, Bob Kinnaird, was appointed and I, Kirsty Murfitt, also took up a new post which included the environmental management of the business.

Bob made it quite clear that he had a vision that we would become waste neutral. To begin to achieve this it became obvious that composting our food waste would be crucial in this quest.

Once again the reasons why we shouldn't compost arose. The Management Team talked about all the issues and reasons why it wouldn't work. The only way we were going to be able to answer these was to visit a composter and see and smell the machine ourselves.

On the 9th November 2009 Stuart Upward (Facilities Manager), Matt Dare (Catering Manager) and myself, Kirsty Murfitt visited the Rocket Composter installed at the Knock Castle Hotel in Crieff. Here we met Douglas Boyle, the Accelerator Compost Rep for Rocket in the UK and who is also a Compost Doctor.

We firstly chatted with the kitchen team who said that waste was just put into green caddy buckets and this

didn't take any longer than putting into a waste bin. That was the extent of their involvement with the process. The grounds man took care of the rest of the process.

We then went down to the composter itself and were shown how the machine worked.

The operation of the machine seemed very simple. Lift the lid on the funnel and empty in the waste, add an equal quantity of wood chippings (more if waste is very watery) and a quick spray of real ale! Close the lid and give the blades a turn.

Could it really be as quick and simple as that?

In the main yes, providing that you have an understanding of what is being put into the machine and how to balance out the moisture levels. Get this mixture right and there is no smell and the compost is of the right consistency.

As we headed away we could all see the benefits of a composter but there were still some reservations. There was still further work to be carried out to work out how much waste we had, but we were a giant leap closer to having a composter.

The Waste Audit

Carrying out a waste audit is a simple process and certainly worth the time and effort.

Our waste audit was over a 2 week period where all the waste from the kitchen and dining room was measured.

Meat waste was measured separately to compostable waste as we wouldn't be putting meat into the composter because of the regulations.

The staff were not overly keen on this process which did give me some concern on how they would react if this became the norm to separate waste

The results were quite revealing. We had a lot of food waste. This waste was down to a number of factors including preparing too much food, food going off, guests not eating what they take, etc.

A further 2 week waste audit took place which showed a reduction in food waste, lessons had been learnt and practises changed.

From the waste audit we were able to ascertain what size of machine we would need.

With a set of scales and some buckets it's a simple task to weigh and record your waste. By doing this you can look at ways of reducing even if you don't go for composting.

Too Good To Be True?

If we had read this a few years ago we would have been thinking that it was too good to be true.

The journey began back in 2006 with tentative steps taken to look at what composting food on site would entail. We were complete novice when it came to composting. We considered the dalek like composters but couldn't really see them working in our location and certainly not with the volumes of food involved. After further investigations we found 2 mechanical



A 25ltr food caddy

machines, the Rocket composter and the Big Hanna. Now this certainly looked the way to go however the management team were reluctant to look any further. The reasons were many and varied.

Read on to find out more.

Compost Doctors— the perfect prescription

Costing anything from £9k to £20k a composter is a big financial investment for a business.

We hadn't heard of the Compost Doctors until we had visited the Rocket Composter.

They then heard that we were very interested in a machine that they contacted us and we were offered a Rocket Composter to try for a year through the Compost Doctor Scheme.

This was the ideal solution for us. It would allow us to see how well the machine worked and the processes involved without having to part with a large sum of money.

The composter was delayed due to a part needing to be fitted so we were offered a Big Hanna.

A conversion was made to our current recycle shed to house Hanna which keeps her warmer than being out in the open and its nicer for the user!

Compost Doctors have been great offering support where needed and helping us to get up and running.



What were our concerns?

Our Concerns	What We Have Found
How much is a machine?	£9k to £20k
How much time is needed to look after the machine?	Actually only taking around 10mins a day
Who would look after the machine?	We have only 2 people using it until we are confident that we know what to do
What about the smell?	No smell, bio filter removes this and provided drainage filter emptied and cleaned there is no smell.
Is it complicated to use?	The process is very simple
What will we do with the compost?	The machine reduces what comes out by 90% of what goes in so in reality there is not a huge supply of compost.. We will need to build some pens to store compost in .
Where will the machine go?	We have built a shed to house Hanna
Are there vermin issues?	Fully sealed unit as long as user keep place clean there should be no vermin issue at all
What about licensing?	The application to SEPA for an exemption was straight forward. As no meat was going into the machine the process is a matter of filling out and returning the form to SEPA. New legislation means that pretty soon you can apply for an exemption which will also allow meat products to also be composted.
Do I need other machines?	You can get a macerator which removes water, we are just careful with what we put in.

The Future

We have now had our first bag of compost from Hanna which is quite exciting. A pen will soon be constructed to allow the compost to sit before use. This will also have a compartment for grass cutting which once dry can be used in Hanna.

The machine is with us for a year and providing the process continues to be as straight forward as it has been I would see that we will continue to use Hanna or something similar in the future.

Hanna is now well and truly part of the Glenmore Lodge team.



The food gets poured down the chute into the machine



The easy to use control panel. Shows the temperatures on the display for each part of the machine.



The bio filter unit with outlet pipe



Our very first compost

Visiting Big Hanna

If you are still unsure whether composting is for you we would encourage you to come and visit Hanna here at Glenmore Lodge. Please contact Kirsty Murfitt on 01479 861 256 to arrange a visit.