

DUNG

The importance of putting back into the soil at least as much as one is taking out is generally recognised. But how much? And what type?

When I took over my allotment in 1973 one of the first things I did was to use a soil testing kit to analyse the soil content. The pH was down a bit, ie a little too acid, so for many years I applied lime everywhere – except where I was applying manure and/or growing potatoes. The potash was a little down so I applied bonfire ash wherever possible. The phosphorus content was also a little down, but I thought that manuring would gradually build up the phosphorus level. However, the BIG PROBLEM was nitrogen, which was way, way down. Obviously, previous allotment tenants had cropped and cropped without putting anything back, so the soil had become impoverished. I resolved to apply generous amounts of manure every year to gradually restore the situation. As to the type of manure, I used pig, horse and cow. I have not used chicken, firstly because I did not have a ready supply of chicken manure, and secondly, because chicken manure is very highly concentrated and there are warnings about it burning plants. I turn up my nose about human manure, even though farmers in the UK and on the Continent use it, because of my fears about the transmission of human bacteria and viruses, as well as worries about hormones and pharmaceutical residues.

PIG

When I took over my allotment there was a pig farm a few hundred yards away and I was told “help yourself”. Since it was conveniently close and FREE I used pig manure for a few years, transporting it in my big builder’s wheelbarrow. The pig farmer’s mound of muck was massive, resembling a flattened pyramid in shape. The pig farmer barrowed fresh manure to the centre via a series of planks. I took the oldest manure from the outer edges and piled it deep where I was going to grow potatoes, then dug it in. I rotated my potato patch, so that the whole allotment received a lot of pig manure every three or four years. However, there are some perils in do-it-yourself manure gathering. I cannot resist telling you the following cautionary tale.....

OXO

Oxo was a simply delightful Jack Russell terrier, with mainly white hair with touches of brown and grey. He was amazingly intelligent and loved people. And people loved Oxo. His other name was “Rent-a-Dog”, since his owner let him loose and he visited neighbours in turn to play and, no doubt, scrounge food. I was one of his favourite humans, since I was forever off to the allotment a couple of hundred yards away and there he could indulge his favourite pastime – chasing stones. (I should say here that we started with tennis balls but he immediately chewed them into bits so we resorted to stones.) That was in the early days when there were many stones on my allotment and a huge patch of brambles at the far end, into which I would lob the occasional stone. Oxo would plunge in after it, tail wagging, using his tremendous power of smell to find the stone I had just thrown in amongst the many others. Meanwhile, as I dug, I would put other stones into a bucket for future disposal. Occasionally Oxo could not find the stone I had lobbed so brought another. But we both knew he had cheated and he looked a little guilty. Our game continued, month after month, year after year. He was a very happy little dog.

He would accompany me to the pig farm of course but I don’t know what his sensitive nose thought of the simply overpoweringly awful smell. Then, one day, he decided to explore whilst I was filling my wheelbarrow round the edge. He took a walk up and along the planks to the centre of the mound..... and stepped off. He was in it up to his ears, and suddenly swimming furiously. I was faced with the decision of either plunging in to save him or to let him find his own way out – I chose the latter. He eventually found firmer ground and managed to scramble out, shaking himself vigorously, with very liquid and very fresh pig manure flying in all directions. However, his white coat remained a dark grey and he knew he was in the brown stuff. We went home from the allotment with Oxo looking the most crestfallen dog in the World. As the end of the drive to his house I said “Oxo, go home”, and he

obeyed extremely reluctantly, plodding step by step to meet his fate. I hurried away, anxious to avoid the neighbour knowing my part in the disaster. Then..... the volume of noise from next door was frightening. The stench coming from Oxo really got my neighbour going. I could not make out the words, but I feel that serious doubt was cast as to whether Oxo's parents were properly married. (I hope my neighbour does not read this article and find out, 30+ years later, my part in the disaster!) Oxo was confined to barracks for a whole week, which was a very severe punishment for him, but was eventually let out, nice and clean, and off we went to the allotment again for another day of fun.

HORSE

I was put off horse manure from stables because of the low ratio of dung to straw, and the fact that the straw usually was not sufficiently decomposed, so I went for spent mushroom compost from a local mushroom grower. The quality, for the growing of mushrooms, had to be extremely high and the horse manure/straw mix well rotted. It was extremely light to handle, with little smell. Then I came across an interesting byproduct.....

I noticed in the mushroom compost, fresh from the farm, that small mushrooms continued to grow. I thought that if I were to cap the compost with fine soil then more mushrooms would emerge. So I spread the compost over a large area where I was to grow potatoes, covered it with an inch of fine soil and waited. After a week or so, eruptions! All over the patch cracks appeared, the soil was thrust upwards and it resembled a scene from a science fiction film. The mushrooms were huge, up to a foot in diameter, and delicious. We lived off mushrooms for weeks.

However, I realised that in the mushroom compost were small pieces of chalk, and that if I continued to use that form of compost my soil would eventually become too alkaline.

COW

After about three years using pig manure and a further three using spent mushroom compost I turned to farmyard manure (ie cow) from a local friendly farmer, and have applied that exclusively ever since. A load weighs about three tons and arrives on a trailer pulled by a tractor. Some years I have two loads. The advantage of two- to three-year old cow manure is that the ratio of manure to straw is very high, the straw is usually well decomposed and there is little odour. It is therefore highly concentrated – and heavy. One disadvantage is that it can contain farmland weed seeds such as fat hen. To clear such weeds, which can become huge in a few weeks, I cut them off at ground level with secateurs (they do not re-grow). Once I had a fat hen weed which completely filled my wheelbarrow, so you can tell how large they can grow. Another disadvantage is that if one leaves a pile of manure for a period wasps can set up in residence. What one does then is to find the entrance to the nest, puff in anti-wasp-nest powder, then run like mad. After a week or so it should be safe to destroy the nest.

For many years I dug in the farmyard manure where I was to grow potatoes, as well as using it to mulch fruit trees and fruit bushes, but went over to the no-dig method in the year 2000 and have not dug since. I simply put a layer about three inches deep on the soil and plant young plants in it – such as brassicas, sweetcorn, the marrow family, leeks, climbing French beans and runner beans. The following year the manure has broken down sufficiently to plant out beetroot plants and sow broad beans and the onion family. The third year permits the sowing of small seeds such as carrots and parsnips in the fine tilth mixture of very well rotted manure and soil.

As I have said in earlier articles, the manure layer helps to retain moisture and suppresses weeds, so leading to less effort generally. Weeds can be pulled out easily. Worms are greatly encouraged, dragging the compost into the soil and creating vertical holes for oxygen to percolate into the soil for the bacteria living therein. The worms, in their casts, also bring up from the deep essential nutrients and trace elements – including lime! There is no need to apply lime!

As to the results of applying large quantities of manure every year, all I can say is that my crops of fruit and vegetables are excellent, with many types of vegetable of large size – and delicious!

I would like to conclude with an old saw. A young allotmenteer, proud of the rhubarb he had picked from crowns covered in farmyard manure the previous winter, asked an old allotmenteer what he put on **his** rhubarb. “Custard” came the reply. Good gardening!

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