

ASSESSMENT OF UNSTONE GRANGE GARDENS

Unstone Grange, Crow Lane, Unstone, Derbys. S18 5AL

January 1996

Background:

In recent decades Unstone Grange has been in the possession of the Education Department of Sheffield City Council. The Grange has been used as a residential centre for schools and youth groups to go on field trips and holidays away from the city. In more recent years the Grange has been managed by the Unstone Grange Trust, using the site for many various activities, including conferences, workshops, alternative medicine, field trips for children and social and fundraising events. Up until about five years ago the kitchen garden behind the house had been cultivated organically; producing vegetables, fruit, flowers and herbs. Foundations reveal an earlier structure which must be the old Crow Hall, which included in its grounds the neighbouring Grange Farm and its fields. It is therefore probable that the kitchen garden area has been in cultivation for much of the past 400 years. The Grange itself has ten bedrooms, large ground floor dining/meeting rooms and kitchen, warden's house and a number of utility outbuildings. The grounds cover four acres, of which about one acre is currently for the kitchen garden. The 'Unstone Gardeners' for 1995 comprised Nick Park, Richard Clare and Darrell Maryon, plus occasional help from an equal number of friends and volunteers during the summer months.

Starting up;

We were approached by the Trust at the end of 1994 with a request to take on the grounds and, if possible, steer the garden back into productive use. This was part of the Trust's efforts to secure ownership of the Grange from the City Council, who had long since lost interest in the site because of the high cost of upkeep. A general survey of the grounds was carried out by Richard Clare during the winter 94/95 which described basically the site and its assets. Whilst the survey was

encouraging in its appreciation of great future potential, it also warned of the amount of necessary remedial work that must be done, as the site had fallen into a state of neglect and disrepair. On a subsequent visit, Richard Clare and Darrell Maryon noted that there was probably much residual fertility, considering the history of the site, and that therefore our strategy for the first season would be to restore the structure and fertility of the soils. Some patches consisted of a deep loamy topsoil, others of little but heavy yellow clay, but at least of a type that it is possible to turn around using the correct techniques. A meeting was then held with members of the Trust's management committee at which we stressed the importance of using the first year for purely remedial work and therefore not expecting to grow until the second year, i.e.1996. The committee agreed to make funds available to us for our immediate needs, such as green manure seeds, seaweed meal, lime, organic fertiliser and manures. We started working the site from early spring 95, and whilst work has been carried out on areas simultaneously, the following is a description area by area, outlining some of the methods used depending on the particular challenge met.

Main (lower) Vegetable Beds:

Part of this area was still in some form of cultivation, so work first started here. The soil was forked over and sown with green manures, partly to improve soil health and friability, but also to build up a stock of green manure seeds for use around the site. Crops grown included mustard, quinoa, wheat, rye, calendula and cress. The rest of this area was overgrown, especially with couch grass and convolvulus, both difficult weeds to control. The top growth of the weeds was scraped off and stacked away, the soil then being spade turned and left to dry out and break down in the summer heat. Rock limestone dust was spread to help sweeten the soil [raising pH to about 6.5], which at the same time helps to unlock any residual fertility in neglected soils and also promote the beneficial work of soil microbes and bacteria. Bonemeal was applied at the

same time to improve long-term fertility reserves. After the first rains in late summer, the area was forked over and weeded, then shaped into 6 ft wide beds, angled with the slope to best effect in terms of drainage and irrigation. Paths were made between the beds by heaping the topsoil onto the newly defined beds, making the beds raised. A deeper bed has many advantages over a normal 'open plot', including a deeper rooting zone for the crop, easily maintained soil structure and easy harvesting of the crop as most work can be done from the paths. The essential addition of seaweed meal, leafmould and manure (cow and pig) then followed, all of which contribute to improving the soils structure, health and fertility. We plan next to sow a quick growing crop of mustard which will have the effect of homogenising the various materials added to the soil into a living, vibrant loam. Once the mustard has been cut and dug in, these beds will be ready to grow food crops.

Vegetable Beds (Top End):

This area was covered in a thick sward and showed a good soil beneath, consisting of a sandy loam topsoil and yellow clay subsoil. The entire area was spade turned and left to dry out. Consequently, much of the turf died, the rest being forked out. Raised beds were formed and seaweed meal, leafmould and compost added. The whole area was sown in late summer with field beans which will be left to overwinter.

South - Facing Wall:

Some of this area was already in partial cultivation. The wall was for the most part covered in unproductive shrubbery, which we felt were a waste of a sheltered and sun-soaked area. The shrubs were grubbed out, with the intention eventually to plant up with fan-trained apricots, peaches, nectarines and sweet cherries. The bed in front was dug over and improved with seaweed meal, leafmould and compost, and then sown with a cover crop of greek cress and rye.

Coldframes:

Two large coldframes with brick surrounds; the glass frames had to be thrown away as they were beyond repair. Inside, the frames have sandy, gritty, friable soil and so will be used as seedbeds and for crops needing extra protection. The small bed next to the larger coldframe was almost devoid of topsoil, consisting largely of heavy, yellow clay. Barrowloads of manure were dug in early in the year and field beans sown. It has since begun to improve and has now been planted up with comfrey rootlets and jerusalem artichokes.

Polytunnel:

A sizeable structure, approximately 70' x 35'. A replacement skin is available. The polytunnel area is where we have devoted most of our attention as we feel it provides the greatest potential for growing interesting crops productively, with the extended growing season that its protection provides. We were lucky to find that this area had the deepest, richest loam on

site. However, we were unlucky in that three years without proper cultivation had left the area heavily overgrown with a gardener's nightmare collection of weeds, such as couch grass, perennial thistle, convolvulus, horsetail and nettles. This situation had been exacerbated previously by people before us trying to use a rotovator - the use of which we have prohibited. The area was steadily cleared and sown with field beans which by July had cropped very well, the seed being kept for use elsewhere on site.

The polytunnel area now has a rich cover crop of rye for overwintering. We intend to put on the new skin at spring equinox, weather permitting, and to start cultivating crops soon after. The borders outside the tunnel will be planted up with comfrey plants, the fermented leaves of which shall provide a rich liquid feed for the polytunnel crops, especially crops like tomatoes and peppers.

Orchard:

The main orchard has a number of varieties of apple and pear trees, mainly on half-standard or semi-dwarfing rootstocks. However, whilst the area is very beautiful and a haven for wildlife, many of the trees are old (60 - 80 yrs?), neglected and unproductive. A strategy of slow and careful remedial work is being carried out. This has so far involved cutting back dead wood and starting on the task of pruning, reshaping and thinning. The ground flora was scythed down and each tree given a bulky mulch of cardboard and compost from the trunk out to the drip line. Further work will include cutting back the overgrown hedges, more remedial pruning and shaping, understory plantings of productive and companion plants and the planting up of spaces with new fruit stock, including bush fruits. The newer orchard area has a younger selection of over a dozen apples and pears. These have all now been pruned and mulched. It is anticipated that even by this autumn, 1996, there will be a marked improvement in quality and yield from both orchard area.

Paddock Area:

Most notably the paddock contains a hard standing area against the other side of the south-facing wall, and we are using this for the making and storage of compost and compostable materials. We have already made a few tons of compost and collected a sizeable amount of leaf mould. The success of the gardens is largely dependent upon the quantity and quality of materials we are able to process through this hidden area.

Greenhouse:

This is in a state of disrepair, with areas of rotted frame and missing glass. Nevertheless, it has wonderful potential, though without a large input of money, the best that can be done for the moment is to patch up what we can to make it usable. Its size means it could provide a haven for pot grown citrus and for figs, as well as for use in propagation. In the meanwhile, it still houses grape and passion fruit vines.

Environmental Aspects & Plans for the Future:

Our work at Unstone Grange has many implications relevant to issues of environmental conservation and the creation of more sustainable, closed-loop environments and communities. Our cultivation techniques are strictly organic, with a special accent on the recycling of materials and the composting of as much putrescible waste as we can obtain. The orchard is to be managed in a way friendly to wildlife, with understory plantings to create a richly diversified flora, especially attractive to horticulturally beneficial insects and other animals. The grounds of the Grange contain many valuable features including dry stone walls, stands of mature trees, lengths of mature hedging, streams and unkempt, 'wild' areas. We intend to plant up bare boundaries with productive hedging material, such as damson and hazel if and when finance is available. We aim during 1996 to start being able to supply the house kitchen with a large amount of its fresh produce needs for its many guests and visitors. There is great potential for the garden's resources to be used in conjunction with courses run at the Grange concerning health and nutrition, the use of edible and medicinal herbs, gardening and permaculture. We hope that some time in the near future we can develop the site as a demonstration garden, showing what organic techniques and permacultural planning can achieve and provide. And from this to present the case for local, organically grown fresh produce, as opposed to the current trend towards environmentally-unfriendly practices of mass-produced, technologically-complex, chemically-dependent horticultural production methods with their inherent wastefulness and concern more with short term economic rather than longer term social (and economic) criteria. We would also like to build up a stock of permaculturally-useful plants and possibly develop a nursery on these lines. We shall also be looking into eventual certification

by the Soil Association, by which any produce we market off site can be recognised to be of organic quality.

UNSTONE GRANGE GARDEN : UPDATE 1996

After all the preparatory work of the previous year 1996 was to be the first year of producing crops in any significant quantity. Most importantly, at spring equinox we covered the polytunnel with a new polythene skin and started immediately to prepare beds and sow and plant crops. Indeed, by early May, we were lifting first early potatoes. Outside, on the main beds were planted a variety of conventional vegetables, such as peas and beans, leeks and onions, cabbages and kale, parsnips, beetroots and salad greens, and this continued with much success throughout the season. Many crops were of a potentially marketable quality and the occasional box of spinach or lettuces, for example, was sold to Beanies wholefood shop in Crookesmoor. Some prolonged spells of very hot weather resulted in lush growth in the polytunnel, but not always in much of a crop; tomatoes, for example, do not like very hot conditions. The temperature was often over 100°F in the polytunnel. As we manage to work the gardens just one day a week, we were reliant on individuals residing at the Grange to ensure routine ventilation procedures and watering were carried out during the rest of the week. This did not always occur satisfactorily with the result that some crops did suffer. The polytunnel still produced crops of aubergines, sweet and chilli peppers, courgettes and squash, cucumbers, celery, beans, lettuce and spinach. The remedial pruning and mulching of the orchard resulted in a decent crop of apples and pears - but will improve with time - some still showing signs of scab. Funding was minimal - we made some money back by selling some produce. We relied on our own initiative for some resources; making leafmould from the autumn fall from the mature trees on site; transporting a load of elephant dung on site from a circus that was passing through the area. Lack of

funding and the insecurity created by the Council putting the Grange up for sale, with no one being sure as to whether the Trust would manage to raise sufficient funds within the deadline given, meant that we had to hold back on a number of desirable developments, such as extending the orchard and planting up the south-facing wall. On the positive side, however, we had managed to prove the potential of the garden by successfully growing a wide range of crops. As a group we had grown too, so that there was usually six people out on the work day, sometimes more, presenting an opportunity to develop the site in the future beyond what we had so far achieved.

UNSTONE GRANGE GARDEN : UPDATE 1997

The year started on a high note with the news that the Trust had secured ownership of the Grange from Sheffield City Council. Although funding would again be minimal for the garden, we were at least now securely to remain there. The management committee agreed to let us sell the rotovator which we had already made redundant. The money from its sale enabled to buy essential materials such as manure and seaweed meal.

The greenhouse was patched up in the spring and then filled with various varieties of tomatoes grown in tubs, producing good crops throughout the summer. The polytunnel became less jungle-like this year; the summer being damp and cool for much of the time, making it easier to care for the crops than previously. We managed to push a number of quick growing crops through at the start of the season very successfully, crops such as lettuces and spinach, when it would have still been too cold outdoors to grow a useful crop. Some of this produce was sold to Beanies wholefood shop as before. A number of carrot crops went down a treat: in particular when the Grange played host to a primary school from near Chesterfield, with many of the children taking up the offer to each dig up and nibble a carrot or two. The main beds provided a good crop of winter vegetables such as broccoli, leeks and parsnips up until the spring. Again, a range of conventional crops were grown out on these main beds. We were sometimes down on numbers of volunteers, without whom we were perhaps not able to fully exploit the beds this year. In the autumn, an excellent crop of apples was harvested, about 500 lbs excluding damaged and windfall fruits. Finally, we were able at the end of the year to start work on developing the south facing wall. The coping stones and brickwork were repointed, planting holes prepared and finally, in December, the area was planted up with two apricots, two peaches, two nectarines and

a sweet cherry. Each tree's cost, including soil improvers, was paid for by an adopt-a tree subscription either by one of the gardeners or by a friend/member of the Unstone Grange Trust. There is much potential on site for further developments of this nature. Next we are to develop unused areas of the orchard, starting with planting up one large area with a variety of bush and cane fruits.