

Irish Mountain



Bocare is a beautiful south-facing piece of mountainside in the South West of Eire. I was privileged to spend a year living there between the summers of 1997 & 1998. We lived barefoot & without modern day paraphernalia, in order to maintain a real connection with the land. My design was for an area of land above the cottage, half of which was very marshy with slow running water. The soil was very peaty & so constituted a new environment for me. Although I didn't have long there, I was still able to complete the first phase of planting in the design before moving on.

The Design Process

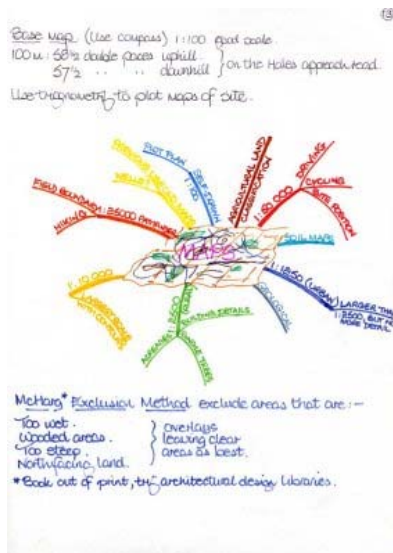


Bocare was my first real experience of living in a completely permacultural way. The ethic of the small community was one of honouring all the life forms on the land & to negotiate everything that we wished to do there by putting ourselves in those life forms' places. To maintain a strong telepathic (no, that isn't misspelled) connection, we chose to be barefoot all the time. We also removed all modern day paraphernalia that tied us to disconnected habits. This meant that we chose to live without linearly measured time (clocks, watches, calendars etc.); using the sun, moon & the seasons instead.

We had no electricity, gas, telephone, mains water or sewage & very little money. The one connection with the outside world that remained was the postal service. This we used to communicate with visitors & to buy in plants & seeds for the garden with the money that some visitors would give to us as part of their exchange. We didn't have cameras either, I only have these photos because my parents took them when they visited me in late Spring.

Observation:

This was my first proper land-based design, having only previously done this exercise as part of my Design course. It was certainly the first time I had to properly survey a site as the Course design was done on a site map that was provided for us. What made this a little less easy was the complete lack of surveying equipment available to me. Even the simple surveying tools of permaculture involve things like hoses & measuring tapes, which we just didn't have. I decided to use what I knew about my stride length on the flat & up & down hills, from the exercise that we did on the design course & surveyed the site very simply this way. I guessed the angles, both vertical & horizontal, by eye & came up with a base map.



I had observed the Midsummer & Midwinter sunrises & sunsets & guessed roughly where North was (the observant reader will notice that on the Final Design drawing, these two elements are not quite consistent with each other!). Once I started putting it down on paper (one of the few modern things that we did have a little of), I was able to accommodate any small discrepancies in my measurements & come up with a base map for my design that was essentially correct.

Having made my basic site measurements, I needed to gather the other information I needed to create an effective design. So I made a list of my other observations about the land:



- * The site is essentially south-facing.
- * The slope is approximately 15 degrees.
- * The prevailing wind is from the South West.
- * The altitude is approximately 800 feet.
- * The soil is very acidic (peaty).
- * Almost half the site is under a shallow stream.
- * The terrain is uneven & covered with boulders.
- * Ridges bound the site on the East & West sides.
- * Existing vegetation is typical moorland.
- * Trees will grow well here (around cottage).
- * Driest area is near the top West corner.
- * We get a lot of rain & mild winters here.
- * Sitka & Larch shelter site from North winds.
- * Deer & hares have caused damage here.
- * A small stone ruin at the bottom of the site.
- * Beautiful views from the top of the site.

Next it was time for me to look at my own needs & wants from the design:

- * Year-round food!
(very important as we were relying on it to live upon).
- * A natural living shelter
(I was living in a small metal caravan at the time).
- * To be surrounded by trees; including in time, some big ones!
- * Colour, scent, beautiful plants.
- * The sound of running water.
- * Fibre.
- * Medicine.
- * Renewable natural building materials.
- * Some biomass to keep me warm in winter.
- * A quiet retreat (even by my normal standards); a 'secret garden'.



Boundaries:

The physical boundaries of the site were well defined. To the South was the cottage & the main pathway that went from there up the hill to the wellspring & on to the next living space. To the North was a low wall, bounding the lower edge of the Sitka & Larch plantation above. To the East & the West were rocky ridges, both approximately eight to ten feet high. The shape of the site was essentially rectangular & the pathways in & out of the site were more or less in each corner.

The wind was going to provide it's own boundary as to what would grow in such an exposed site. The lower area was sheltered a little by the cottage & surrounding trees, but further up the slope was quite exposed. The rain too, would impose restrictions; not all plants were going to be able to cope with the wet conditions. The altitude was quite high; higher than recommended for pears for instance, but I figured that it was worth trying growing one or two less hardy species. If I could provide enough shelter for them they may be alright, after all the winter temperatures weren't such a big problem. The acidity of the soil was also going to put restraints on what would grow on the land & this was not a soil type that I had ever gardened on before.



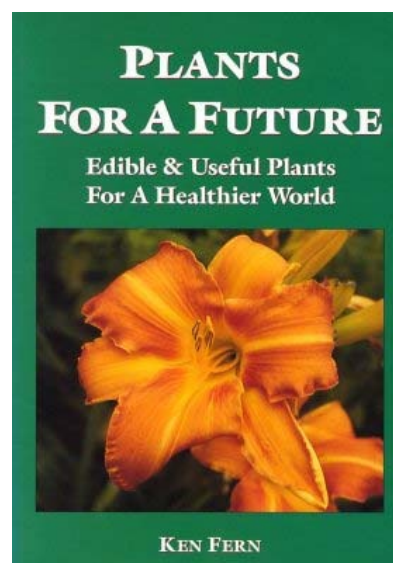
Of the non-physical boundaries, the obvious one was financial (& not the last time it was going to be!). This time it was because we lived mostly without money, though visitors sometimes gave us some or brought things with them as gifts. I had the money I had accumulated from selling

some of my things & I wanted to use this to buy seeds, plants & trees to go on the land. So buying these initially for the design was not a big problem, however replacing any that didn't survive was going to be. The other boundary for me was my own knowledge & experience. What I had learned on the Design course, whilst being extensive in coverage, was only a basic foundation for me to build upon. Having no previous experience I was in at the deep end. Luckily, I had a couple of books to help me out & a lot of spare time to learn from them.

Resources:

Unlike many permaculture gardens I have seen & others that I have made, this garden did not have the usual plethora of recycled modern waste to utilise. All of the resources were entirely natural (unless you count the money that I started with; & I'm going to consider that to be the plants & trees I bought with it!). Other than the living elements that I had to put into the garden, the most important resources may well have been the two books that I spent so much time reading.

Without that knowledge I would have been far less well equipped to decide which plants & trees to buy in the first place & where to place them in the design. I had brought 'Plants for a Future' with me as a gift when I first arrived, having bought it when I visited their new site's official opening the day before I first visited Bocare. Now the information within it was really coming into it's own & along with 'Designing & Maintaining your Edible Landscape - Naturally', which was already at Bocare, it was soon going to become an essential element in my design.



As I have just mentioned, our other resources were all natural ones. We had the wild energies of the sun, wind, rain & the stream flowing through the site. Then there was plenty of plant material available (e.g. Rushes, which made good mulch) & the seeds, divisions, suckers & easily propagated cuttings that could be taken from many of them for planting. Hazel & Willow were also easily to hand nearby. We had the fertility inherent in all our bodily wastes, which enabled us to remain in complete cycle with the land that we lived upon. Finally, I had my time, energy, enthusiasm, knowledge & ability to observe & learn as my own impalpable resources. I also had the assistance of my friends on the land to call on too if I needed them.

The most important thing about resources for us as a community was the way we conserved them through our social life. In the winter months in particular, when it was cold & dark for long periods, we used to gather around a single fire &/or candle, rather than have three or more going in separate places. We also regularly shared meals & the gathering & preparation of them, providing us with a rich social life.

Evaluation:

Exclusion:

This was a garden that I was going to have to design primarily around the principle of exclusion. The whole site was an exclusion zone for plants that didn't like acid conditions & if altitude was a problem there was no escape from that either. However there were other zones that covered only parts of the site. The two main excluding elements were:



- * Wind exposure.
- * Waterlogged land.

...And to a lesser degree:

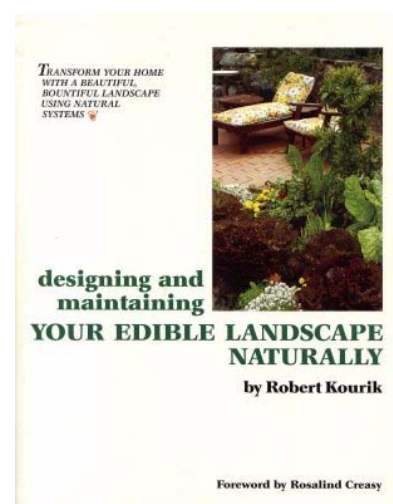
- * Frost risk.
- * West & east facing zones.
- * (Poor) viewpoints.

I could modify some of these factors in the longer term with my planting scheme, but for the meantime I will have to work around the current situation. The main things that I can do to influence these elements with my design are:

- * To plant wind tolerant trees & shrubs as protection for other plantings.
- * Plant 'thirsty' trees to take up some of the moisture in the ground.
- * Plant a belt of hardy plants to reduce the risk of early morning winter sun damaging tender plants on the east facing side.
- * Divert the water flow from the deep pool at the top away from the site.
- * Knock the cottage down to open up the view & reduce the frost risk at the bottom of the slope (but then again, maybe not.....).

With these first three design elements in place I can then look to site the other elements that I am aiming to include. The fourth; that of diverting the water flow is not a practical option as the track goes steeply down at that point & water flowing in the other direction would cause a lot of erosion. In order to cope with the challenging conditions, I need to choose plants & trees that will be able to not just tolerate, but preferably thrive in the particular conditions in each zone.

Of all the areas on the site, the most favourable conditions lie in the North west corner, just above the stream. This is the driest part of the site, yet still moist enough to grow any of the plants I aim to grow in my home garden. It has good views & gets the early morning & late evening sun throughout the year. I have water there to irrigate the garden, should it ever be necessary, either flowing right past me or in extreme circumstances in the deep pool above. It is also afforded a degree of protection from the wind by the ridge down the western boundary. Having my home here will also provide me with the sound of nearby running water. So having decided that this is the best place for my zone 1 garden I then have to look at my other needs & where they can be accommodated.



Next on my list of priorities are the fruit trees & these will also need a fairly dry site. The one other area available for this is the North east corner, which despite the current wind exposure appears to be the best site for an orchard, especially as it has 'lumps' of dry ground dotted about.

With these elements roughly placed I now need to look at my remaining needs that I haven't yet potentially fulfilled along with the areas of land that are still 'unplanted':

Remaining needs:

- * Biomass.
- * Building materials.
- * Fibre.
- * A 'secret' garden.

Areas unplanted:

- * Stream down West side.
- * Marshy area mid-bottom of slope.
- * Pooling water at bottom of slope.
- * Drier area in South west corner.

I can certainly put some of these elements together very easily from what I know. Willow & Alder are both fast growing trees that love damp conditions. Not only will the Willow provide me with building materials, but both will produce biomass & provide wind protection very quickly to the trees behind. At the same time their roots will be taking up some of the ground water, stabilising the edges of the stream too.

Reedmace is another potentially very useful plant. In confined areas it can be very invasive, but as it also produces a very good source of easily processed carbohydrate on its roots, that can be a real case of the problem is the solution. The slower moving water at the bottom of the slope is an ideal site for this plant & a band of Willow can be planted behind it to give it protection from North winter winds. There is a plentiful supply of Reedmace in a pond down in one of the parks in the village from which root cuttings could be harvested, particularly as it needs thinning out there anyway.

So by planting Willow & Alder along the west edge of the stream underneath the ridge, they will be well protected from the wind until they become well established. At which point they will begin to provide a windbreak to wind coming over the top of the ridge.

I can also plant a windbreak belt along the ridge itself & Eleagnus seems ideally suited to this task, being tolerant of salt-laden winds; a potential problem, though the site is five miles inland. I can also plant Eleagnus in front of individual fruit trees to give them wind protection too & they will also fix nitrogen for the trees at the same time. The zone 1 garden could be additionally protected by a lower windbreak (still permitting views) of hedging plants, doubled on the South West side & if these are chosen to provide fruit &/or other valuable materials as well, then all the better. The stream side boundary to the garden would need a plant tolerant of boggy conditions & yet tall enough to give some wind protection. Phormium tenax would fulfill this role & also provide me with that fibre on my wanted list.

Zoning:



The centrepiece of my home garden will be my living Willow house & the surrounding garden is clearly zone 1. However, the pathways that I will be regularly walking will also be zone 1 areas & so I can also plant these up with species that will need more regular visits from me. Next of all then I need to determine where these pathways will go; in other words where are the places that I will be travelling between on a regular basis? The cottage is a fixed element that is not going to be moving (unless I put into action my earlier crazy idea to knock it down!).

Even if I am not visiting there, beyond it is my current caravan home & beyond that the main entrance to the land. Another fixed element is the wellspring from where I fetch my drinking water & a route towards that will also lead me down into the main vegetable garden. Up over the hill to the North east is the uppermost caravan & a path this way will avoid going down the hill & back up again. Finally above the site to the North west is a deep pool which is a water catchment. Beyond this is a track that goes up the mountain, but of all the routes, this is the least likely to be used. So I am essentially left with a path to each corner & I can now design my garden around the most traversable routes across the site in each direction.

Each of these paths then also constitute zone 1. Beyond that, the rest of the easily accessible areas of the site constitute zone 2 & in a sense the vegetable gardens around the cottage are my zone 3. The more difficult places on the site that would rarely need attention, such as the windbreak plantings up on the ridge are essentially zone 4. For once in one of my designs I really do have a zone 5; the mountains, where human management is limited to the grazing of a few sheep.

Principles:

Minimum effort for maximum effect: Choosing the most suitable sites to supply each of my needs! We already had a lot of plants growing successfully in the other gardens on the site, with lots of seeds, cuttings & young plants to make the new home garden with. Planting Willow couldn't be much easier by using wands & the quantity of material available allows for failures. The same is true of the Currant & Fuchsia cuttings, which we also have in great quantities.



Multiple supply: A variety of plants in the hedge ensures that if some don't do well, others will fill the gaps. Choosing a variety of fruits & nuts again ensures a good supply even with the occasional failure of some crops. Having two entrances to the Willow house means that whichever way the wind is blowing, there will be a sheltered doorway to sit in.

Multiple yield: Willow provides wind protection, building materials & biomass. The Willow house provides shelter & also a crop of more Willow wands. The hedge provides fruit &/or other valuable materials as well as a boundary & a windbreak. In the orchard deep rooting perennials can provide more wind protection & help to quickly bring up nutrients to the surface where the young trees can utilise them. Eleagnus also provides them with wind protection & fixes nitrogen too.

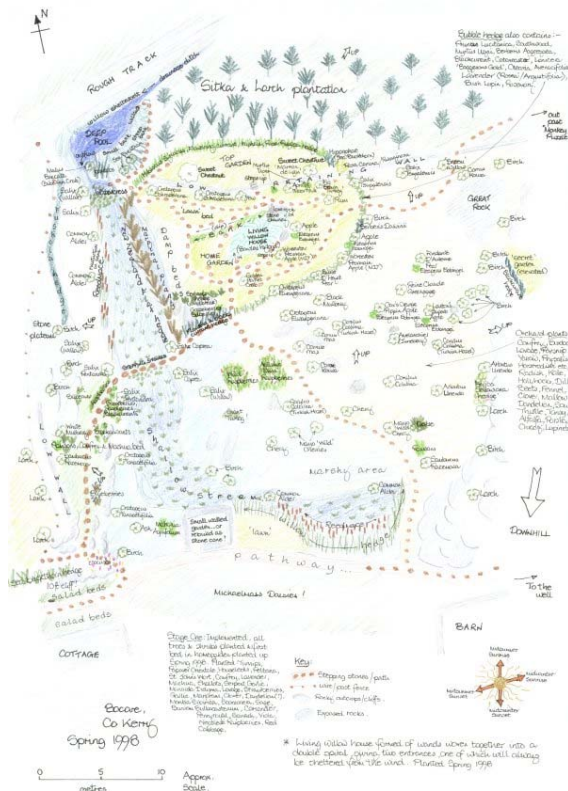
The problem is the solution: The rushes thrive on the land because none of the animals seem to like to graze them, therefore surrounding the trees with cut rushes can help to disguise & protect them. The hares might instead graze the grass around the trees...

Utilising the very wet areas of the garden to grow Willow & Alder which will also 'trap' the nutrients washing down the mountain in the stream. The great swathe of Sitka & Larch planted above the site will provide a windbreak against the cold North winds & can be replaced a few at a time to create a more diverse planting there.

Relative location: Placing the most tender trees (Fig, Apricot) against the South-facing wall in the home garden where the reflected & retained heat will aid their growth. Placing the tender plants, such as Feijoa against the West-facing ridge prevents the rapid warming of the direct winter sun killing them. Incorporating a large rock into the Willow house to act as a hearth & the foundation for a stone chimney.

Stacking: The temporal stacking of plants (choosing seasonal varieties of fruits & planting in different microclimates on the site). The vertical stacking of plants & trees (utilising all the seven vertical layers of growing space).

The Final Design



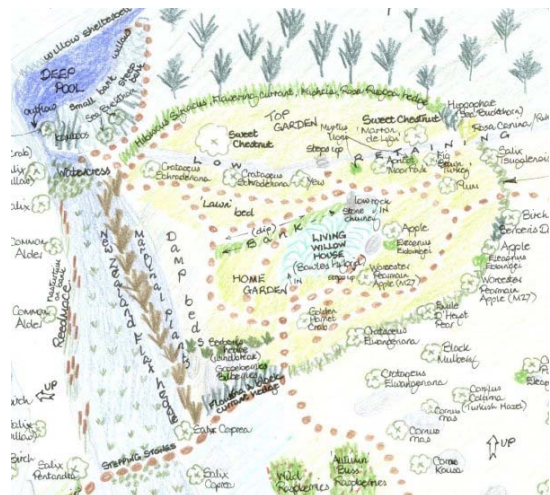
Here is the final design drawing for the site, which can be seen in more detail later. Nearly all of the detail that can be seen here was implemented, with only the finer detail of plantings around the Willow house still to have been decided (effectively zone 1). This home garden area is protected on all sides by its own fruiting windbreak planting scheme. The plantation to the North will in time give more shelter to the whole site from that direction & to reduce South Westerly prevailing winds I'm planting a stand of Sea Buckthorn on the cliff in that far corner. A further belt of fast growing

Alder & Willow down the wet West side gives extra protection there too. The main orchard area is planted out over on the drier East side where the trees would be happiest & able to get plenty of sunshine too. The marshy area at the bottom of the slope is an excellent place to grow Willow & Reedmace & the stone ruin next to it could one day be rebuilt in time as a stone cone with great acoustic properties.

Living off the land makes growing decisions a bit more important than usual, which is why this garden has a preponderance of food plants, many of which are unfamiliar to most gardeners. However a lot of research has been done into such valuable plants in recent years by the likes of Plants for a Future & the Agroforestry Research Trust & I was able to make good use of some of this using the then recently published 'Plants for a Future' book. Alongside the more recognisable fruits, vegetables, herbs & flowers we grew more of those unusual plants & they constituted a good proportion of our diet. Thus it is obvious for me to plant more of what we enjoyed eating & that was successful, in the new home garden.

The home garden is chosen to be on the driest part of the site & where there is a natural slight backward slope, dropping it down into the hillside a little. This dip makes a great little sheltered suntrap & a place to lie down & 'disappear' into when required. I need to define a boundary for this garden & to protect it from wind damage, so I've decided to surround it with a hedge of species that I know do well locally & that could provide me with fruit & shelter, as well as habitats for the wildlife. Intermingled with these I'm going to plant a few experimental plants & If they don't survive it won't be too much of a problem to fill a gap. Along the line of the hedge I'll also plant fruit trees, which would in time form part of the boundary. Along the wet West edge I'm using New Zealand Flax as the hedging plant as I'm not going to be short of Willow & I thought it would be a good experiment to try growing it.

Within the sheltered area of the home garden & in the lee of the Willow house up against the south-facing retaining wall, I decided to plant the two most vulnerable trees, the Fig & the Apricot. This area is also where I'm going to grow many of the plants that had proved to be reliable in other gardens on the land. We had used several different planting strategies to reduce losses to wildlife & those that had previously worked were well worth trying again. White strawberries fooled the birds & while the resident rodent population devoured our brassica stems killing the plants, they left many of the 'exotics' for us.



Two Sweet Chestnuts would in time dominate the garden, providing plenty of protection from the North & a lot of chestnuts every year I hoped too. I'm choosing a fast cropping variety, 'Marron de Lyon', which reportedly produces chestnuts as early as within eight years. Other interesting & useful shrubs are being planted here, including Myrtle Ugni, an evergreen which has beautiful blossoms & a delicious fruit, apparently the favourite of Queen Victoria! Somehow it never caught on, but I want it in my garden anyway.

Three paths lead in & out of the home garden, one to the South & the cottage & wellspring, one to the East & the orchard & the other to the West & the pool above the site which is deep enough to swim in.



The centrepiece of the home garden is an experiment in creating a living home (this is before willow sculpting was really popular!). Hazel is being used to create a 'bender' structure & Willow wands planted around its base & tied on in a diagonal trellis fashion. There are two potential entrances which both curve into the central space in a double spiral (like a twin-arm galaxy), either of which could be used depending on the prevailing wind at any time. Each entrance being quite low to cut down the wind blowing into the structure.

Whilst the entrances themselves are low, the headroom increases as you venture inside & is high enough to allow standing in the centre. The two entrances are pointed towards the North West & the South East, because these are the two directions least likely to be the source of the local winds. A large rock is to provide the basis for a fireplace & a stone chimney built on top of it. While the structure would in time provide a good wind shelter, quite how it could be made rainproof is still to be tested. I had thought about slowly adding small amounts of turf, allowing the Willow to grow up & out through it, until finally the structure of the building is provided by root material covered in turf, with the wands growing up out of it... but whether it would work? This was my first big piece of research & one that unfortunately I didn't in the end have the time there to see through.

Fruit trees are planted on the higher, better drained areas, amongst the existing Birch & Larch trees there, to make an orchard. Many varieties are being tried to increase diversity, spread the cropping over a longer season & reduce the risk of crop failure on a big scale.

I'm planning the planting so that the trees further down the slope would provide a bit of shelter from the prevailing winds for the trees behind them. *Eleagnus Ebbingei* is being planted to fix nitrogen & to also provide a fruiting, living windbreak for some of the vulnerable fruit trees.



There is also a need to protect trees from being ringed by hares, this I'm doing using cut rushes tied loosely around their stems. In order to increase the fertility of the land I'm also planting a lot of deep taprooted plants in amongst the trees to bring up nutrients to the surface. When the top growth dies down in winter it falls onto the surface & puts the nutrients into the topsoil, in the same way that trees do when shedding their leaves, but more quickly.

I have also placed trailing squashes between the trees, where they can clamber up & over the other plants. Chilecayote (*Cucurbita ficifolia*) was a particular success story on the land, sending out thirty foot long tendrils in every direction & depositing vast green & white striped squashes all over the landscape - this is just what I need in the new garden! They also taste delicious & they keep well too - if we can resist them that is, so they are a perfect food for winter storage. There is also a secret elevated spot on this side of the garden, which with the addition of a hedge of blackcurrants would create a small place to sit & look over the garden without being noticed!



I am laying stepping stones in the stream so that in the winter months the crossing can be made without freezing my feet. Soft fruit is being planted along the sides of the paths in the best places for them to thrive. Raspberries I am planting in clumps, as they would naturally grow. I'm thinking that this will provide some invisibility from birds for the fruit in the middle & create a temporal cropping.

Perhaps the canes on the leeward side would fruit first? The Blueberries are an expensive small scale experiment, but with the acid soil, they should in theory do well here. The lower slope is also already home to a giant 'Turtog'; a large lump covered with a great diversity of beautiful little plants - clearly an excellent example of beneficial relationships!

The small ruin at the bottom of the slope seems to have enough rocks in it to build a stone cone (when all the other jobs have been done of course!). There is one about ten feet high, in a park down in the village as part of a small group of stone sculptures. What is particularly amazing about it though is the acoustics inside it & we always visited it when we were in the village to do some toning there. To have our own on the land would be great & it would also provide us with an opportunity to learn a bit about dry stone building.

This last part of the site is where the water slows right down & goes under the pathway somehow. It is a body of water that would be perfect for growing an excellent crop of reedmace (for it's carbohydrate-rich roots) & Willow (for hedging, biomass & more building materials), Alder would also thrive here. There is a small area of short grass here too, which is presumably gardened by the local hares (there are apparently no rabbits in Eire).

I am planting five cherry trees here, three of them wild County Mayo (North West Eire) varieties which would hopefully grow even better in the warmer South West.



Implementation



I started my implementation by planting out the trees that I had ordered. It was early spring & they needed to go in at the earliest opportunity. As the South West of Eire is very wet & mild, trees there bud up relatively early in the spring, but I still got them in the ground in good time. Altogether there were

over sixty trees of various different species & these were going to form the main skeleton around which the other elements would be added.

The varying conditions across the site required trees with different qualities. In the South West corner I planted Sea Buckthorn up on the exposed cliff to provide some extra wind protection, alongside the three existing young Larch trees there. Down below, in the partially sheltered marshy area along the South & West sides, I planted Alder & various species of Willow. There they would thrive in the wet conditions & carry out a pioneering role creating a more conducive environment in which other trees could follow on behind. The young trees would be sheltered by the steep bank above them until they reached eight feet high or so, giving them an excellent opportunity to get started.

The top of the garden I hoped would in time be dominated by two Sweet chestnut trees, though this was a bit of an experiment & one that would take a long time to determine (at least a decade, even though these were supposed to fruit quite quickly). The rest of the garden was more sheltered & generally a lot drier (i.e. not marshy!), so I planted out a variety of different fruit & nut trees; Apples, Pears, Cherries, Edible Hawthorns, Cornelian Cherries, Hazels, Red Elderberries, Plum, Greengage, Fig, Mulberry, Juneberry, Apricot, Arbutus, even a Feijoa. However, even here though I had to find the drier 'lumps' in the ground to plant them on to give them a chance in such generally wet conditions.



The pathways around the site were fairly obvious; some were already there & others, like the ones around the area I was going to have as a home garden just fell into place. Where the path crossed the stream, I placed several stepping stones, just to make the journey that little bit more comfortable in the depths of winter. I also planted up a pair of Willows either side of the crossing point to act as guide points in low light conditions.

I then planted out the various shrubs that I had in between them. I planted soft fruit bushes in various zone 1 areas (i.e. around the Willow house & along the pathways) & in clumps to provide a bit of wind protection to those on the leeward side (in theory these might fruit first). I used the *Eleagnus* as a fruiting, nitrogen producing windbreak, on the South West side of some of the newly planted fruit trees. I planted an encircling hedge around the area that I was planning to make the Willow dome upon, using fruit trees, hedging plants (*Berberis*, *Eleagnus*, *Rosa rugosa* etc) & cuttings. I had plenty of cuttings of *Fuchsia*, *Flowering Currants* & *Blackcurrants*, so I just stuck them all in the ground in between the plants, knowing that at least some of them would root.

Along the west side of my windbreak perimeter hedge I needed a plant that would cope with being planted in such wet conditions & according to my 'Plants for a Future' book, *Phormium tenax* (New Zealand Flax) was 'tolerant of boggy moorland' & would do the job. I wasn't quite sure whether that meant that they would grow more slowly or not so big as usual, or just not die! So I tried another



experiment; planting them close together in a hedge like fashion, something I have never seen done before or since. I know that they can certainly become big plants that would do this job admirably, but whether they have thrived there I don't know. The other thing that I wasn't sure about at the time was whether I could have coped with all the rustling every time the wind got up a bit! One thing is for certain, if they had thrived, I'd never have gone short of strong fibre.

In amongst the trees in the orchard I set about planting some deep-rooting perennials & self-sowing annuals & biennials. I wanted them to help to bring up the deep minerals to the surface where the young trees could benefit from them & to provide a bit more wind protection too. For this purpose I chose as diverse a range of plants as Comfrey, Burdock, Parsnip, Yarrow, Kale, Fennel, Tansy, even Thistles! (for the full list see the Final design drawing). Would you believe that we were even bringing in & nurturing Dandelions from further down the mountain because we didn't have any?!

My next task was to plant up the living Willow house that I had designed, but first I needed to make a framework over which to train it. I harvested some Hazel rods from a local wood that was ready for some coppicing, having worked out how many I was going to need. I tied them together to make the framework shape that I wished to train the Willow into. I had never read anything specifically about doing this, but I had heard rumours & I knew that the Willow wands that I had cut would very likely root. They were however too short to tie together at this point, hence the need for the framework to tie them to. I figured that by the time the Hazel got brittle & fell down it would have done it's job.



I finished tying up the Hazel frame in the double spiral arm shape that I had designed & then inserted the Willow wands into the ground at 45 degree angles, crossing at right angles & weaving in & out of each other. I had already discovered that cuttings put into the ground at this angle seemed to have a better chance of rooting, presumably because the sap doesn't have to work so hard against gravity to reach the buds. I tied the Willow to the framework where necessary & stood back to imagine how the structure would look as a green living home. Once I had planted my potential future home, I started planting up some of the garden beds around it. This was the driest part of the site, even though I knew that there was plenty enough water below the surface to keep the Willow wands happy.

Though it was currently quite exposed, the planting of the hedge would in time reduce this & the Willow dome would provide further shelter still to the area behind it. This was where I was going to be growing all the plants that I was used to seeing in the other gardens on the land; the plants I was used now to eating. I took a selection of plants from the garden around the caravan that I was currently living in & transplanted them up in the new garden. The list of these plants appears at the bottom of the Final design drawing. Sadly, this was as far as I got with the implementation & I have never returned to see how it got on.

Maintenance:

Whilst I don't know how little maintenance this garden needed, I do have my experiences from tending the other gardens on the land. These were gardens just like the one I have now, full of a diversity of plants, all rambling under, over & around each other, with little space in between. This meant that it was very difficult for weeds to get a hold & what was there we made the best use of anyway (i.e. we ate the nettles & used them as mulch etc.).

The rodent population seemed to take care of the slugs in the gardens (& there were some very big black ones out on the moor beyond!) & they also spread seeds around (when they carried off tomatoes for instance & only ate half of them). It wasn't an entirely beneficial relationship though for us at least; we had to sacrifice some plants to them, brassicas in particular, as they loved the stems. All in all, maintenance was very low & most of the weeding & pruning was incorporated into the daily salad picking. This was a job that was shared with the visitors to the land & was also utilised as a learning experience for them. I was once one of those visitors & in time I became the teacher.

...And the salads? Well, as you can see, they weren't your regular salads either. We used to keep a list of the plants that went into the salads & in the summer months, the number often went up to seventy or eighty. We took time & care in decorating the salads to honour the garden for feeding us & we all used to eat out of one big bowl, having thanked the garden again by toning together around it.

Design Review

What went well

A lot of things seemed to go well. **Research:** I had plenty of time during the winter to do reading & to learn much more about the plants & techniques that I was going to use when I started implementing my design in the Spring. It was a very exciting period & I spent days at a time hungrily devouring new ideas & plant information.

Planting trees: I always enjoy planting trees, there is something incredibly satisfying & healing about the exercise. Having so many to plant was wonderful; I had only ever planted a few at a time before. The number involved did give me slight concerns about whether I would get them all into the ground on time as most were bare-rooted trees, but it only spurred me on to spend more time enjoying myself.

Living house: Putting up the Hazel frame & planting Willow around it was very exciting. It was a totally new experience for me, but I planned out how I was going to do it & it all went very smoothly. I was able to bend the framework into the shape that I wanted easily in most places (there was one slightly tricky section) & planting & weaving the wands was straightforward too.

Rooting cuttings: Being able to stick cuttings of plants like Currants, Willows & Fuschia (which grows as a large hardy hedge in that part of Eire) directly into the ground & having a lot of them rooting as a result was a great discovery. It was a very quick & easy way for us to propagate our plants all over the land (the original Blackcurrants had grown from prunings from a 'neighbour', treated similarly a few years previously).

What was challenging

Wet ground: While I was prepared for planting up the marshy area to the west side of the site, I hadn't planned for the East side to be quite so wet as well. It was however springtime & probably the wettest months of the year, so what did I expect?

I managed to find some dry humps around the orchard, into which I planted many of the fruit trees, but they weren't always where I wanted them to be & maybe in not enough number either. There I was with the land & the trees & not enough dry places to plant them!

Windy aspect: The site was quite a windy one & while I could plant windbreaks, they were going to take some time to grow enough to be effective. The lower part of the site was sheltered by the cottage & the surrounding trees, but further up I was going to be limited to what I could grow until some of the pioneers had grown up a bit.

Limited resources: As I have already mentioned, we didn't have a lot to work with & I had concerns about losing trees & not being able to afford to replace them. The simple hand tools were perfectly adequate, but not always particularly sharp & it could make progress rather slow at times.

Tree protection: Having to cut so many rushes to bundle around each tree made the job so much more time consuming. I also had to ensure that while they provided a protective barrier, they were well enough tied on to not fall off, but not so tight as to cause the tree bark to rot.

What I would do differently

More time: Having more time to spend on site observation (i.e. the whole year) would have avoided me coming up against difficulties such as the wet ground I wasn't expecting on the East side. Spending more time there would have enabled me to give the garden a chance to get established. Leaving so early on in it's development meant that I wasn't around to keep an eye on protective measures (like the home-made tree guards) & to take quick remedial action should it have become necessary.

Sweet chestnuts: These trees in particular seemed to be struggling with the wet conditions & I fear that they didn't make it. Despite planting them in one of the driest spots on the site, they still appeared to suffer with the rainfall, or maybe it was the wind? Perhaps they just needed to be in a different part of the land.