

Design No.3 - Jean's Dream



I have used the **Appreciative Enquiry Design Process** as laid out in Jasmine Dale's book 'Permaculture Design Companion'. I wanted to try a different process to SADIM but also this has been very much a 'Design in Action' and it felt most appropriate as it seemed like a more fluid & open process to SADIM.

Dream - 'Allow yourself to envision your ideal scenario & outcome for the project. Use creative techniques to expand this and then name clearly your intention for the design'.

Jean's Dream.

A vibrant, colourful space full of diverse wildlife, edibles and flowers.

A space for friends and family to enjoy now and in the future.

A positive response to climate change.

Discover - 'Investigate yourself, the place, current processes and methods being used. Explore related topics, visit other projects, research your ideas and alternatives'.

- Jean asked for help to design a low maintenance allotment that her family would be able to manage and enjoy. In October '21 Jean had been diagnosed with bone cancer and told she might not live beyond that Xmas, so she was keen to get things in place quickly.
- The plot had been registered to Jean's family for about 10 years and she had been guiding them with ideas such as a covered seating area for socialising. Her sons had installed an IBC water storage container with a green roof to catch water from the seating area.
- After a shed fire on the plot above, an opportunity arose to take on the upper half of the plot and this is what Jean needed help with designing.
- A member of the family had asked to have a polytunnel and so she asked the Allotment Rep to put in a polytunnel to increase year round food production.
- Jean was looking for guidance on low maintenance as her family kept feeling demoralised when only dealing with weeds. She was keen on the idea of her grandchildren planting fruit trees.

- I know the land well as my plot is on the same side of the valley - a west facing slope, on chalky soil off the South Downs on the edge of Brighton. **Predominantly south westerly winds. A lovely community on the allotment site. (Sectors)**
- **Budget** was quite free as Jean had some savings and was keen to use them for the benefit of her family and the land / wildlife. (Roughly £500).
- Potentially a lot of support from the family was available in making Jean's dream come to life
- Her sons are good engineers and builders - the grandchildren were willing to help with physical work.
- Jean's ideal scenario was to plant fruit trees with all her Grandchildren ASAP and create a low maintenance space that the family could manage without stress and have as a positive memory of her love for the place.
- Jean invited me to attend a '**Planning & Planting a small orchard course**' on her behalf to help get us started.....this was an important process towards realising her dream. The course was run by Brighton Permaculture Trust in December 2021. I learnt about spacing, suitable growing conditions, different rootstocks & local suppliers which gave me the confidence to advise on what to buy and where to plant.
- Jean also paid for me to go on a **Pruning course** with Brighton Permaculture Trust and I was able to visit 3 different orchards as part of this, which was inspiring and beneficial to visualising the design.
- **Survey tools used** - Client Interview, Sectors, Budget, PASTE, Mapping, Observation & Zones.

PASTE.

Plants	lots of pollinator attracting flowers, established apple trees that needed some TLC, a brassica & perennial area for cardoons & strawberries, beans/squash/nasturtiums/peas
Animals	Jean has made lots of sheltered areas & a pond for lizards, bees, frogs, beetles, ladybirds, hedgehogs, birds & foxes to feel welcome and regularly has visits from a robin and a blackbird
Structures	There is a wonderful covered area with seating in the middle, a wooden arched area & a picnic bench at the bottom, polytunnel
Tools	A well equipped tool shed, as well as a hot composter and 1 IBC container for water collection, good irrigation pipes were installed in the polytunnel by her sons with a timer for future watering
Events	One of her sons was coming over from Australia for Christmas and was able to help with site preparation and planting.

- I **measured & mapped** the 2 areas I had been asked to design, took lots of **photos (observation)** and spent as much time there as possible with Jean to get to know the

space, where water points were and get a feel of how it was to **move around the space (zones)**. Most of this was done during December 2021.

- We had access to lots of free cardboard from a local community centre and woodchip left in huge piles outside the allotments by local tree surgeons.
- I found a nursery recommended by BPT that had the right trees in stock and available for delivery at the right time.
- I also found a local company (again, recommended by BPT) for sweet chestnut stakes to support the trees. These are from a sustainable source and would be sturdy and strong.
- I had noticed some **IBC containers** that appeared to be dumped near another local allotment, so I asked around to see if anyone was claiming ownership and no-one seemed to be, which was an opportunity not to be missed!



The covered seating area with view up to the polytunnel, the irrigation pipes in the polytunnel beds

Design - 'Consolidate the above into key elements with beneficial relationships between them'.

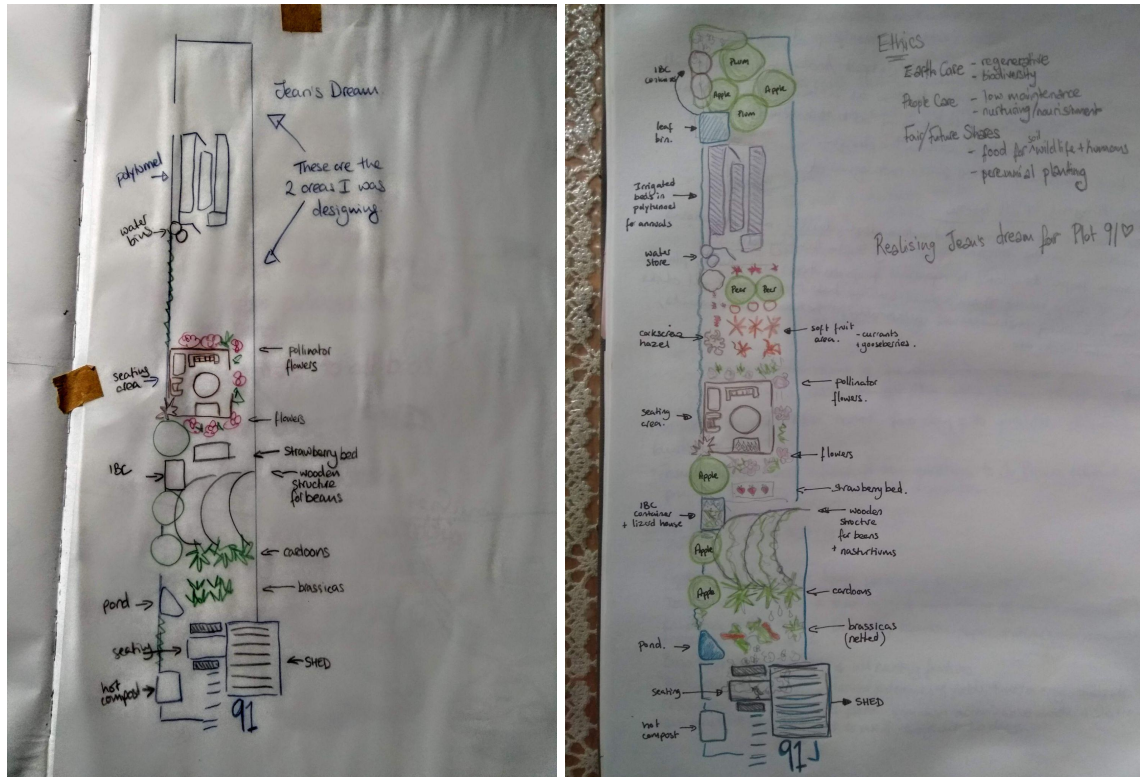
- The points below show analysis of the site and the family's needs which informed design decisions.
- An awareness of **soil quality** (poor), **sectors** (SW wind mainly, west facing slope), **zoning** (top and bottom for access/taps & central seating structure for socials & polytunnel - Zone 1; rest mainly Zone 3 with some wild edges Zone 5) & **available resources** (free cardboard & family help) helped to inform this design.
- Regular **observation & enquiry** while doing hands on work with Jean & her friends/family also helped to inform design decisions such as successful people systems, timing and areas of enthusiasm).
- I found a local company again recommended by BPT who could deliver 2 cubic metres of compost to the site to improve the nutrients of the soil where the trees would be planted.
- As part of the design process I used **SWOC** and the 3 **ethics** -to analyse what was present, what was needed and how best to facilitate these within the design. This led to using local resources, low maintenance systems & principles such as 'create no waste' & 'beneficial relationships'. I suggested a **No dig** approach would be best to help with **low maintenance and build soil health**.

SWOC:

Element	Strength	Weakness	Opportunity	Challenge
Pear trees	Local & organic	Sensitive to cold wind. Needs good water in first year.	A favourite fruit mentioned by Jean's family & planted lower down the hills for protection	Needs protection from wind - best place lower down the slope
Apple Trees	Local & organic - hardy and able to cope with wind	Will need a good watering program in the first year.	Share pruning knowledge with family.	Choosing / sourcing appropriate root stock at short notice.
Plum trees	Local & organic / able to cope with wind	Good watering needed in first year.	Share tree care knowledge with family	Finding appropriate root stock (dwarf) at short notice.
Autumn raspberries	Delicious, easy to prune, local & organic	Keeping area weed free	Fruit ripe in Autumn so not missed by summer holidays (1 Grandma in Norway)	Preparing the ground
Currants		Nurturing while they establish/need covering		Learning how to prune
Gooseberries	Local, organic, delicious	Nurturing while they establish/need covering	Jams & foraging	Learning how to prune
KPS compost	Local & organic	Cost / bag disposal	Lots of compost needed for poor soil	Lots of help needed to spread it onto beds and planting holes.
Sweet chestnut stakes	Local & strong Long lasting	Cost	Supporting local small business	Will need a post rammer to get them into the ground.

IBC container	Free!	Needs to be moved from local park - quite large	Additional rain water harvesting that can be gravity fed to polytunnel & fruit area	Constructing the sail/chain structure to harvest rainwater (Still to be done)
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- **Key elements** within the design needed to be **fruit trees/perennial fruit**, low maintenance systems and water capture.
- I recommended Pear -'Baronne de Melo' on Quince A & Pear 'Chalk' on Pyrodwarf for just below the polytunnel as it was more sheltered - **this uses the design tool 'Relative Location'**.
- Also in this lower area I recommended Raspberry - 'Autumn Bliss', White Currant - 'White Versailles' and Gooseberry - 'Captivator' for the soft fruit area. All good for chalk and pretty low maintenance, hardy and delicious.
- In the area above I recommended Spartan Apple MM106 as I have a Spartan on my allotment and it's possibly one of my favourite apples, also a James Grieve Apple M26. In addition to this Purple Pershore Plum VVA & Bonne de Bry Plum WA-VIT.
- I had measured the area and also spacing needed between plants. All trees chosen were on small rootstocks and their placement allowed for space to reach maturity with enough space. **These trees were chosen as they had a beneficial relationship to one another and the space available. They grow well together, fruit at different times and will give stability to the soil as well as future food for the family & space for wildlife.**
- Due to time restraints and Jean's enthusiasm there was a lot of 'Design in Action' - this involved Jean and I, along with other people involved, constantly asking questions: Is this good for the land? Will this be low maintenance? How can we avoid waste / how can we use this waste? Is this the best place? Why is this here? Could it go here? and always using **SWOC** to help us come to a decision.
- An example of a **No Waste design in action solution** would be the **Hugelkultur** bed that we created at the top boundary using **green waste from pruning and weeding and covering it in woodchip**. This also acts as a **good barrier to water run off** that can come from the top path in heavy rain.
- The above points are a mix of **observation & analysis** which **informed design decisions** - the trees were chosen because they were suited to their proposed planting positions and available within a limited time frame from a local recommended company.
- I told Jean about the IBC containers and we agreed that her sons would collect one for the plot.
- **Design tools used were:** SWOC **which helps to consider elements from all angles**, Relative location - **where is the best place to put elements of the design in relation to the site and other elements** & Beneficial relationships - **the best place for different elements to support each other and the people systems.**



My visual map of Plot 91 showing Before & After

Deliver - 'Make a plan of action with attention to timings, budget, mode and method of implementation'.

- Jean's sons installed the IBC tanks above the polytunnel and connected it to the timer for **easy watering**. At the moment it is filled from a tap but her sons have a plan to **capture rainwater** in the long term. - this feeds into irrigation tubes under the beds in the polytunnel and they have also installed a timer for this and it uses gravity to feed the pipes.
- Jean's son Nic was visiting from Australia for Christmas 2021 and dug holes for the trees as well as planting the 2 pears for his sons.
- 2 cubic metres of local good quality compost was delivered to put in tree holes as the soil quality was very poor. Jean also sourced some free manure from a friend.
- The whole family got involved planting their trees over Xmas and New Year.
- New Year 2022 arrived and Jean was smiling, feeling positive and defying her diagnosis with spirit!
- Jean paid for me to go on a 'Pruning' course with BPT in January '22 so that I could support the family in caring for the trees in the future and she also paid for her friend and co-worker Annette, to go on a Tree Care course with BPT so she could help with tree health in the future.
- Once the trees, stakes and soft fruit were in, everything was covered in cardboard to minimise weeds and where plants were, compost was put down. Everywhere else had a healthy layer of woodchip.

- Excess prunings and non-weedy green waste were turned into a Hugelkultur bed at the top, surrounding a second seating area for observing the orchard and views across the valley. **(Beneficial relationships)**
- **Implementation of the project happened very quickly between November 2021 & February 2022** using help from **friends & family**. **Local producers** were used for trees, soft fruit and stakes. **Free resources** such as woodchip and cardboard from the **local area**. **Budget = roughly £500.**



Jean and her co-worker & friend Annette tearing up cardboard, her sons Nic & Mark delivering the IBC container, Nic & Joe preparing the ground for the trees.

Permaculture Ethics & Principles.

Earth Care was the underlying motive of this design as the ground was poor and had been the site of a fire, so nurturing the soil was important for soil health & good quality food as well as carbon capture and supporting biodiversity which Jean is extremely passionate about.

“Healthy soil has the ability to sequester carbon and help reverse the effects of climate change, it better absorbs and retains water, cutting down on evaporation and creating resilience to drought and extreme weather, it increases soil fertility and productivity, increases the nutritional value of food and forage, supports greater biodiversity and ensures species stability.

Soil hosts a quarter of our planet’s biodiversity. Billions upon billions of earthworms, nematodes, insects, fungi, bacteria, and other invertebrates make their home in soil. These creatures use the organic material found in soil as food and work together to break down materials into minerals and nutrients that support healthy growth for the rest of the ecosystem, including crops and animals on farms”.

[Biodiversity and soil health: how protecting one, safeguards the other | IUCN](#)

People Care was fundamental as Jean’s health and her family’s well being was a very important consideration, so the design needed to be sensitive to this. We also chose local companies to support small business and ethically sourced products.

“Fundamental to permaculture is the concept of Permanent Culture. How can we develop a permaculture if our people are expendable, uncared for, excluded? People Care asks that our basic needs for food, shelter, education, employment and healthy social relationships are met. Genuine People Care cannot be exclusive in a tribal sense; there can be no elites here: no

plutocracies or oligarchies, all members of the community must be taken into account. It is a global ethic of Fairtrade and intelligent support amongst all people, both at home and abroad”.

[What is Permaculture: Part 1 – Ethics - Permaculture](#)

Fair Shares/ Future Care - allowing for increased biodiversity by using organic compost & trees, also developing No dig systems to improve soil health on a vandalised plot. Providing food security for future generations in the family and for pollinators. Jean’s love of nature meant that consideration of the ‘more than human’ visitors to the site would benefit as much as the humans.

“The last ethic synthesises the first two. It acknowledges that we only have one earth and we have to share it with all living things and future generations. There is no point in designing a sustainable family unit, community, or nation whilst others languish without clean water, clean air, food, shelter, meaningful employment, and social contact. Since the industrialised North uses the resources of at least three earths, and much of the global South languishes in poverty, Fair Shares is an acknowledgement of this terrible imbalance and a call to limit consumption (especially of natural resources) in the North”.

[What is Permaculture: Part 1 – Ethics - Permaculture](#)

Use & Value Renewable Resources.

We sourced cardboard from local recycling points for laying on the ground.

Woodchip is freely available at the entrance to the allotment - so Jean’s family, friends and on occasions youth from her church helped to lay this onto cardboard to suppress weeds & add nutrients plus water retention to the site.

We ordered sweet chestnut stakes for the trees from a local company. These have a long life span and are a good coppice resource.

Design from Patterns to Details.

The Orchard course meant I was able to use different sector observations such as wind, rain and soil to identify the best place for planting. The pears were planted below the polytunnel in a slightly more sheltered position with soft fruit as company. The apples and plums were planted higher up as they are better suited to coping with wind and colder temperatures. The family planted these over Xmas and New Year which is the best time for bare rooted trees. (At the time Jean time was short and really wanted to make this happen with her family).

Integrate rather than segregate.

There have been a lot of people involved in realising Jean’s dream - a lot of love has been focussed on this bit of land. Reciprocity - developing a relationship with family & land.

Catch and Store Energy.

Potential rainwater harvesting. Family support. Mulching for better water retention on soil. Leaf mould cages were created and some ventilation pipes added to the centre. These were used as mulch on a new area using plants from Jean’s garden and hanging baskets. (see below)

Obtain a yield.

Perennial fruit provides future food security. Wood mulch creates healthy soil with a good mycelium network for healthy plants and carbon capture. Hugelkultur beds break down into healthy soil to create more growing space. Good mental health and family wellbeing/cohesion.

Beneficial Connections.

Using relevant location, local resources and family skills and energy, a thriving space full of biodiversity has successfully been created. Benefiting Jean, family, soil and local wildlife.



The main areas of the design, above and below the polytunnel showing the installed IBC tank & a plum with chestnut stakes above and the pears and soft fruit area with woodchip mulch below.



The leaf mould bin with aeration holes that we then used to create a new bank to plant pollinator flowers next to a plum tree.



Summer 2022....abundance.

Final thoughts - it has been an absolute pleasure working with Jean and her family to realise her dream and I continue to support Jean in the development of the allotment, sharing ideas and permaculture knowledge. Jean has found the focus of planning for the future at the allotment to be great for her mental health and has planted lots of additional flowers for pollinators and beauty. The polytunnel has and is being very productive for food.

The IBC container was moved further up the site to make access to it easier and to make space for a compost bin next to the polytunnel. A trench was dug for the pipes to go underground and Jean said the soil was now deep and healthy in that area with lots of worms. The trees and soft fruit are looking happy. All the paths have had cardboard put down and layers of woodchip, so there is a clear structure to the site and much less weeding needs to be done.

Design process - This is the second draft of the process which has been interesting. I went back to a blank canvas & used Jasmine Dale's description of each stage and also used [design frameworks and methods.pdf \(permaculture.org.uk\)](https://permaculture.org.uk/design-frameworks-and-methods.pdf) to remind me clearly of what design tools I have used in the different stages of the design process.

I am aware that the Dream part of Appreciative Enquiry can be much more open to creative process and possibilities, but this was Jean's dream. I would like to explore this in more depth with vision boards with future designs. I will also slow down and use the different processes more consciously in analysis & design decisions, but we were on what we believed to be a tight time scale. Jean's family have taken on different responsibilities at the allotment such as watering, weeding, growing and pond care.



Jean's grandchildren (& a partner) who now regularly look after the allotment together.

Evaluation of the Design - I think it's been very successful. We have added to biodiversity, soil health & food security while creating a low maintenance design that the family can manage. Minimal waste was created - 2 cubic metre bags, but they are quite useful for moving bindweed off site. We managed to keep the budget small and use local / free resources. I am writing this in October '23 and this year the family harvested lots of lovely plums. Jean told me when she lifted up cardboard from under the woodchip paths there was a minibeast party going on. The family have had a lot of different issues health wise to deal with and the allotment has provided a wonderful focus for them to come together and share Jean's love of the space. The IBC container is waiting for a sail & chain drip mechanism to be added so it can fill with rainwater, for the time being it gets filled with a hose and then used with the timer system to irrigate the polyhouse.

Reflection on my learning.

It was a great benefit to be able to attend the orchard planning & pruning courses. The trees look very happy and well spaced. The planning enabled me to place the appropriate fruit trees in suitable positions - for instance the Pears are slightly lower down to avoid extreme wind, whereas the plums and apples can cope with being on higher ground.

Appreciative Enquiry felt very appropriate as a design process due to the nature of Jean's request.

I have found it incredibly hard understanding the difference between Survey & Analysis, and understanding what tools are used where in the process - I think this is because some can be used all the way through as a checklist. I have found this document [design frameworks and methods.pdf \(permaculture.org.uk\)](https://permaculture.org.uk/design-frameworks-and-methods.pdf) incredibly useful to cross reference when writing up the design.

My first design was a very clear process but Hollingdean Community Centre & Jean's Dream involved a lot of design in action as well as tweaking in action at a busy time (not lockdown) and I think this made the process of writing up the designs quite challenging. I aim to slow down and get my notes written up more regularly for future designs.

I have now taught SADIM on 2 x Intro to Permaculture courses which I think has helped me grasp the difference in the stages of the process. Survey = What is there & what is needed; Analysis = making sense of this; Design = making good design decisions based on the first 2 stages & planning the implementation of the project. For my learning I need to explore different design tools and also make sure I have clear 'Before & After' illustrations. It's really important for me to consciously look at 'the big picture' first before getting excited about details.

Next steps:

I continue to support Jean and her family as they are my allotment neighbours. I am encouraging the family to get the rainwater harvesting up and running for a truly resilient system and because the plants much prefer rainwater. They will also need some support with pruning while they get confident. Her 2 granddaughters have become good friends with me - one is keen to develop the pond and I am sharing info I picked up from some voluntary sessions with Froglife so she can improve pond health and biodiversity. Apart from that the family seem keen to manage the space now that it no longer feels overwhelming to them.

Polly Charlton 2.11.2023.