OBREDIMET

The Kitchen: How can our kitchen be made a more relaxing, organised and efficient place to be in?

Observe

Whenever we go away and stay in self-catering properties, we love the simplicity of them, there is the essential of things, and there is no clutter. This is most noticeable in the kitchen. Our kitchen on the other hand ...



..., even on a relatively good day, is not.

It struck me on the way home from staying in a small and calm cottage that permaculture design and principles could be applied to our kitchen and make it care for the earth and each other and allow us to share the space more effectively.

We currently waste energy, physical and mental, in how we work in the space.

We live in an old building and our kitchen is unfitted. Cupboards from the auction, doors from a demolished house, worktops from old doors and a pool table. It is a multifunctional space, cooking-laundry-eating-office-social-cat-storage, but like everything in our house it has evolved and not in the most efficient manner. Nevertheless many visitors comment how easy our kitchen feels and how easy they feel in it.

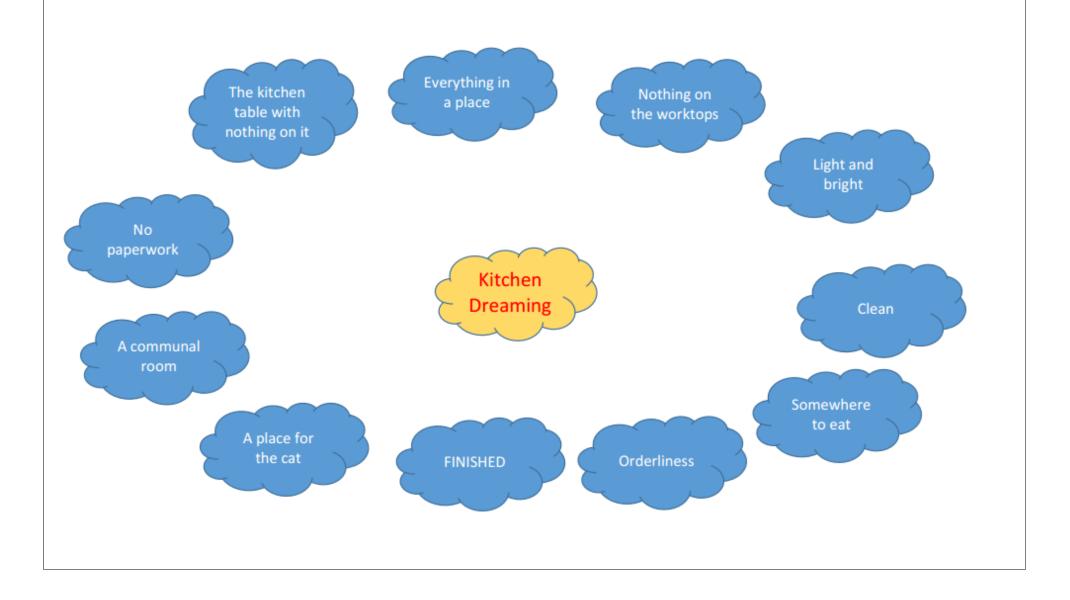
Two summers ago we increased the light in the kitchen by moving a small window, putting in a large window and removing a false beam from across the middle of the ceiling. This has made a huge difference to the feel of the room, the light and the view from the window of the fells to the east have a significant people care impact.

Although the structural work is complete the redecoration is not. Neither for that matter are other elements dating from well before, for example the space around the Aga.

The appliances in the kitchen are fuelled by electricity either from our solar or from Bulb, who are 100% green. The heat from the radiator, when it is on, which is only when we go away in the winter and the Aga is turned off, is powered from the wood pellet boiler and the Aga is powered by oil. The Aga is a multi-functional appliance, providing cooking, heat and clothes drying. It also used to provide hot water, but since the wood pellet boiler it does not, reducing our oil consumption. When we first moved in we had a solid fuel Aga, which was causing problems of dust and because it was difficult to control with particular weather conditions it was damaging itself and the chimney. We changed to an oil burning Aga with the intention to move to something different at a later date.

Client Interview

Emma and I talked about what our "Kitchen Dreams" were then looked at the positives, negatives and the interesting aspects of the kitchen now.

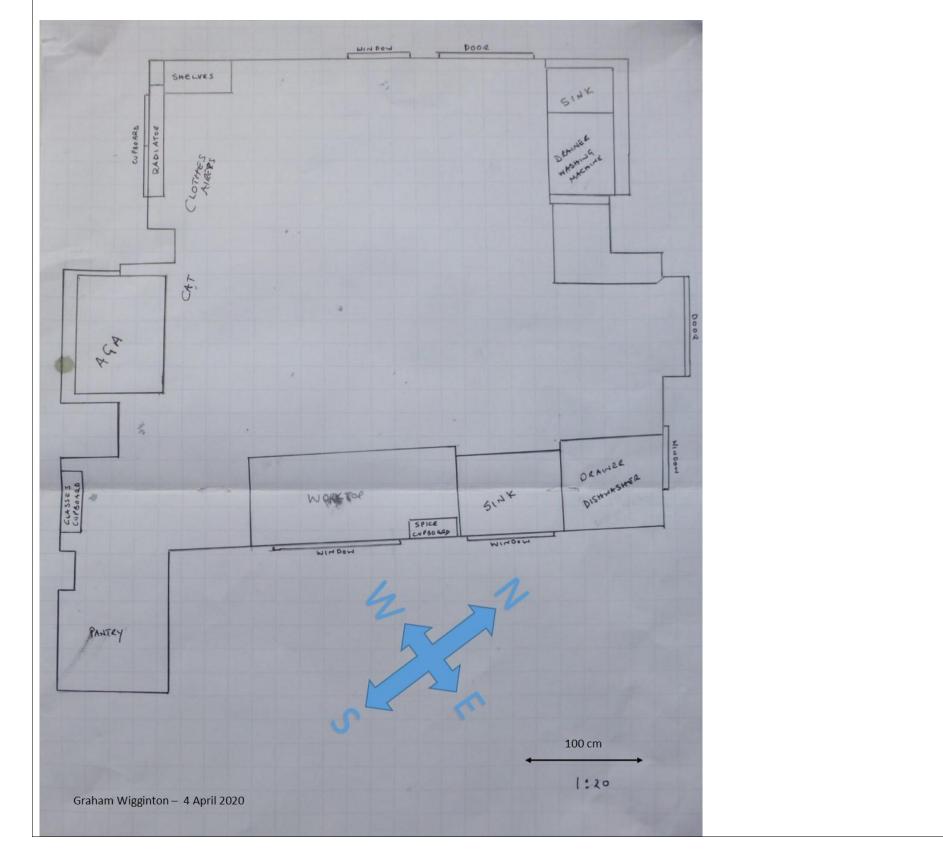


Positives	Negatives	Interesting
The Cat	It needs to be finished	It is a blank canvas
The kitchen table	Dirt comes in from outside	It is a flexible space because it is unfitted
Aga	The clutter	We use a variety of fuels
Unfitted	The chairs are falling apart	
Cheerful	The paperwork needs somewhere to go	
It is big	There is too much stuff	
The big window	Tools get left	
It is light		
It is warm		
It is welcoming		
It has all the appliances we need		
It has two sinks		
It has lots of electric sockets		

Boundaries

Physical boundaries: if we are to remove elements from the kitchen where are they to go? Finishing the décor will involve a large amount of upheaval as everything will need to be moved out and we will have to prepare food and eat elsewhere. Although the kitchen is unfitted certain elements will need to remain where they are, the appliances, the worktop, the sinks and the table. Reducing the size of the table is a possibility but we decided that it is a non-negotiable.

Limiting factors: time and upheaval are the main two factors and therefore the décor part of the project would need to be completed in the summer holidays. The upheaval is a certain psychological boundary but we are buffered to some extent having created a calmer, tidier space in the lounge. Money is also a limiting factor, particularly with regard to replacing the Aga, which runs on oil. We have considered on a number of occasions changing our cooking source, for example when we installed the wood pellet boiler we researched wood pellet cookers. We discounted these because of the difficulty we would have in storing pellets. We do not have space around the house, the garden and outbuildings are across a lane, which would mean that we could not have an automatic system. We have also looked at moving to an electric "Aga equivalent" or an electric range cooker, but have discounted these for the moment because of cost. We are now looking at how we can provide alternative cooking for times when the Aga is turned off, which would also mean that we could turn it off in the summer when its ambient heat is not needed. Our current thinking is to investigate an electric hob, which we can place on the worktop temporarily and also a small moveable oven.



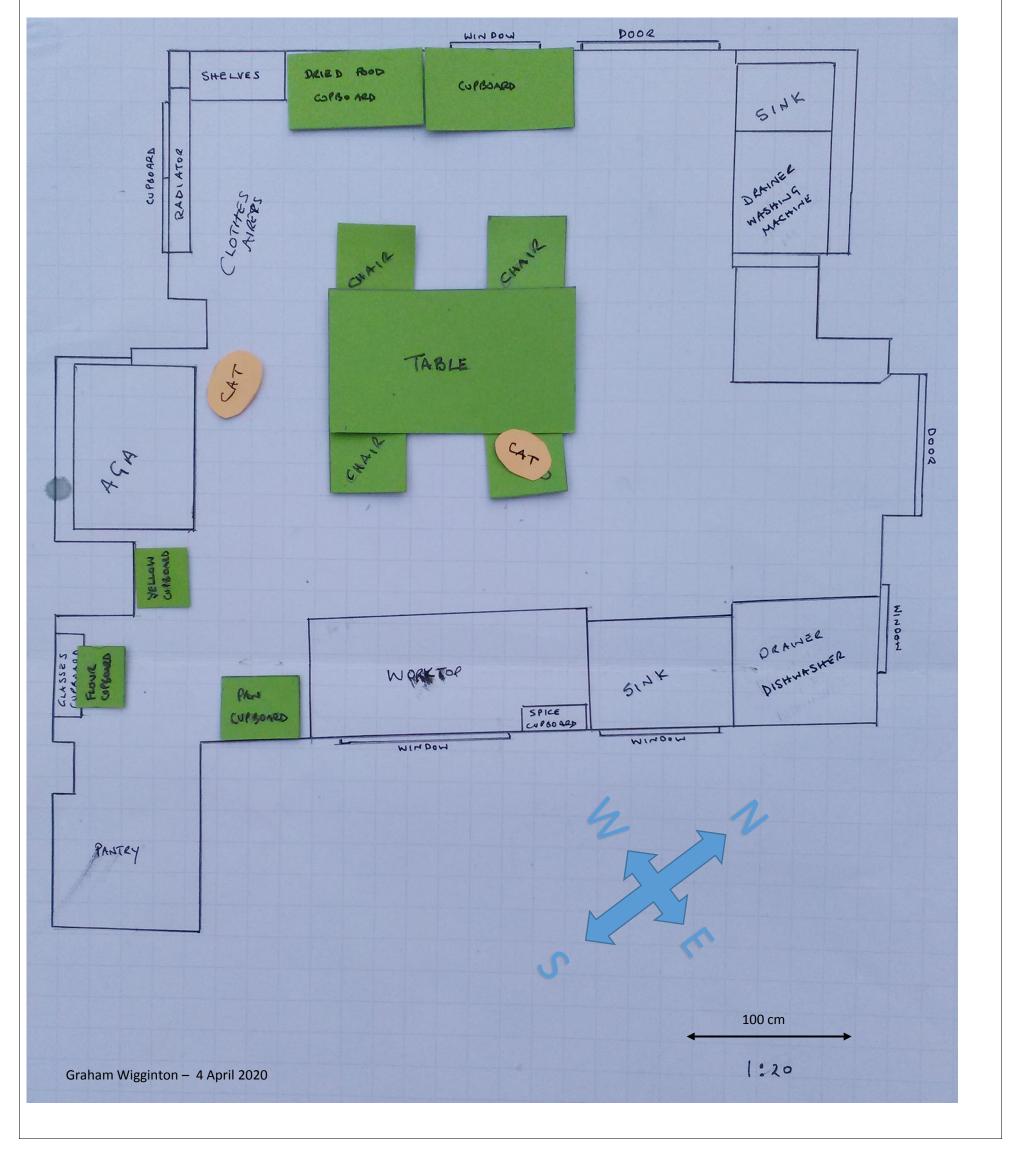
Resources

We have the skills to complete the décor, having completed a similar task in the lounge and the cost would be only for the paint. Any further cupboards or shelves would not be expensive.

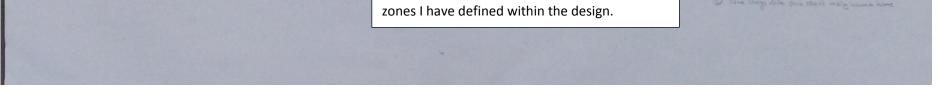
Evaluate

We want to achieve a kitchen that remains warm and welcoming, that is light and bright, clean and orderly, where there is space for all the roles it has, is finished and has a place for the cat.

The first task was to produce a Base Map. I started from the architect drawings from the original renovation, only to discover that the building work and the drawings did not match closely. So I measured and drew the base map. The room is approximately 4m by 4m and not square.







My initial thoughts are that:

- There are things that are not kitchen things.
- Some items are too numerous.
- There are some things so rarely used that they do not need to be in the kitchen.
- Generally things we use regularly are towards the front and rarely use to the back.
- Some things, like the pans do not have a home.

Design

An efficient kitchen has impacts on all three ethics. There will be more efficient use of resources, both of fuels and of food, using energy at more effective times and with less food waste. There will be less personal energy used as the most used items are nearest to hand. There will be more space, as things are easily returned to their home so sharing the space will be simpler and sharing with visitors more welcoming. But the most impactful element will be on the feeling of peace generated, not necessarily by tidiness but by orderliness. There will be a visual and internal feeling of calm.

CATCH AND STORE ENERGY

The Kitchen lends itself to zoning and I have sketched 4 zones, in parallel to the conventional use of zones in land based designs where zones are defined by the number of visits made daily, weekly or on longer timescales.

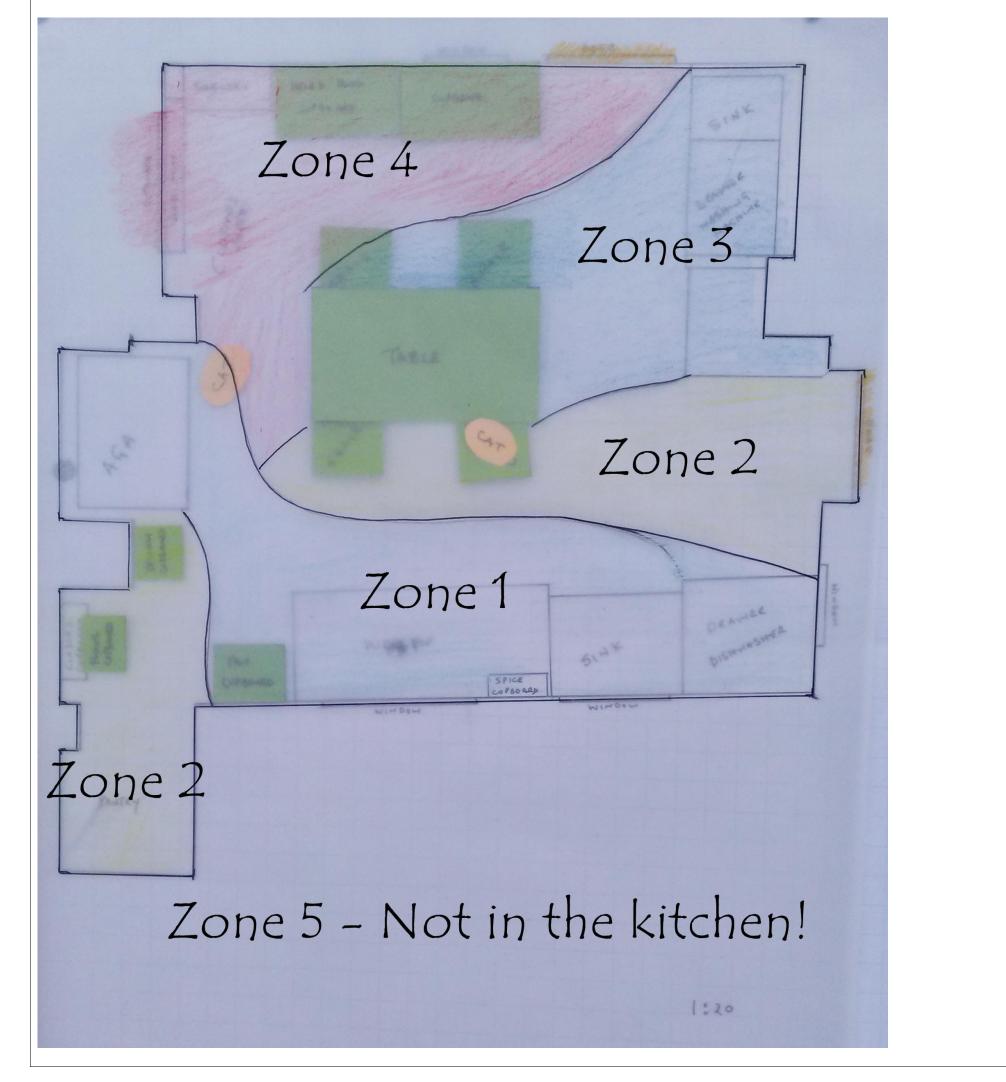
Zone 1 where we spend most time and where the everyday foods and equipment are.

Zone 2 where the commonly used foods are kept and where things we need as we go out the house are.

Zone 3 where we keep cleaning things and things to feed the cat.

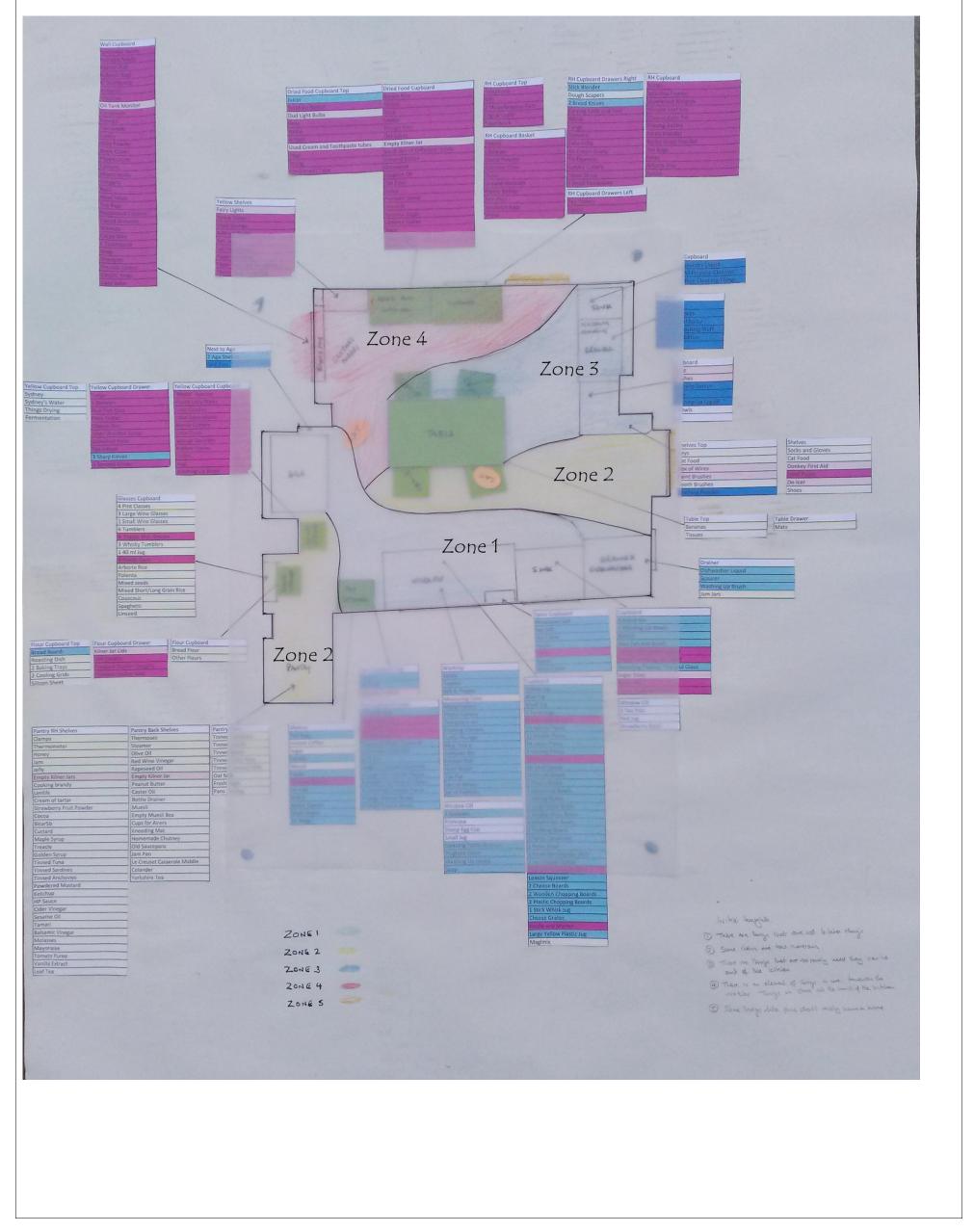
Zone 4 where foods and equipment are that we do not need access to daily, for example supplies to replenish Zone 1. Zone 4 is in reality 2 subzones as part is less accessible because of the clothes airers and washing. This is the cupboard in the wall.

There is also Zone 5 outside the kitchen. Immediately outside we keep things that need to be cool and this is where the freezer is. Zone 5 also includes the rest of the house and outbuildings. We have 2 freezers, one just outside the kitchen for things that will only be partly used and then put back, for example frozen peas, and one in the outhouse containing things that will be used up in one go or kept unfrozen, for example meat, bread or milk.



Allocating items in the kitchen to appropriate zones identifies:

- We own a lot of crockery etc do we need it all in Zone 1?
- Is the Yellow Cupboard in the correct place?
- The cupboard by the back door contains things for outside.
- There are things in the wrong zones.
- The pans need somewhere to go.



DESIGN FROM PATTERNS TO DETAILS

Actions from considering the plan

- Reduce the amount of crockery in the cupboard under the sink. Use this space for storage of things from the worktop. New cupboard either at bottom of stairs or in entrance hall.
- Move the contents of the yellow Cupboard to the Wall Cupboard. Move Flour cupboard to where the yellow cupboard was.
- Move the contents of the Cupboard by the back door to the tool shed. Use this to store cleaning / cat things. ٠
- Create something for the pans. Possibly where the Yellow cupboard now is. ٠
- Move individual items to correct zones or remove completely.
- Paperwork is already moving out of the kitchen.
- We need a vegetable storage system in the pantry. ٠

USE AND VALUE RENEWABLE RESOURCES AND SERVICES

- We will use organic paint from Lakeland Paints that have no solvents or VOC.
- We will put aside surplus things for going to charity shops post lockdown.

Client Interview

APPLY SELF-REGULATION AND ACCEPT FEEDBACK

The analysis backed up what we thought we knew with evidence. The discussion focused on how we should then go about making changes, where we should start and how to integrate that with the redecoration.

USE SMALL AND SLOW SOLUTIONS

Actions from Client Interview

The main outcome was to work across the kitchen from Zones 1 and 2, though to zone 4. Working section by section, emptying the area and redecorating and returning only what is needed. I therefore envisage that the detail of the design will be set out for each stage at that stage.

STAGE 1 (Zone 2)

1. Start with re-designing the pantry, removing items, such as muesli, empty jars, jam pan, etc and reorganising items on the shelves by category. Buy or make vegetable racks to go under the shelf.

The slate shelves on the right hand wall of the pantry will stay, but will be painted and covered in oil cloth, so that they can be easily cleaned. The big slate shelf will come out and be replaced with two wooded shelves, allowing storage of some cooking pans, eg colanders, le creuset casseroles and themos flasks.

The walls will be repainted.

- 2. The flour from the flour cupboard will be put in plastic boxes and moved with other baking items to Zone 4 and the cupboard removed.
- 3. The cupboard by the door will be emptied of paint etc, and cleaning stuff from the yellow cupboard moved into it.
- 4. Contents of the yellow cupboard to be decided.

STAGE 2 (Zone 1)

- 5. Sand and paint walls.
- 6. Put cupboard on wall above draining board and new shelves above pan cupboard. Glasses to cupboard above draining board and pasta, rice etc in jars in what was the glasses cupboard.
- 7. Reduce bowls, plates mugs etc. This requires space to be made in the cupboard outside the kitchen at the bottom of the stairs, possibly a new taller cupboard.
- 8. Pans to be on top of pan cupboard.

New worktop or paint current recycled door being used as worktop.

Stage 3 (Zones 3 and 4)

- 10. Sand and paint walls.
- 11. Fill gap behind the Aga.
- 12. Create a baking space in one of the cupboards for flour and baking equipment.

13. ...

Stage 4 (How we use resources)

- 14. How and when we wash up / use the dishwasher.
- 15. How and when we use the washing machine.
- 16. Options to oil for cooking.

Implement

The sequence of work is outlined in the design.

The target would be to have the whole process completed by the beginning of the summer holidays. The "Stay Home" edict this spring will create time, I will not have additional work commitments so will only be working the equivalent of 3 days, Harriet will be at home as well adding further hands.

Time for deliveries of paint etc. may slow the process, this will need to be ordered first, there is a small amount left from painting the lounge last summer which will do for the pantry.

APPLY SELF-REGULATION AND ACCEPT FEEDBACK

In the end we decided that as we were all at home and the amount of disturbance caused by sanding walls and painting, we would implement the plan in one go. As all three of us were working together, adjustments and tweaks to the detail were easily implemented. This also meant that as sourcing wood for shelves in the pantry was not easy under lockdown other areas could be addressed in the meantime. Both Harriet and Emma took on board the concept of zoning. Decisions were made regarding what was needed for shelves / cupboards above the draining board, eventually deciding on a simple shelf made out of scrap wood.



Understairs Cupboard. Dried food cupboard. Contains paint and recyling. Shelves made out old cupboard doors.



Yellow cupboard. Now a fermentation-station, with space for demi-johns, sourdough starter, water for bread making, baking silic "tins", rye flour to feed starter, thermometer, knives in new knife block and bread board and knife

Everyday Dried goods cupboard. To be refilled from Zone 4 as necessary. Pasta, couscous, nuts, seeds, rice, lentils, oats, quinoa, polenta.

Pantry. Tea, jam, honey, custard powder, instant coffee, chocolate powder, bicarb, peanut butter, tinned fish, tamari, ketchup, balsamic vinegar, tins of tomatoes, chick peas, beans, oils, vinegar, less regularly used pans, stock of muesli, bottle drier. Vegetable boxes to go under bottom shelf

cloths and tea towels, Cereals, pasta, rice, oaten. Thermos flasks and occasionally used utencakes, Ryvita, herbal baking / jam making sils, eg carving knives, tea, coconut oil, sugar, equipment occasiona ce cream scoops. Cupdried fruit, seeds and used ooard with flour, plastic nuts. containers for freezing On top: Pens, pegs, ood, foil, parchment string, radio and basket etc and snacks for papers. Draining board. Now has only washing powder and cat bowls. Cleaning cupboard. Cleaning materials and cloths. Shelves. Cat food and owels. Basket for keys. Glasses shelf. Everyday glasses, other glasses out of the kitchen. Spice cupboard. Herbs and spices, stock cubes, oatcakes, ryvita, salt. Blue cupboard. Plates, jugs, bowls, pyrex and le crueset dishes, magimix, cheese grater, chopping boards Worktop. Kettle, toaster, kitchen roll, nutri-bullet, compost bin, cutlery and utensils

Drawers with clean dish

Cupboard outside kitch-

Maintain

Now that the kitchen does not contain things that should be elsewhere and everything has a place, maintaining the kitchen is more straight-forward. Having things to hand means that nothing is left out because they have to be put away on the other side of the room. We have also instigated a weekly morning for house cleaning and tidying therefore at least once a week non-kitchen items are removed. Nevertheless there are only a handful of these each week. How this will continue post lockdown, when less time will be spent at home, will need to be seen?

Maintenance Plan

Daily:

Washing up and clearing / wiping down the worktop, every evening, and lunchtime if time allows.

Clearing the table at meal times of un-necessary items.

Cat bowls washed up daily and stored on the drainer.

Washed clothes dried and taken out of the kitchen when dry.

Monitor the number of shoes at the back door.

Filling up jars in zones 1 and 2 as they are used up from cupboards in zone 4.

Weekly:

All the above.

Vacuum floor.

Remove not kitchen items to their correct places.

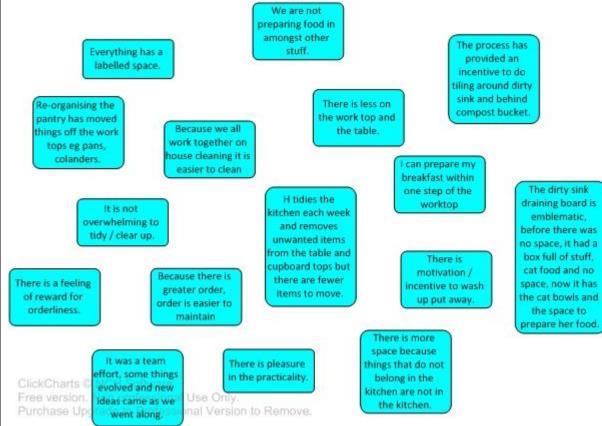
Dust and wipe down surfaces and windows.

Empty waste and recycling bins on Wednesday

Evaluate

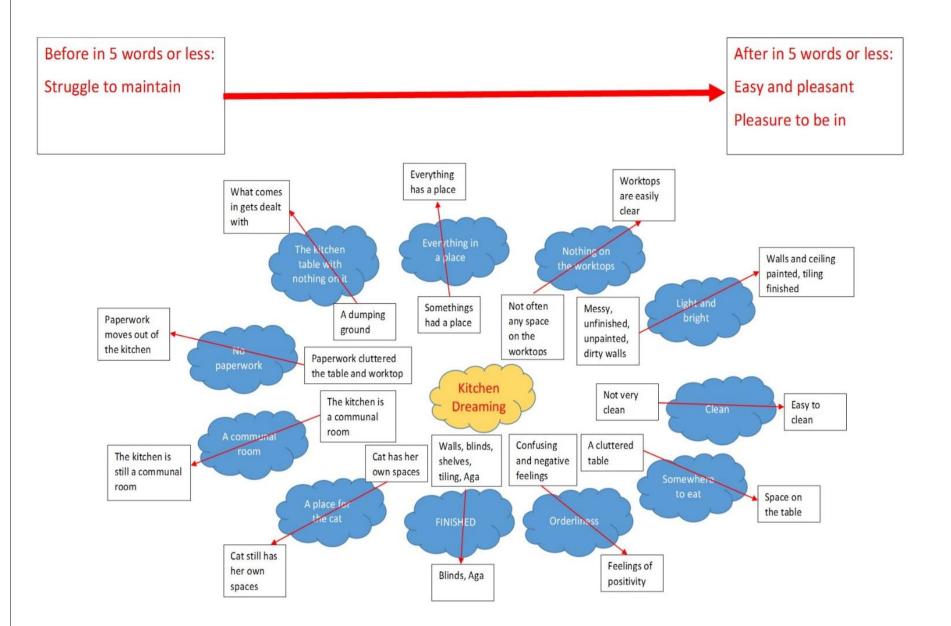
APPLY SELF-REGULATION AND ACCEPT FEEDBACK

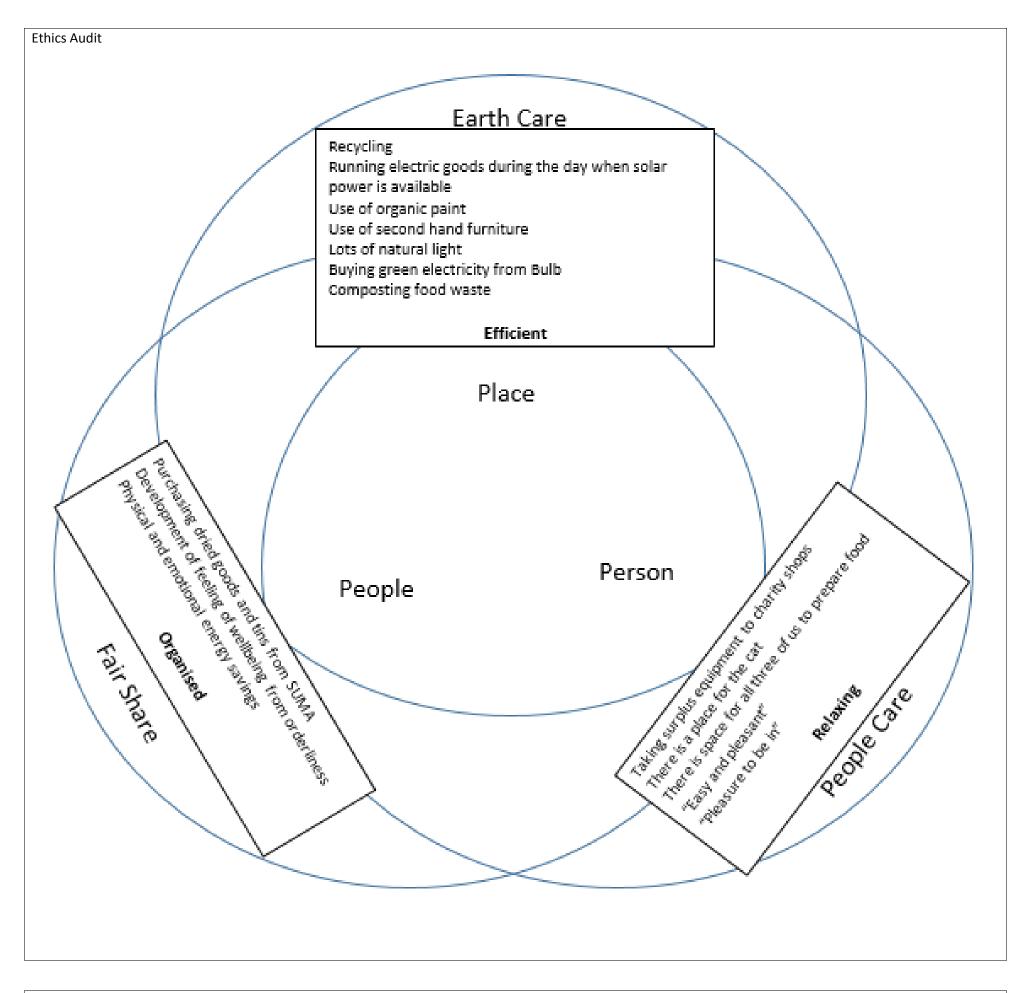
We have a final "client meeting" to discuss what the impact of applying permaculture design to our kitchen has been. These are a summary of some of the statements:



It is clear from these statements that we are expending less energy, physically and emotionally.

We also looked back at the Kitchen Dreaming to see how things have changed. Initially I thought of scoring out of ten for before and after, but we decided to go for a more textual based approach. In retrospect we should have scaled in some way how we felt about the dreams at the dreaming time.





Tweak

The kitchen is a living place, it is fluid, always moving. As such tweaking will be continuous. The following are areas that need tweaking identified in the first month:

- There are too many utensils in the utensil jug. •
- Need to have some larger jars and more storage jars, particularly for pasta. •
- Need vegetable boxes. •
- Behind the Aga? •
- Curtains or blinds?
- Either paint the worktop or replace.

Reflection

I have used the Individual Design Assessment Form to provide structure to my overall reflection of this design.

ACCREDITATION CRITERION 1: Demonstrating design skills

		What's gone well?	What could have been done differently?
1a	The design uses an appropriate design framework or intentional process accurately	OBREDIMET – I found this a straight forward framework to use for this design. It was heoful to be straight forward as I was working closely with my family and di not want to get bogged down in the framework and focus on the decision making within it.	The boundaries and resources sections are brief.
1b	It references the permaculture ethics appropriately	There are two angles for the ethics within the design, one how we as individuals are impacted by it and the other how we impact on the world outside the kitchen. Simplistically people care is predominantly related to us, earth care to the world outside and fair shares sitting between.	As a consequence of this a number of the earth care actions are ones that we have already chosen that have remained unchanged through the design. If the design extended into our purchasing or we had the financial capacity to look at our sources of energy for cooking, earth care would have been a more prominent ethic.
1c	The design uses permaculture principles & theory that are appropriate to the situation	I have used the principles through the design, implement and evaluate sections. The "apply self-regulation and accept feedback" is a recurring principle applied as we were working together in process and therefore this was important to ensure we were happy at each decision.	I was not explicit about other principles used and could have produced statements against them as part of the review.
1d	It uses a variety of tools to suit the needs of the situation/ design brief	I have used "dreaming" for collection of ideas; "positive, negative, interesting"; base map; zoning, client meetings,	I could have looked at zones within zones, for example on the work top, I could have done some flow mapping to look at movement around the kitchen and the connections between elements.
1e	The design is intelligible, coherent and effective, meeting the client's needs	The design has certainly been effective in how we use the kitchen and has continued to be so.	There are still elements to complete and we need to build momentum to move forward again. Currently we have plateaued to be living with it as it is but there are, as identified in the tweaks section, things still to do.
1f	The documentation is appropriate to present to the clients and others	I was very pleased with how Emma saw and valued the permaculture approach to the design, its implementation and final outcome. This was particularly pleasing when we discussed the inventory as displayed on the base map.	The pictures are small, a walk around video, before and after may have been more effective.

Areas of Application (delete all that don't apply)

Site / land development

System development & implementation

Personal development, "Zone 00", health and well-being, etc.

Community Development

Administration & organisational design

		What's gone well?	What could have been done differently?
2a	SURVEY There is a clear explanation of how the design brief was investigated through surveying the situation and gathering the information.	I feel that the information was gathered in a coherent way though the "kitchen dreaming" and the base map with inventory.	 In retrospect I would have liked to have taken individual photographs at the start to show the before and after more clearly. The boundaries and resources sections are brief, which relates to the fact that a number of elements are not moveable, for example where appliances, sinks etc are. With regard to resources we were predominantly painting and re-organising, so the main resource was our time, which under lockdowr

			conditions was not a impacted by other things as it might have been.
2	b ANALYSIS & DESIGN There is a clear explanation of how the design decisions and solutions were developed.	The evaluate and design sections relating to the base map worked well. When I started the "Use small and Slow Solutions" timescale for the design we had decided to try and work around using the kitchen while we painted, but changed our mind once we began sanding and cleaning the walls and moved things to another room for food preparation for a couple of days. As a consequence implementation differed from the design with regard to the order and timing.	Having identified the outcome zoning the design could have been much more simplistic in retrospect.
2	C IMPLEMENTATION & EVALUATION PLANS The solutions are relevant and appropriate to the area and design brief.	During the implementation we worked well as a team. There were some adaptations made as we waited to get materials, for example for finishing the pantry shelves. It was good to sit down afterwards and review it more formally.	It was interesting how our preferred ways of looking at an evaluation fitted how we think. My initial thought was to look at each of the "dreams" and score how we had improved out of 10. Emma did not like that approach at all hence the more word oriented approach. Sometimes the best questionnaire is a blank piece if paper.

ACCREDITATION CRITERION 3: Learning from and developing your permaculture practice

(for further guidance, see section C5, page 7, in the Guide to Accreditation Criteria)

	What's gone well?	What could have been done differently?
3aThe design report includes an evaluation of the design's effectiveness.	I think the evaluation section indicates how effective the design has been and its impact on how we live in our kitchen, It is never going to be the same as a self-catering kitchen that started us on this journey but we do now have a kitchen that works much better.	
3b There is critical reflection on how you used theory, design tools, and processes, and some next steps for this design.	I have used this document to critically reflect and will append the content to a reflection section at the end of the design.	
3c The design shows how design skills and competence have progressed and some next steps for design practice.	I feel that this has been a successful use of zoning and of base maps.	I would like to look at how I reference design against the principles and ethics in future designs.