

Permaculture Design Course
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Site Survey Project

- **Landform** The area is basically an open and flat site with a sloping bank on the west edge that falls towards the driveway.
- **Microclimate / light and shade / wind/ frost pockets/ moisture** It is an open and sunny site. There is a shady area on the southern slope and under the elder trees in summer. The neighbours' old barn casts a shade patch in summer afternoon that you can see in the photograph at the end. The houses on the north, south and west sides act as a protective windbreak so it is not particularly windy. There are no frost pockets. It is a dry site with no natural water.
- **Water** There is no natural water on the site. There is an area that puddles in the north-west corner on the road due to bad drainage. Water collects here and freezes in winter. It is marked on the map entitled Site Survey Map (attached) There is also a dry patch, which is caused by the sand filter from the septic tank being placed there. It is also marked on the map.
- **Services** There are both electric and telephone over-head cables which cross the site as marked on the base map. The electricity cables have been replaced recently and they now cross right over one of the trees, which wasn't the case when the trees were planted.

There is a leach field for a septic tank on opposite the chicken house and it is marked on the map. All trees must be at least 3m away from this area. In summer the depth of soil (20cm) means that the grass dries out here quickly.

- **Soil** Three soil samples were taken and the sites are marked on the map.
 - **Soil sample one** was a mixed sample of predominately gritty silt loam but with in the sample there were patches of a more clay soil. This area was turned over when large macrocarpa trees were felled and the stumps removed and the area levelled some years ago. Photos show samples taken near surface and then deeper down.



- **Soil sample two** was gritty and loose as it came out of the ground. It too proved to be a sandy silt loam and this area has been dug over on a couple of occasions.



- **Soil sample three** was taken from the edge of the site and the only area not to have been dug over in recent years. It was no surprise that this sample too was a silty loam with plenty of sand and more organic matter at the surface. Deeper down there was a evidence of a bit of clay in the mix as the ball was noticeably stiffer than the subsoil samples at the first two sites. It changes in texture and becomes a little stickier at the deeper level but will not take a polish and is still predominately a sandy silt loam but now with some clay in the mix.



- **Plants** A number of plants were put in a few years ago with the idea of this area being a chicken forage area, but this was done without a proper design plan! Of these plants the willow bank is doing very well but there are a couple of Siberian Pea Shrubs, which are now in its shade which isn't a good position for them and the same thing is affecting a small weeping mulberry. The comfrey, gorse and Pyracantha shrubs that were planted are all doing very well, but there are perennial weeds such as creeping buttercup, thistle, nettle, bramble and dandelion that are invading the area. Three trees were planted; a Silver Birch, Honey Locust and Rowan. All three were quite large when bought and badly pruned both above and below. The rowan still looks quite sparse although the other two have improved slightly this Spring. The assorted shrubs on the northern boundary that were there when we arrived are messy and some are failing and this makes the area difficult to maintain. The area to the side of the chicken house has been dug over a few times but has not been maintained and has quickly reverted to a wild and weedy state.
- **Animals** This site is to become an area designed for chickens. There are no animal pests such as rabbits, deer or squirrels in the area but the lack of secure fencing has meant that stray and neighbouring dogs have been able to access the area, and have on occasion caused damage to stock.

- **Structures.** The existing chicken house is the only structure on the site. Close by is the back corner of our current home. This area is easily accessed from the house, however the path to the chicken house is slightly slopped, frequently muddy and slippery in wet weather and the wooden steps have degraded.
- **Access** There are currently no established fences or paths, however there are a couple of 'desire lines', which are marked on the map.
- **Beauty** An important feature of this site is that it is the first part of our land that guests in our holiday cottage see. This business has proved successful and we are expanding, so it is important that it makes a good first impression. It is not the prettiest area and in many ways looks a bit wild and neglected, not giving the right impression at all! There is a steep bank that faces the driveway that is both shady and covered in bramble. Lorries and cars have scuffed the edges of the land where it meets the road. Water collects on the corner and the drain is blocked.
- Misc



This photograph was taken facing the northwest corner of the site and the position of the camera is marked on the map. In this photo you can see

- the proximity of the area to the rear of our house
- the large bank of shade cast by the building next door in summer afternoons- when the sun is shining that is!
- the power and telephone lines that cross over the site