

Permaculture questionnaire

If you have questions regarding this questionnaire, please contact Stefan Griesser gristeph@student.ethz.ch

Name of the Property, garden or farm:

Location:

Owner:

Project type: (community/business/farm/private):

Employees:

Certified organic:

As permaculture includes various methods from different fields the questionnaire is grouped into different sections. There is a section about the design approach, another about the methods and concepts used during planning. We are interested in how the implementation worked out for you in one section. There is a part about the plants used. One part investigates animal use. We are interested in your water strategy and energy strategy and how you manage your soil. At the end we have a short part about permaculture ethics too.

Design approaches:

Have you used group work methods to outline your permaculture project?	Yes/No	A1
Have you used Dragon Dreaming?	Yes/No	A2
Example used: Facilitators, Minute taker, Timekeeper, Heart watcher?	Yes/No	A3
Example: Consensus works?	Yes/No	A4
Example: Hopi Poem or songs or games?	Yes/No	A5
Example: Crossed arm exercise?	Yes/No	A6
Example: Cosmic circle?	Yes/No	A7
Example: Vision workshop?	Yes/No	A8
Example: Open Space Technology?	Yes/No	A9
Do you use "Transition to Resilience" (T2R) training?	Yes/No	A10
Have you used Design mandala pictures (Worldview, Social, Economic, Ecological)?	Yes/No	A11
Did you use Brainstorming or "Wild design"?	Yes/No	A12

How many people hold a Permaculture Design Course (PDC) certificate in your project?

None:

One:

More than one:

A13

According to David Holmgren's 2002 book "Permaculture: Principles and Pathways beyond sustainability" there are 12 principles used in permaculture. Which of the principles influenced you in creating your permaculture project?

- | | | |
|--|--------|-----|
| 1. Observe and interact? | Yes/No | A14 |
| 2. Catch and store energy? | Yes/No | A15 |
| 3. Obtain yield? | Yes/No | A16 |
| 4. Apply self-regulation and accept feedback? | Yes/No | A17 |
| 5. Use and value renewable resources and services? | Yes/No | A18 |
| 6. Produce no waste? | Yes/No | A19 |
| 7. Design from pattern to details? | Yes/No | A20 |
| 8. Integrate rather than segregate? | Yes/No | A21 |
| 9. Use small and slow solutions? | Yes/No | A22 |
| 10. Use and value diversity? | Yes/No | A23 |
| 11. Use edges and value the marginal? | Yes/No | A24 |
| 12. Creatively use and respond to change? | Yes/No | A25 |

Used methods and concepts:

Planning:

- | | | |
|---|--------|-----|
| Have you used the permaculture zoning method when planning the garden? | Yes/No | B1 |
| Did you implement Zone 1 (Home (Zone 0/00) and food security garden)? | Yes/No | B2 |
| Did you implement Zone 2 (Close spaces and orchards)? | Yes/No | B3 |
| Did you implement Zone 3 (Large open spaces and garden)? | Yes/No | B4 |
| Did you implement Zone 4 (Reserves, fuel forests, windbreaks, etc)? | Yes/No | B5 |
| Did you implement Zone 5 (Wildlife corridors, native plant sanctuaries)? | Yes/No | B6 |
| Did you use scaling to adapt the zones? | Yes/No | B7 |
| Did you implement Sectors in the zones (Sun exposition, topography, etc)? | Yes/No | B8 |
| Did you implement Vectors in the Zones (roads, etc)? | Yes/No | B9 |
| Do you use the closed looped system permaculture recommends? | Yes/No | B10 |
| Did you choose plants and structures for special combinations you would like: | | |
| Have you planed guilds in your project? | Yes/No | B11 |
| Other Methods: _____ | | B12 |

Have you looked into how the garden will evolve over time:		
Have you planed successions of plants at your site?	Yes/No	B13
Did you use Backcasting? (E.g. What will it look like in 20 years)	Yes/No	B14
Other Methods: _____		B15
Have you used patterns when planting shrubs and trees?	Yes/No	B16
Have you checked the site requirements of the used plants beforehand?	Yes/No	B17
Did you optimise access:		
Do you use keyhole design?	Yes/No	B18
Do you use steppingstones?	Yes/No	B19
Have you planned measures to change or adapt the microclimate at your site?	Yes/No	B20
How did you plan beneficial micro-climates?		
_____		B21
Can frost be a problem at the location?	Yes/No	B22
Did you implement measure to reduce frost problems?	Yes/No	B23
Methods: _____		B24
Did you use the classical selection, grouping, adaptation, pattern creation, control, in your design the way Bill Mollison recommends?	Yes/No	B25
Did you plan how much food and produce you are aiming for?	Yes/No	B26
Did you estimate how much time and energy is needed day to day?	Yes/No	B27
Do you know if there are variations of soil in the area you use?	Yes/No	B28
Ho did you take the soil variations into account in your planning:		
_____		B29
Did you plan for low garden maintenance?	Yes/No	B30
Is there a view to enhance or block out?	Yes/No	B31
Please choose the statements that apply to you (circle or underline):		
➔ I'm dedicated to quality (organic or biodynamic not necessarily permaculture)		B32
➔ Diversity is a high priority, with many crops and sometimes livestock		B33
➔ The project is labour intensive with output		B34
➔ The project is multi-dimensional; producing, processing and delivering		B35
➔ We focus on educational and cultural dimensions		B36
➔ We are dedicated to environmental improvement		B37

Have you implemented the zones according to:

spiritual values	Yes/No	B38
social values	Yes/No	B39
economic values	Yes/No	B40
ecological values	Yes/No	B41
Is the enterprise a city farming project?	Yes/No	B42
Is the farm a Community Supported Agriculture (CSA)-Project?	Yes/No	B43
Is your project/garden/farm part of a bigger permaculture project?	Yes/No	B44
Are you part of a bioregional organisation as Mollison proposed?	Yes/No	B45
Did you start or are you part of a permaculture foundation the way Mollison introduced them?	Yes/No	B46
Are you part of a modern sustainability trust or fund?	Yes/No	B47
Do you use an alternative financial system in your project?	Yes/No	B48

Implementation:

How well did the implementation of zones in your project work out?

- No problems C1
- Problems: _____ C2

How well did the implementation of the closed loop system in your project work out?

- No problems C3
- Problems: _____ C4

How well did the implementation of guilds in your project work out?

- No problems C5
- Problems: _____ C6

How well did the implementation of plant succession in your project work out?

- No problems C7
- Problems: _____ C8

How well did the implementation of patterns work in your project?

No problems C9

Problems: _____ C10

How well did the implementation of keyhole design or steppingstones for your access paths work?

No problems C11

Problems: _____ C12

How well did the implementation of measures to change or adapt the microclimate at your site work?

No problems C13

Problems: _____ C14

Please specify what fraction of the area you apply the following practices.

Use either estimates in percent, square meters, Are's or hectares (please specify).

mulching _____ C15

broad composting area (Flächenkompostierung) _____ C16

terraced garden _____ C17

box patch (Kastenbeet) _____ C18

raised bed (Hochbeet) _____ C19

Hay bed (Heubeet, E.x. for potatoes) _____ C20

pole tent (for climbers like beans) _____ C21

pit or herb spiral _____ C22

swales _____ C23

aquatic systems (lakes, streams,etc) _____ C24

deadwood heap (beneficial organism retreats) _____ C25

stone heap (heat savers or beneficial organism retreats) _____ C26

hedge, hedgerow or live fence (wind breaks) _____ C27

trees as shading and climbing help _____ C28

nitrogen fixers (clover, sea buckthorn, Robinia, etc) _____ C29

animal manure _____ C30

compost _____ C31

no till / no pronging _____ C32

Bio-char use:	_____	C33
Crop-rotation (Potatoes, Legumes, Brassicas, Roots):	_____	C34

Special horticultural practices:

Do you use Hydroponics (Growing in liquids)?	Yes/No	C35
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Do you use Aeroponics (Growing in mist)?	Yes/No	C36
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Do you use Aquaponics (Fish & Farming)?	Yes/No	C37
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supporting measures:

Do you use precision farming in your project?	Yes/No	C38
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Do you use Integrated Pest Management (IPM with chemicals)?	Yes/No	C39
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Do you use Biological Pest Management (BPM)?	Yes/No	C40
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Used Plants:

1. Do you grow mushrooms?	Yes/No	C41
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• How many bales or logs? _____	C42
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• What varieties? _____	C43
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2. Do you grow vegetable bamboos?	Yes/No	C44
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• How many square meters? _____	C45
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• What varieties? _____	C46
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3. Do you use annual vegies (Example: Salad, Carrots)?	Yes/No	C47
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• How many square meters? _____	C48
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• What varieties? _____	C49
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4. Do you use perennial vegies (Example: Hops, Jerusalem artichoke, Daylily)?	Yes/No	C50
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• How many square meters? _____	C51
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• What varieties? _____	C52
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5. Do you grow medicinal plants (Example: Mint, Roses, Marigolds)?	Yes/No	C53
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• How many square meters? _____	C54
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• What varieties? _____	C55
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6. Do you grow spices (Example Saffron or Sezuan pepper, Juniper)?	Yes/No	C56
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• How many square meters? _____	C57
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• What varieties? _____	C58
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7. Do you grow herbs (Example Lovage)? Yes/No C59
- How many square meters? _____ C60
 - What varieties? _____ C61
8. Do you grow plants for oil production? Yes/No C62
- How many square meters? _____ C63
 - What varieties? _____ C64
9. Do you use vines, creeping plants (Example: Grapes or Kiwis)? Yes/No C65
- How many? _____ C66
 - What varieties? _____ C67
10. Do you grow groundcover-berries (Example: strawberries or cranberries)? Yes/No C68
- How many? _____ C69
 - What varieties? _____ C70
11. Do you grow shrub-berries (Example: currants or raspberry)? Yes/No C71
- How many? _____ C72
 - What varieties? _____ C73
12. Do you have orchard or “Food forest” components integrated? Yes/No C74
- Did you implement Agro-forestry systems components? Yes/No C75
- Would you classify the whole project as:
- Orchard Yes/No C76
 - “Food forest” Yes/No C77
 - Agro-Forest Yes/No C78
 - Other: _____ C79
- Do you use native trees (Example: Apples, Pears, Walnuts or Hazelnuts)? Yes/No C80
 - How many? _____ C81
 - Do you use exotic trees (Example: Blue Bean Plant, PawPaw, Pecans, Figs)? Yes/No C82
 - How many? _____ C83
- Nutt trees:
- Tree species? _____ C84
- Fruit trees:
- Tree species? _____ C85
- Other trees (Example Sezuan pepper)
- Tree species? _____ C86

Kept Animals:

Do you have:

Bees	Yes/No	D1
Rabbits/Connie's	Yes/No	D2
Chickens	Yes/No	D3
Do you use a Chicken-Tractor?	Yes/No	D4
Ducks	Yes/No	D5
Pigs	Yes/No	D6
Goats	Yes/No	D7
Sheep	Yes/No	D8
Cows	Yes/No	D9
Do you have a special "worm-farm" for compost?	Yes/No	D10
Do you grow insects as animal feed?	Yes/No	D11
Did you add nesting boxes for wild animals?	Yes/No	D12

Water strategy:

Do you use an irrigation system?	Yes/No	E1
Have you looked into how you can optimise water use?	Yes/No	E2
Have you implemented a water strategy?	Yes/No	E3
➔ Do you use it to transport heat (into houses/greenhouses)?	Yes/No	E4
➔ Do you use it to create special microclimates?	Yes/No	E5
➔ Do you use it to reflect light? (Wood understories, buildings)?	Yes/No	E6
➔ Do you use it to increase diversity by multiplying the edge effect?	Yes/No	E7
➔ What kind of water management have you implemented in your project?		
○ Using water as many times as possible till it leaves the system?	Yes/No	E8
○ Slowing down the water flow across your property?	Yes/No	E9
○ Using gravity to move water around as much as you can?	Yes/No	E10
○ Solving the problem of contaminated water at the source?	Yes/No	E11
○ Ensuring the water leaving your property is clean?	Yes/No	E12
○ Using "Keyline analysis" by Yeomans (as did Mollison)	Yes/No	E13
Did you implement measure to adapt to climate factors like stone mulch, dew catchers, sun collectors or wind breaks?	Yes/No	E14
Have you planted trees to increase moisture and water collection in your project?	Yes/No	E15

Have you implemented measures to increase ground water accumulation?	Yes/No	E16
Do you collect and use rainwater?	Yes/No	E17
Do you use and clean grey water locally?	Yes/No	E18
Do you process excrement locally?	Yes/No	E19
Did you create a lake?	Yes/No	E20
Did you create some swamp land or river?	Yes/No	E21
Do you grow aquatic plants?	Yes/No	E22
Did you have to create a drainage in your project?	Yes/No	E23
Do you use infiltration drains?	Yes/No	E24
Have you incorporated any of Mollisions proposed irrigation systems like fleece or drip irrigation?	Yes/No	E25

Energy strategy:

Do you use motor-powered tools and machines?
Examples: ploughs, walk-behind tractors or a tractor and other farming implements, etc

F1

What natural energy sources are used in your project?
Examples: Solar, Water, Wind, geological heat, wood, biogas, etc

F2

Have you implemented carbon compensation strategies?

F3

Did you create sun traps? Yes/No

F4

Do you use a greenhouse or poly tunnel / loop house to extend the growing period? Yes/No

F5

Is it heated? Yes/No

F6

Questions regarding soil:

Have you use the preserving jar method or any other method to analyse your soil?
What method was it? _____

G1

How recently have you repeated it? _____

G2

Do you use the USDA soil classification like Mollision described it in his first book? Yes/No

G3

Do you use another soil classification system? _____

G4

What soil types do you have in your project? _____		G5
Did you have to reconstruct your soil?	Yes/No	G6
Have you measured soil C content in your project?	Yes/No	G7
If yes, what is the soil C content? _____		G8
Have you measured phosphorus and nitrogen?	Yes/No	G9
If yes, what is the content? _____		G10
Do you have problems with soil erosion in your project?	Yes/No	G11
Did you take measure to minimize soil erosion?	Yes/No	G12
Please specify the measures: _____		G13
Have you adapted your sowing, planting and crop rotation plan to increase soil formation?	Yes/No	G14
What measures did you take? _____		G15
Do you add additional compost to increase fertility of your soil?	Yes/No	G16
Have you used biochar or terra preta in your project?	Yes/No	G17
Did you have to take measures against soil compaction?	Yes/No	G18
If you have soil compaction problems do you use plants or machinery to resolve the problem? _____		G19
Did you have to do earthworks to create your project?	Yes/No	G20
Did you create terraces for your project?	Yes/No	G21
Do you use the chicken or pig plough?	Yes/No	G22
Any soil cultivation methods that aren't mentioned above? _____		G23
For how long have you managed your soil with permaculture practices? _____		G24
Has the whole area been managed for the same time or did you expand the area?		
Area constant: <input type="checkbox"/> Area expanded: <input type="checkbox"/>		G25
If you expanded the area, in how many steps: _____		G26
Why did you expand? _____		G27
List the sizes of the areas: _____		G28

Permaculture ethics:

Bill Mollison only uses “earth care”, “people care” and “fair sharing of resources” as ethical baselines. Today there are many extended approaches in permaculture. What approach do you use?

_____		H1
Did the six principles of natural systems by Birch inspire you in your design? (Permaculter -A Designers Manual; Mollison 1998: 34-35)	Yes/No	H2
Did you take Mollisons demand for an energy balance into account?	Yes/No	H3
Have you implemented measure to compensate negative bio-social consequences in your project?	Yes/No	H4
How did you implement Mollisions principle that you have to give back as much as you take out of a system (law of giving back)?		H5

How did you implement Mollisions principle to work with and not against nature?		
Give an example: _____		H6
How did you implement Mollisions principle that the problem is the solution?		
Give an example: _____		H7
Permaculture philosophy uses space and time niches, whereas niches in space are land and niches in time are opportunities and niches in space-time programs or time-tables. Have you implemented space, time or space-time niches in your project?		H8

Mollison uses the 1. law of thermodynamics to demonstrate that in nature only the end goal of entropy counts and that’s why ordered systems need a lot of upkeeping. That’s why you should use cycles and accept a certain amount of disorder in a permaculture setting. How did you implement that in your project?		H9

Mollision states that it’s not the number of elements in a system but the connections that stabilize a system. Did this view impact your project too?		H10

Have you implemented the concept of information as a resource and its sharing in your project?	Yes/No	H11
Have you implemented pattern- and current-analysis like it is used in flow pools or winter and summer air currents or an herb spiral?	Yes/No	H12
Have you been inspired by Mollisons approach to alternative nations?	Yes/No	H13