

David Holmgren's Permaculture Principles

(adapted from *Permaculture: principles and pathways beyond sustainability*)

1. Observe and Interact



The power of good observation is something not many of us have, and detailed observation of where we are will underpin any actions we undertake. A post-peak world will depend on detailed observation and good design rather than energy-intensive solutions.

2. Catch and Store Energy



Energy passes through our natural systems, and is stored in a variety of ways, in water, trees, plants, soils, seeds and so on. We need to become skilled at making best use of these, and move our idea of 'capital' from what we have in the bank, to the resources we have around us. I once heard Holmgren say that a good woodpile, such as you would see in Eastern Europe, is a far more reasonable indicator of national wealth than GDP.

3. Obtain a Yield



This principle states that any intervention we make in a system, any changes we make or elements we introduce ought to be productive, e.g. productive trees in public places, edible roof gardens, or urban edible landscaping.



4. Apply Self-regulation and Accept Feedback

A well-designed system using permaculture principles should be able to self-regulate, and require the minimum of intervention and maintenance, like a woodland ecosystem, which requires no weeding, fertiliser or pest control.



5. Use and Value Renewable Resources and Services

Where nature can perform particular functions, be it aerating soil (worms), fixing nitrogen (clover) or building soil (trees) we should utilise these attributes, rather than thinking we can replace them. Where nature can take some work off our hands we should let it.



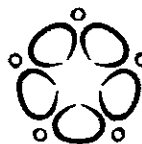
6. Produce No Waste

The concept of waste is essentially a reflection of poor design. Every output from one system could become the input to another system. We need to think cyclically rather than in linear systems.



7. Design from Patterns to Details

We need to be able to keep looking at our work from a range of perspectives. This principle argues that we need to see our work in the wider context of watershed, regional economy and so on, so as to keep a clearer sense of the wider canvas on which we are painting, and the forces that affect what we are doing.



8. Integrate Rather Than Segregate

Permaculture has been described as the science of maximising beneficial relationships. In a powered-down settlement, what will become increasingly important is the relationships that we can weave between different elements of the place (a principle demonstrated in Tool 5, p.101). Solutions are to be found in integrated wholistic solutions rather than increased specialisation and compartmentalisation.



9. Use Small and Slow Solutions

This principle represents the core argument of this book, that, as Holmgren puts it, "systems should be designed to perform functions at the smallest scale that is practical and energy-efficient for that function." Our solutions will be based on the principle that the smaller and more intensive they can be, the more resilient they will be.



10. Use and Value Diversity

Monocultures are incredibly fragile and prone to disease and pests, more diverse systems have much more inbuilt resilience. Our towns will be much more able to prosper during energy descent if they have a diversity of small businesses, local currencies, food sources, energy sources and so on than if they are just dependent on centralised systems, globalisation's version of monoculture.



11. Use Edges and Value the Marginal

One of the observations used a lot in permaculture is the idea of 'edge', that the point where two ecosystems meet is often more productive than either of those systems on their own. This principle reminds us of the need to overlap systems where possible so as to maximise their potential.



12. Creatively Use and Respond to Change

Natural systems are constantly in flux, evolving and growing. The way they respond to shock, such as forest fires, can teach us a great deal about how we might manage the transition away from fossil fuels. Remaining observant of the changes around you, and not fixing onto the idea that anything around you is fixed or permanent will help too.