

PERMACULTURE SOLUTIONS IN URBAN ENVIRONMENTS

Presented by David Sachs
March 2, 2019



Grapewood Farm, PCO, OFA



Ft Barnard, AFAC, FOUA




Thank you Abbot Aiden Shea

(August 7, 1930 – December 2, 2018)

A poem by Wendell Berry







*“Permaculture is ecological design
theory applied to an everyday
context”*

~ David Holmgren



3 main ethics of Permaculture



Care of the Earth
Preserve ecosystems



Fair Share
*Set limits to
consumption and
reproduction,
redistribute surplus*



Care of People
*Look after self,
kin and community*

Permaculture Ethics



Care of the Earth



Care of People



Fair Share

& Design Principles



1. Observe & interact



2. Catch & store energy



3. Obtain a yield



4. Apply self-regulation & accept feedback



5. Use & value renewable resources & services



6. Produce no waste



7. Design from patterns to details



8. Integrate rather than segregate



9. Use small & slow solutions



10. Use & value diversity



11. Use edges & value the marginal



12. Creatively use & respond to change



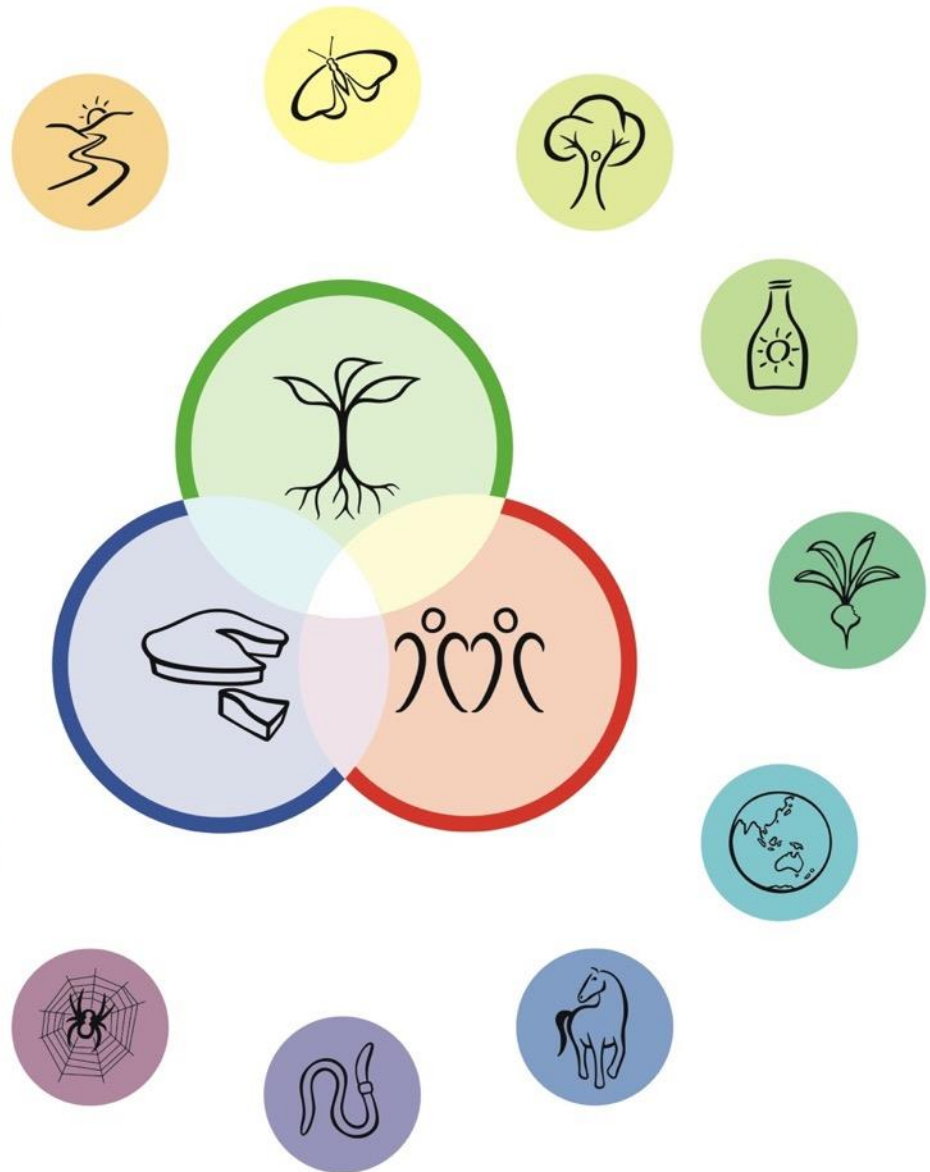
permacultureprinciples.com



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Permaculture Flower

The permaculture journey begins with the Ethics and Design Principles and moves through the key domains required to create a sustainable culture. The spiral evolutionary path joins together these domains, initially at a personal and local level, and then proceeding to the collective and global level.

Some of the specific fields, design systems and solutions that have been associated with the wider view of permaculture are listed below.

Land & Nature Stewardship

Bio-intensive gardening	Holistic Rangeland Management
Forest gardening	Natural Sequence Farming
Seed saving	Agroforestry
Organic agriculture	Nature-based forestry
Biodynamics	Integrated aquaculture
Natural Farming	Wild harvesting & hunting
Keyline water harvesting	Gleaning

Building

Passive solar design	Earth sheltered construction
Natural construction materials	Natural disaster resistant construction
Water harvesting & Waste Reuse	Owner building
Biotechture	Pattern Language

Tools & Technology

Reuse & creative recycling	Bio-char from forest wastes
Hand Tools	Co-generation
Bicycles and electric bikes	Micro-hydro & small scale wind
Efficient & low pollution wood stoves	Grid-tied renewable power generation
Fuels from organic wastes	Energy storage
Wood Gasification	Transition engineering

Education & Culture

Home Schooling	Social ecology
Waldorf education	Action Research
Participatory arts and music	Transition culture

Health & Spiritual Well-Being

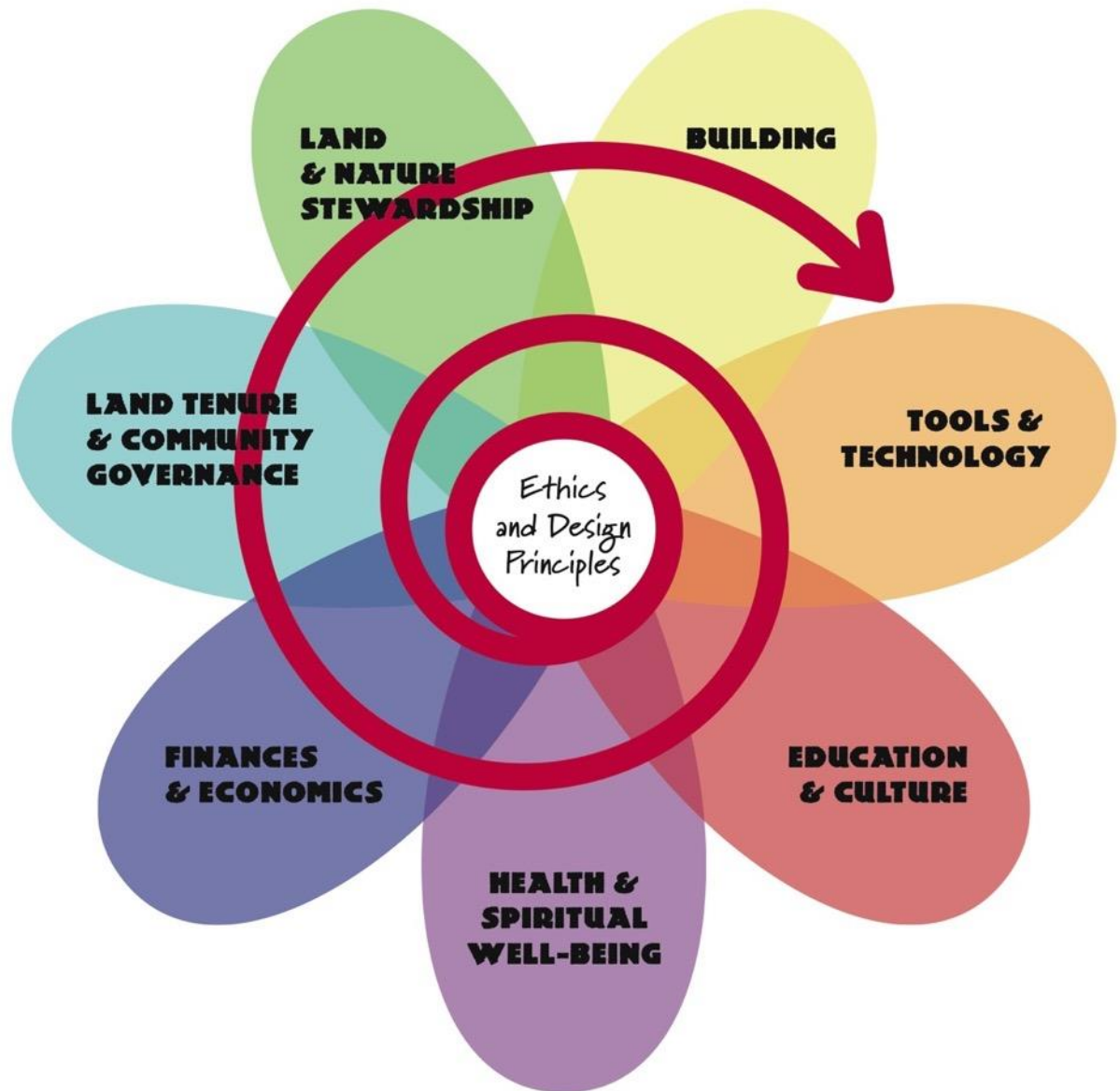
Home birth & Breast feeding	Spirit of place, indigenous
Complementary & Wholistic Medicine	cultural revival
Yoga, Tai Chi & other	Dying with dignity
body/mind/spirit disciplines	

Finances & Economics

Local and regional currencies	WWOOFing & similar networks
Carpooling, Ride sharing & Car share	Tradable Energy Quotas
Ethical Investment & Fair Trade	Life Cycle Analysis & Emergy
Farmers markets & Community	Accounting
Supported Agriculture (CSA)	

Land Tenure & Community Governance

Cooperatives & Body Corporates	Open Space Technology &
Cohousing & Ecovillages	Consensus Decision Making
Native Title and traditional use rights	



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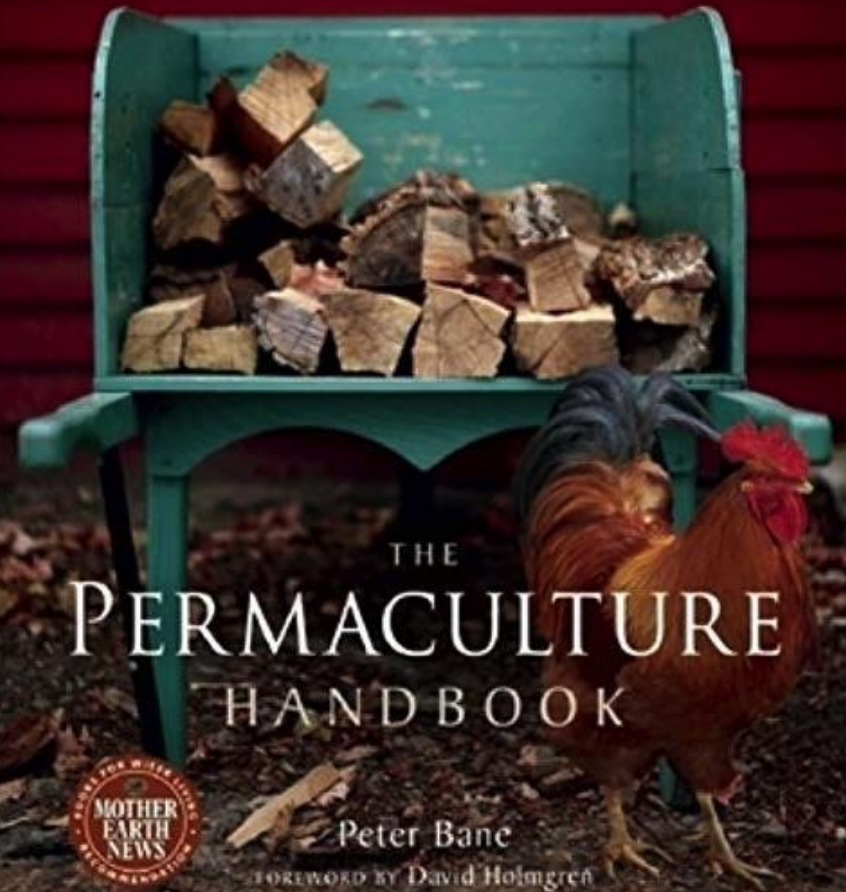
RETROSUBURBIA

THE DOWNSHIFTER'S GUIDE TO A RESILIENT FUTURE

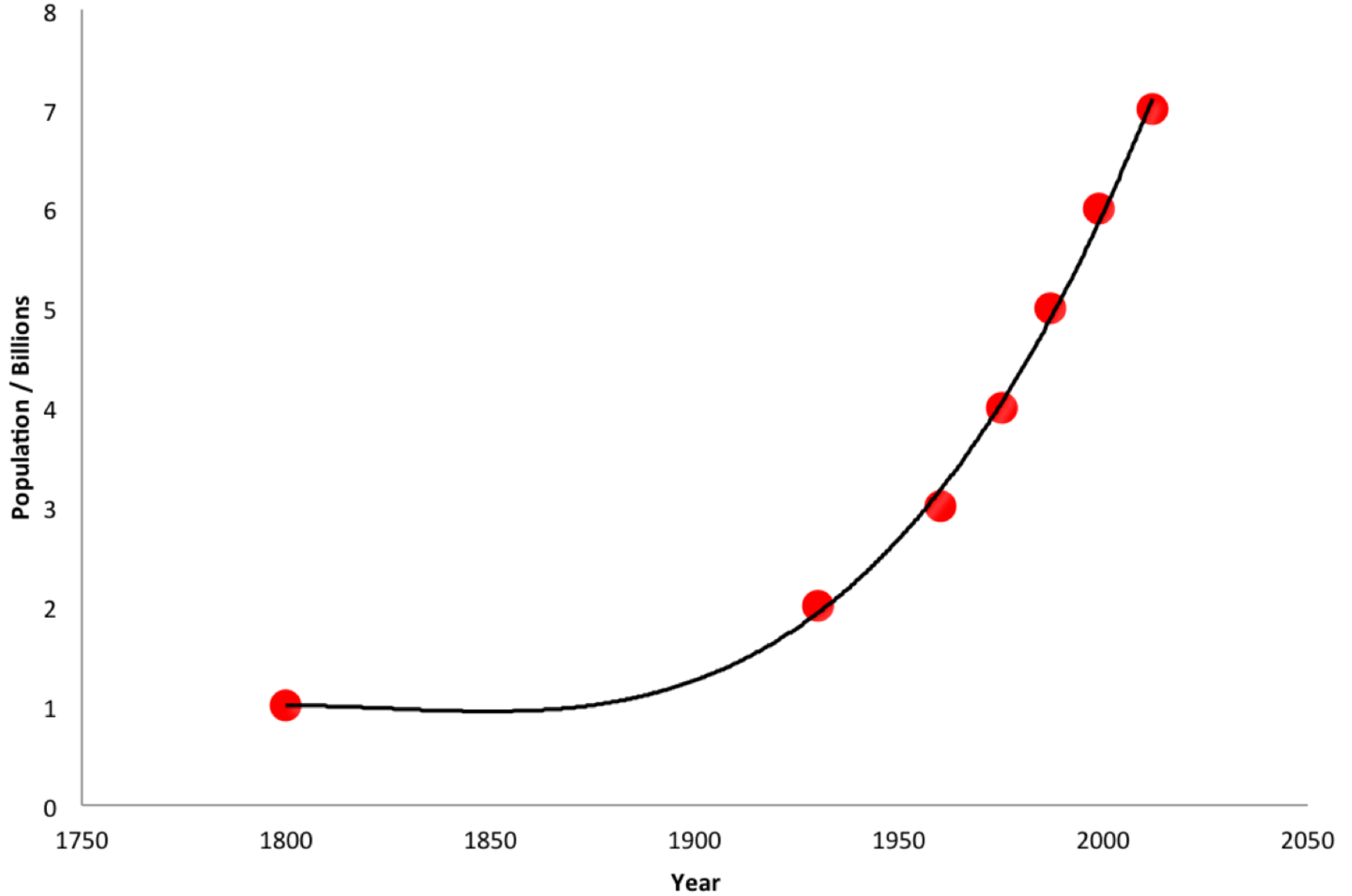


DAVID HOLMGREN PERMACULTURE CO-ORIGINATOR

GARDEN FARMING for Town and Country



Human Population Growth



How are we going to feed all these people?



Rural Industrial Agriculture





SUSTAINABILITY

Only 60 Years of Farming Left If Soil Degradation Continues

Generating three centimeters of top soil takes 1,000 years, and if current rates of degradation continue all of the world's top soil could be gone within 60 years, a senior UN official said

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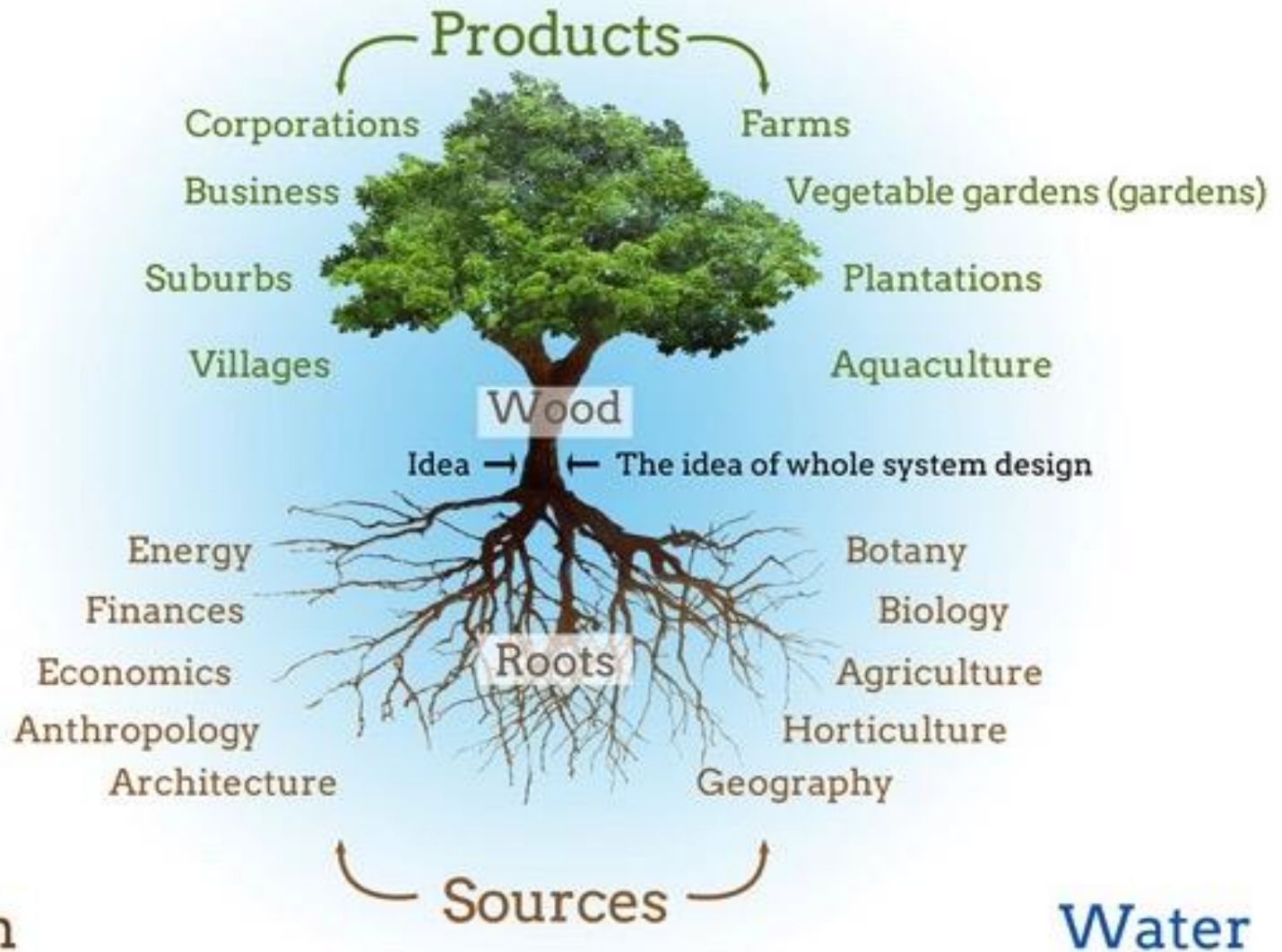
Care of People
*Look after self,
kin and community*

Why Permaculture?

- A deep vision of long-term cultural transformation
- A design system for the creation of regenerative human habitat, not just sustainable (Chuck Marsh)
- Permaculture derives its insights from the patterns of natural ecosystems, and from the patterns of truly sustainable human cultures.
- It integrates water systems, annual gardens, perennial and forest crops, animals, buildings, energy systems and cultural functions with purpose and shared value.

Light

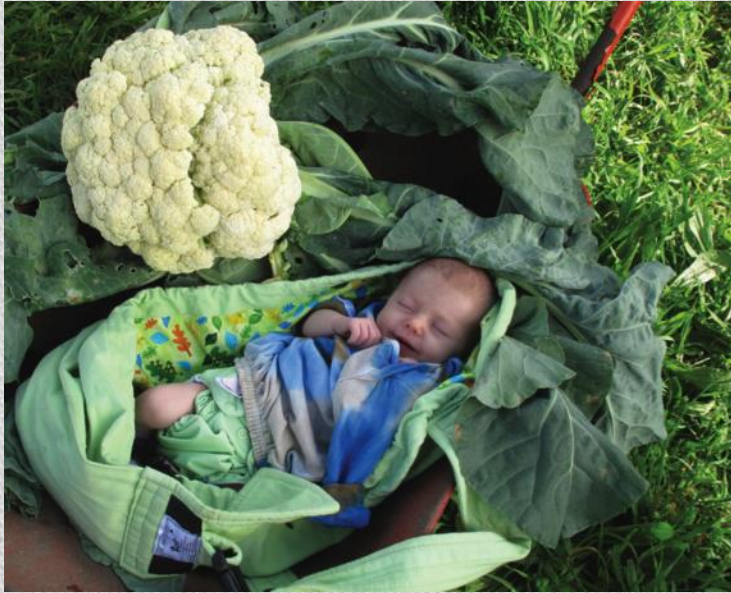
Air



Techno Urban Solutions



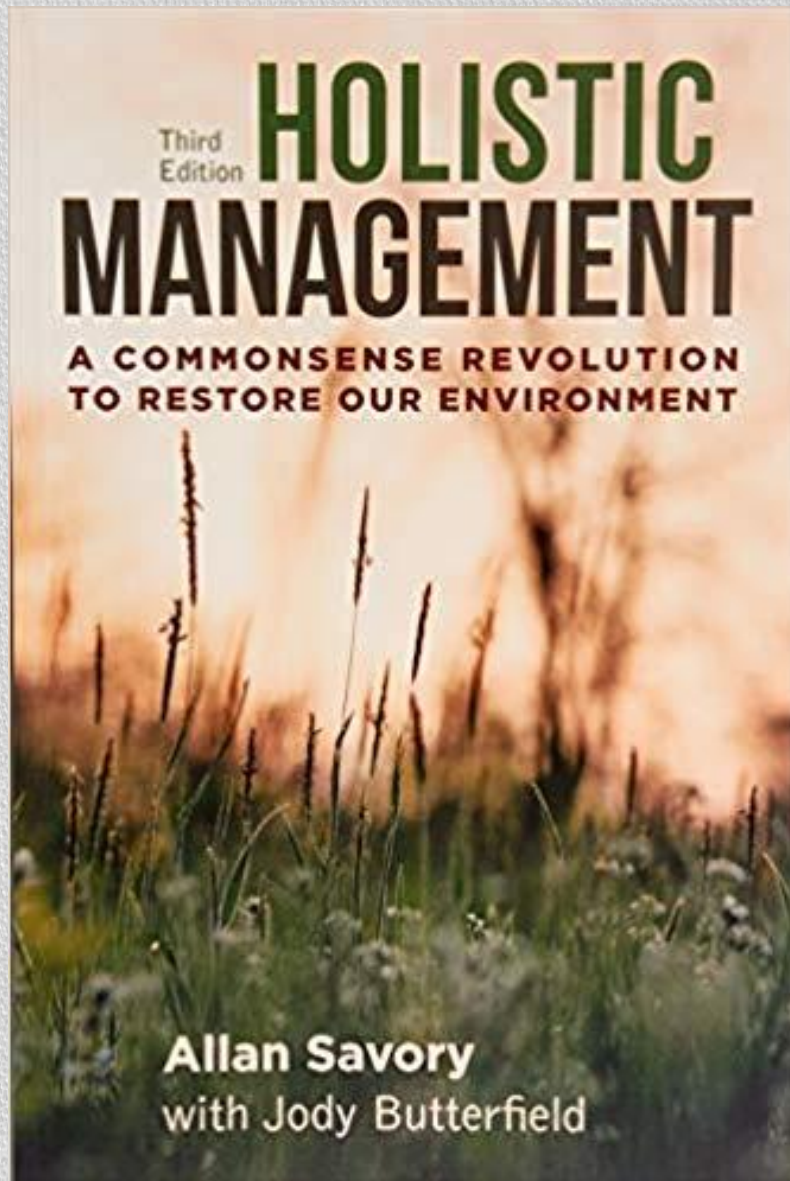
Suburban Retrofit Transition



Principles Derived from Natural Patterns

1. Articulate goals and constantly use and refine them, choosing high leverage strategies (Holistic management)
2. Integrate rather than segregate – work together
3. Creatively use and respond to change – accept feedback
4. Everything must have multiple functions
5. Value cultural and natural diversity for resilience
6. Grow like a seed! Plan through time starting with small and slow solutions in your own life. Then branch out into your community, County, region, etc.

* Permaculture teaches us new ways to think about EVERY goal and challenges us to improve. NOT just a toolbox of techniques or methods to implement.

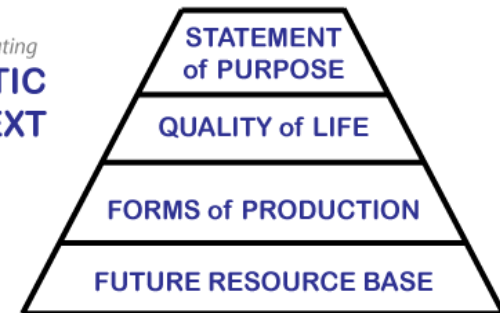


holistic management decision making

starts with defining
WHOLE UNDER MANAGEMENT =



then articulating
HOLISTIC CONTEXT =



then
MAKE DECISIONS TOWARDS HOLISTIC CONTEXT
 (USING TESTING QUESTIONS IF NECESSARY)

then
GET BACK IN THE GAME =

Act on your decisions then seek and use feedback to stay on track, making new decisions towards holistic context as required.

Put together by Dan Palmer from www.VeryEdibleGardens.com
 based on content from Allan Savory's book (written with Jody Butterfield's help):
Holistic Management: A New Framework for Decision Making
 (2nd Edition, Island Press, 1999)

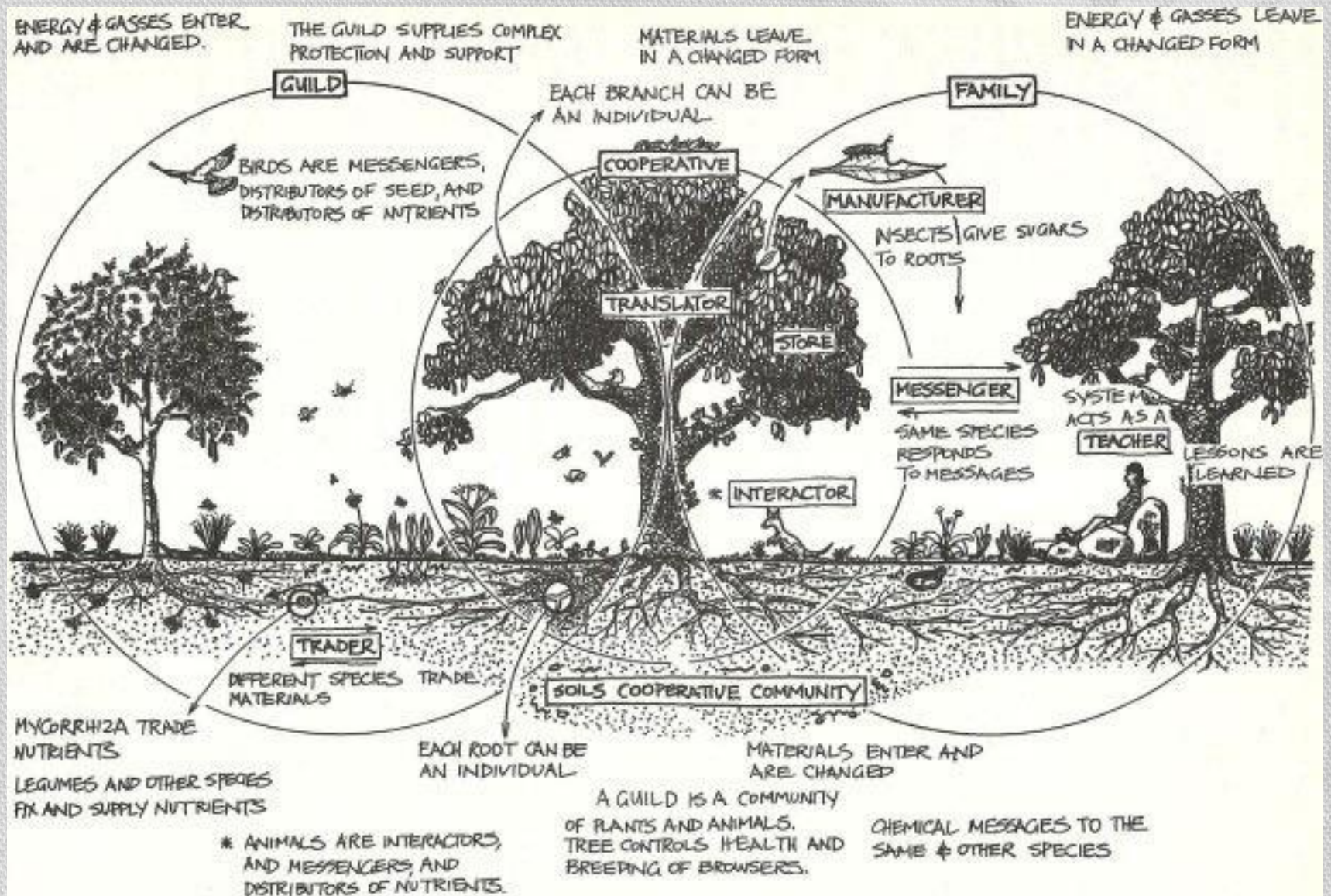


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So where do we fit into all this?



Efficiency of space and non traditional shape



A keyhole bed planted with cabbages, tomatoes, and pathside greens and herbs in a space 8 to 10 feet in diameter.











Cultural and Collaborative Strategies

1. Active listening and true attitude of collaboration
2. Informal neighborhood scale collaboration and rotating work parties to share responsibility
3. Rapid assessment design groups and work-classes
4. Co-ops for: Micro-grids, poultry, cascading rainwater, orcharding, child care and elder care, materials purchasing, expensive tools
5. Land access: Rethinking cohabitation, seasonal work and truly affordable housing
6. Mutual Aid Societies: The ultimate cooperative.
7. Education of Next Generation: Successive transition



The shorter the chain between raw
food and fork, the fresher it is and
the more transparent the system is.

Joel Salatin

quotezancy

QUESTION OR COMMENTS?



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