WWOOF™ Australia

Organic Farming

"Organic Agriculture is a production system that sustains the health of soils, ecosystems, and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation, and science to benefit the shared environment and promote fair relationships and good quality of life for all involved."

IFOAM General Assembly 2008
Source: ifoam.bio/why-organic/organic-landmarks/definition-organic

Organic Agriculture Principles

"The Principles of Health, Ecology, Fairness, and care are the roots from which organic agriculture grows and develops. They express the contribution that organic agriculture can make to the world, and a vision to improve all agriculture in a global context.

Composed as inter-connected ethical principles to inspire the organic movement – in its full diversity, they guide our development of positions, programs, and standards.

See: youtu.be/xzXBLmsXt8w

Source: ifoam.bio/why-organic/shaping-agriculture/four-principles-organic

Organic Federation of Australia's Organic Information Hub

The Organic Federation of Australia is pleased to provide an area that is dedicated to Information, Research and Data to support the growth, depth and expansion of the Organic Sector.

Organic Hub - a search engine dedicated to Organic Research

Journal of Organic Systems - researchers can publish their findings on 'Organic Systems' in the Australasian and Pacific Regions (and beyond).

Organic Trust Australia - The Organic Trust was set up to enable Australia to invest in scientific research and education in areas relevant to organic and bio-dynamic agriculture.

Soil & Health - provides free downloadable e-books about radical agriculture, natural hygiene/nature cure and self-sufficient homestead living.

OK-Net Arable - exchange knowledge, enhance organic farming

Source: ofa.org.au/organic_information_hub

All WWOOF Hosts are practicing **Organics** and can be found on the list search and map search.

PERMACULTURE

"Permaculture is a design system for the creation of socially, economically and ecologically sustainable settlements, whether in rural areas or metropolitan cities." Bill Mollison

Bill Mollison and David Holmgren created the Permaculture design system in the late 1970s in Hobart, Tasmania.

The ethics earth care, people care, and fair share form the foundation for permaculture design and are also found in most traditional societies.

PERMACULTURE PRINCIPLES

The following is a condensed version of the permaculture principles from permaculturepriciples.com

Principle 1—**observe and interact**: By taking time to engage with nature we can design solutions that suit our particular situation.
Principle 2—**catch and store energy**: By developing systems that collect resources at peak abundance, we can use them in times of need.
Principle 3—**obtain a yield**: Ensure that you are getting useful rewards as part of the work you're doing.
Principle 4—**apply self-regulation and accept feedback**: We need to discourage inappropriate activity to ensure that systems can continue to function well.
Principle 5—**use and value renewable resources and services**: Make the best use of nature's abundance to reduce our consumptive behaviour and dependence on non-renewable resources.
Principle 6—**produce no waste**: Value & make use of all resources available so, nothing goes to waste.
Principle 7—**design from patterns to details**: By stepping back, we can observe patterns in nature and society. These can form the backbone of our designs, with the details filled in as we go.
Principle 8—**integrate rather than segregate**: By putting the right things in the right place, relationships develop between those things and they work together to support each other.
Principle 9—**use small and slow solutions**: Small and slow systems are easier to maintain than big ones, making better use of local resources and producing more sustainable outcomes.
Principle 10—**use and value diversity**: Diversity reduces vulnerability to a variety of threats and takes advantage of the unique nature of the environment in which it resides.
Principle 11—**use edges and value the marginal**: The interface between things is where the most interesting events take place, often the most valuable, diverse & productive elements in the system.
Principle 12—**creatively use and respond to change**: We can have a positive impact on inevitable change by carefully observing, and then intervening at the right time.

Source: permaculturaustralia.org.au

Also youtu.be/ss1BjW2kSNs for a Permaculture Tour of Melliodora, the home of David Holmgren and Su Dennett in Victoria, Australia. David is the co-originator of the permaculture concept, and this tour offers an insight into how he and Su have designed their home and gardens according to permaculture design principles.

WWOOF Hosts practicing **Permaculture** can be found on the list search and map search.

WWOOF Australia is a proud Organisation member of Permaculture Australia, the national permaculture member-based organisation." www.permaculturaustralia.org.au

Permaculture Australia
earthcare / peoplecare / fairshare

Bio-Dynamics

The Australian Demeter Bio-Dynamic method was developed in Australia by Alex Podolinsky. It is based on Bio-Dynamic preparations of the highest quality, which have been refined in Australia under Alex's guidance, working from the insights of Rudolf Steiner and the scientific experimentation of Ehrenfried Pfeiffer.

The practical application of the Australian Demeter Bio-Dynamic method is to:

- develop and maintain soil structure
- develop the humus on which that soil depends for its fertility and resilience
- support the growth of healthy plants under the influence of the sun
- produce of the highest quality in both flavour and nutrient density

The success of the method depends on plants feeding themselves according to nature, through nutrients which are held within the humus content of the soil, not through water soluble nutrient in the soil water. Ideally, each farm operates as a closed unit, using the preparations in combination with the soil, climate and seasonal variation with which the farmer works.

Source: demeterbiodynamic.com.au

See also the Demeter Video library: demeterbiodynamic.com.au/video-library

WWOOF Hosts practicing **Biodynamics** can be found on the list search and map search.

Regenerative Agriculture

Regenerative Agriculture is defined as an ecological approach to agriculture that enables natural systems & functions to not just be renewed, but also to do the renewing: to self-organise back to healthy function, a radical idea of empowering and not controlling nature.

In this talk, "How regenerative farming can help save the planet and human health": youtube.com/watch?v=Et8YKBivhaE&t=0s, Charlie Massy OA draws on his decades of farming experience and research to propose new ways of farming that don't harm the land and the planet in the way industrial agricultural practices can.

Charles gained a BSc in Zoology at ANU (1976), before going farming and developing a prominent Merino sheep stud business (Severn Park). He still manages the family's grazing property in NSW while teaching at universities and consulting in the fields of Merino breeding and landscape design.

He has chaired and served as a Director on several national and international review panels and boards of business, research organisations and statutory wool bodies, involving garment manufacture, wool marketing, R&D, molecular genetics and genomics. Charlie's concern about land degradation and the Anthropocene crisis led to him completing a PhD in Human Ecology (ANU) in 2012. This resulted in his new book, Call of the Reed Warbler: A New Agriculture - A New Earth (UQP Sept. 2017) concerning the emergence of a regenerative agriculture in Australia and cause for hope

Regenerative agriculture is one of the most promising wide-scale environmental solutions. A short documentary 'From the Ground Up' youtu.be/6vQW8TI_KLc is a comprehensive journey through a variety of landscapes and regenerative farming techniques.

'From the Ground Up' is a story of genuine change and inspiration - tracing the steps of individuals who transformed their practices following the life-changing realisation - that farmers have a unique opportunity to heal the planet.

Additional resources on regenerative agriculture: TED Talks - Allan Savory on "How to fight desertification and reverse climate change":

ted.com/talks/allan_savory_how_to_fight_desertification_and_reverse_climate_change

Books: "The Biggest Estate on Earth - How Aborigines Made Australia" by Bill Gammage

"Back from the Brink - How Australia's Landscape Can Be Saved" by Peter Andrews

WWOOF Hosts practicing **Regenerative Agriculture** can be found on the list search

Natural Sequence Farming

Is "natural sequence farming" the secret to restoring our water-starved continent? For more than a decade, two farmers have shown that parched landscapes can be revived. And finally, Canberra's listening. Australian Story explores the potential solution to Australia's drought crisis. youtu.be/-4OBcRHX1Bc

A New Beginning for the Australian Landscape - Natural Sequence Farming with Peter Andrews OAM

"If the Australian landscape was better understood, we could save the world from environmental disaster" ~ Peter Andrews OAM. Natural Sequence Farming (NSF) is a system of regenerative farming based on the science of the old Australian landscape and principles developed by Peter Andrews OAM.

Find out more at peterandrewsoam.com NSF takes a holistic view of water, air, soil, plant and animal interactions in the landscape. It uses natural functions where possible, or careful mimicry of them and their natural sequences, to address soil and water degradation and biodiversity loss. Interventions to restore or enhance natural function are made either through implementation of structures or by changes to farm layout and animal management. The implementation of Natural Sequence Farming at the Mulloon Creek at Mulloon Creek Natural Farms is using Peter's techniques to recreate the chain of ponds that would have existed in its undisturbed state, and through this raising the streambed and the level of water in the floodplain.

WWOOF Hosts practicing **Natural Sequence Farming** can be found on the list search

Syntropic Farming

Over the past 30 years a Swiss-Brazilian man, Ernst Gotsch, developed a method of farming, Syntropic farming, which regenerates degraded ecosystems while producing abundant agricultural crops.

This method mimics the growth of bio-diverse rainforests. Replicating how rainforests function removes the need for chemicals, saves enormous amounts of water on a mixture of long- and short-term crops and effectively creates abundance while capturing carbon and substantially reducing inputs & waste runoff.

For more information, see: agendagotsch.com/en/what-is-syntropic-farming

See also: youtu.be/9pvfo5UXupg

"Regenerative Agroforestry method called Syntropic Farming uses principles from natural systems to combine agriculture and agroforestry.

There are many benefits both economic and ecological where forestry plots are also planted with small crops and follow a natural succession of planting. This method allows the landholder to receive an income from 3 months after planting and fully grown forestry trees in the longer term.

This video was filmed at Syntropic Farming workshop Petals In The Park, Tolga on the Atherton Tablelands, which had been destroyed by two previous cyclones and rebuilt using Syntropic Farming as a model to make their farm more resilient."

WWOOF Hosts practicing **Syntropic Farming** can be found on the list search

AQUAPONICS

Aquaponics is a combination of aquaculture, which is growing fish and other aquatic animals, and hydroponics which is growing plants without soil. Aquaponics uses these two in a symbiotic combination in which plants are fed the aquatic animals' discharge or waste. In return, the vegetables clean the water that goes back to the fish. Along with the fish and their waste, microbes play an important role to the nutrition of the plants. These beneficial bacteria gather in the spaces between the roots of the plant and converts the fish waste and the solids into substances the plants can use to grow. The result is a perfect collaboration between aquaculture and gardening.

Benefits of aquaponics:

1) Aquaponics is a way to grow your own fish and vegetables at the same time. You feed the fish and the fish will feed your plants through their waste output.

2) There is no need to use fertilizers because the fish provide rich nutrients for the plants.

3) In aquaponics, less water is used for the crops. Research has shown that aquaponic gardens use 1/10th of the water you would use for soil garden.

4) Regular gardening pesticides or other chemicals can't be used because they would harm the fish.

5) This results in healthier and organic vegetables.

6) You won't experience any soil borne diseases in aquaponics because there is no soil.

7) You can grow plants in very small space, and have a great harvest.

8) Plants grow fast because they get very nutritious substances from the fish waste.

9) Plants and fish production can be done in a controlled temperature environment.

10) Water is used in a closed system and circulated effectively, reducing the consumption and the water bills.

Source: permaculturenews.org

See also the WWOOF Blog about Hosts John and Natalie in Western Australia and their Aquaponic farm.

WWOOF Hosts practicing **Aquaponics** can be found on the list search