thinking tools for an era of change

This calendar aims to bring to life the 12 design principles developed by permaculture co-originator *David Halmgren*. Highlighting each principle over a month gives time to learn them and absorb how they can be applied using examples sourced from practitioners around the world,

In all good permaculture examples you will find they demonstrate several, sometime all, of the design principles. Each principle is part of the whole, and cannot be applied without the consideration of others.

Underpinning this are the ethics of permaculture, earth care, people care and fair share, which informs all practice.

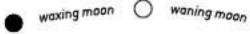
You'll find more examples at permaculture principles, com along with a song by Charlie Mgee for each, Delve in deep with Permaculture; Principles and Pathways Beyond Sustainability, or check out some of the other titles on offer.

You can use the page below as a year planner or as a rain / temperature chart,



The calendar includes a basic guide to gardening by moon phases to help improve plant vigour and yield.

The waxing moon increases in light as it changes from new moon, through the first quarter, towards a full moon, and sap flow is drawn up. The waning moon reduces light from the full moon, through the last quarter, back to a new moon, and sap flow is drawn down.



Each of the four phases lasts seven to eight days, At transition from one phase to the next, sowing, planting and pruning are best avoided for 12 hours before and after the change. Instead, use this time to improve your soil. The exact time is indicated in UTC* and can be adjusted to your local time using the guide at the base of this page.

If you miss the planting windows suggested, you can either wait a few weeks or plant it anyway and see how it grows.



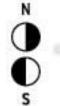
















New Moon phase

Sow or transplant leafy annuals; where we value or eat the leaves or stern. Eg: lettuce, spinach, celery.

First Quarter phase

Sow or transplant fruiting annuals; where we value or eat the fruit or seed bearing part of the plant, Eg; tomato, broccoli, beans,

Full Moon phase

Sow or plant out root crops; decorative and fruiting perennials, take cuttings and divide plants. Eg. apple, potatoes, asparagus.

Last Quarter phase

Time to improve your soil; weeding, mulching, making compost and manure teas, digging or ploughing.

Quarter moon icons above are for the northern hemisphere (N) and below for the southern hemisphere (S)

*Times given for moon phases are in Coordinated Universal Time (UTC) using 24-hour format, not adjusted for daylight savings: eg, if full moon was on January 5th 04:54 UTC = Melbourne +10 = 14:54 or 2:54pm.

Auckland +12, Melbourne + 10, Adelaide +9½, Tokyo +9, Perth / Singapore +8, Moscow +4, Rome / Cape Town +2, Parls +1, London 0, São Paulo -3, Québec / New York -5, Chicago -6, Vancouver / Los Angeles -8, Hawaii -10

