

Permie Patch presenting Perennial Polycultures

“All of the world’s problems can be solved in a garden” Geoff Lawton.

So let’s think about ‘Foodscaping’. Limited resources and space put a finer point on the permaculture design pencil, focus should be on multiuse perennial (plant that live for more than 1 year) food sources, herbs, and fruit and nuts trees. If you cannot think of 5 uses of each element and plant variety there is just not room in an urban backyard for that level of inefficiency. Annuals (plants that live for one growth season and die) should be hardy, well chosen species capable of self seeding and self perpetuating; there should be plant and animals systems, and a focus on integration and species diversity for overall food system stability and resilience. We are trying to reproduce an ethno-botanical garden that is as; seasonal, resilient, raw and ecological as the original forests prehistoric man roamed and gathered food from.

Polycultures

The emphasis on polycultures can’t be made enough; conventional mono-cropping broad acre agriculture is the single greatest threat to our world’s ecosystems. They poison, deplete, and denude the soil and don’t provide even as much yield as a low yielding ecological polyculture. We don’t hear about Polycultures, they can’t be farmed by machines and wrapped in plastic for the supermarket, so there is no money in it for large companies. So let’s get the jump on these failing food systems and not contribute to them by buying their artificial food, and instead use all available space for creating edible, beautiful, ecological garden polycultures.

“Permaculture annuals” are hardier plants, generally self seeding and multipurpose. They replace less useful annuals like spinach, iceberg lettuce, and purely decorative flowers. Parsley, basil, borage, sunflowers, Lambs Quarters, Coriander, Dill, loose leaved lettuces, mustard, calendula, Shinjuku and many other annuals self seed enough to allow me to forage and transplant them as required. As most plants that are not killed in cropping they will form flowers and go to seed. Not only is this self perpetual but feeding beneficial insects, creating beauty and extending seasons and therefore diversity when left to go to seed. There are many great books on basic backyard permaculture gardens so I suggest you grab a copy of Linda Woodrow’s or Jackie French’s books to give you more ideas.

Perennial food systems

Perennial food plants offer much more than annuals to a permaculture system, they generally offer multiple uses (sweet potato, soil aerator, living mulch, vertical trellis shade, all year round edible shoots, and edible staple tuber crop), they don’t need to be replanted from seed each year and are generally hardier (low maintenance), and as they include larger herbs and trees they provide shade, habitat, and ecosystem backbone of your garden.

Eric Toensmeier has written the best guide to perennial vegetables and it is highly recommended reading, so rather than trying to list hundreds of types please see his text, Perennial Vegetables, and we will just illustrate with a few Perth suitable species.

For hot dry areas sweet potato presents the best option in Perth, it survives the 40oC summer days when many plant perish and it mulches and protects the soil, as a bonus the stress on the plant prompts better tuber set. For optimum tuber production new plants should be planted from vine tips each year, but you can certainly leave many plants to grow and expand which allow occasional racooning of tubers.

Other options for this hot zone include, Malabar Spinach, Jerusalem Artichokes, Moringa Tree, winged bean, and citrus. Areas that are more sheltered with some moisture but not garden beds can grow arrowroot (grown more for biomass than root), papaya, bananas, dandelions, daylilies, thyme, sage, Warrigalia Greens, perennial leeks, capsicums, garlic and Society Chives, Kale, and many other perennials. In high nutrient sheltered garden beds, instead of the normal salad greens like lettuce planted every 3-4 weeks we should be planting salad burrett, sorrel, lovage, musk mallow, perennial onions, ground nuts, and other more diverse, nutritious and extended harvest plucking greens.

Herbs are essential for human health, soil health and insect health they are the Doctors of the system. Diversity is essential and most herbs are hardy, multipurpose, perennial and beautiful so there is no excuse.

Trees provide structure, habitat, biomass, and many other permaculture system building blocks, but space is limited on urban blocks so we have to make careful selections and maximise their benefits. Fruits trees are most commonly used, but nuts and natives or timber crops can be used when appropriate. Hardy fruits like quince, wampi, persimmon, are often forgotten for the more appealing peaches, nectarines and apples which are often climatically unsuitable and pest prone. Fruit and nut trees need to be selected for their overall addition to the system, fruit to eat is just one of the outputs of the tree, the Moringa is a drought tolerant, highly nutritious foliage, edible pods, medicinal qualities tree and can be grown as a 10m tree or a 1m hedge. The nectarine produces nectarines prone to fruit fly requiring netting and is prone to leaf curl and other viruses.

So which is the better use of space, we all need to be inspired and grow what we enjoy but given the limited space, time and water resources available in most urban systems some tough decisions need to be made, so you create a resilient rather than a dependant ecosystem. Many resources of useful trees are available, some even for our bioregion. Jeff Nugents, Permaculture plants is a great resource and further development into forest gardening is encyclopaedically covered in Food Forests by Jackie and Toensmeir.

For more on perennial food gardening in Perth please head to PermacultureWest site or keep an eye out for the Perth Permaculture Plants workshop by Terra Perma Design.