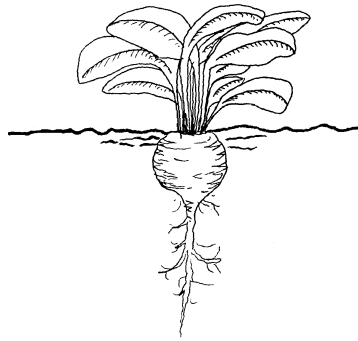


# SOIL FOR LIFE

*Build the soil, harvest the plants, feed the people, heal the planet*



**To all who must eat to live, there is hope.  
Grow your own food.**

**It's the simplest (and cheapest) way to good health**

*Sponsored by the Soil for Life organisation*

*Soil for Life is a Cape Town-based NGO which teaches people to grow their own food. For more information about Soil for Life membership, and organic methods for growing vegetables, herbs and fruit, please phone Pat on (021) 794 4982 or 082-781 4250.*

**Nature turns all waste into food.**

**Well, not quite.**

Left to its own devices, Mother Nature has the most remarkable ability to deal with the variety of metabolic wastes produced by living organisms. In short, nothing goes to waste. All is interminably recycled and re-used, ultimately providing the nutrients for growth and development of the myriad different creatures and plants, both visible and unseen. The cogs of the nutrient wheel go on turning into perpetuity. The planetary household is kept clean and unadulterated. There is no such thing as waste.

Sadly, once humankind is brought into the equation this is no longer the case. With blatant disregard us earthly beings discard, destroy, contaminate and over-consume; we have put a finger in the wheel of life and it is slowly, unremittingly grinding to a standstill. The signs are there. We read about them more and more everyday. We're aware of the changes in weather patterns, agricultural yields, the oil price, people's behaviour and much more, yet we are doing virtually nothing about changing our mind sets. It's depressing stuff; enough to immerse one in a state of total depression and despair.

However, 'they' always say that it's never too late. Let's hope that's true. Greg Braden in his book *The Isaiah Effect* 'invites us on a journey where science and miracles are merged into a new wisdom...and he suggests that Isaiah, the Old Testament prophet, left precise instructions to the people of the future describing an unconventional mode of prayer.' 'Using principles recognised recently in quantum physics' he shows how prayer can 'transcend time and distance to bring healing to our bodies and peace to the

nations of the modern world.’ John the Apostle was reputed to have had the revelation that humankind faces two possible futures; either an apocalyptic end with ‘death and destruction, the magnitude of which has never been seen before’ or that ‘a time of peace and co-operation [will] envelop[s] the nations of the world.’ Braden considers that ‘both outcomes are real, and either could be chosen by the people of the earth.’ He goes on to state that the ‘collective outcome would be determined through individual choices.’

If that is the case it is time for us to put on new spectacles and view the world with new eyes. It is time to look at what we are destroying and to make radical changes to our lifestyles and expectations. We can collectively choose the path of least destruction.

In a recent edition of a community newspaper, some startling facts about waste were published. The people of Cape Town alone generate approximately 6 000 tons of waste on a daily basis. This is sufficient to cover four soccer fields to a depth of one metre – every day. If this is extrapolated – the annual waste produced by the Mother City alone would fill waste collection vehicles placed bumper to bumper between Cape Town and Johannesburg (the ‘big smoke’!). Cape Town’s current capacity at landfill sites, the article continues, is sufficient only for the next eight years or so. And then, what? Well, for a start, roughly fifty per cent of all urban waste is compostable. It is food for the soil, for the plants that grow on it, and ultimately for you and me. Nature turns its own waste into food. So why are we throwing it away when our soils are deficient in those very nutrients that are necessary for human health? Organic materials increase the water-holding capacity of the soil and therefore reduce the amount of water (and work) that is necessary to keep a food garden thriving.

And that’s not all. Have another look at what your household throws away; the waste that nature cannot convert into food. Much of it can be avoided, or reduced, in the first place by more selective shopping, and most of the balance can be either re-used or recycled. If you haven’t stopped to think – the next few articles in these columns will give you a new perspective, and a few ideas to mull over. Putting your own, and other people’s, waste to good use is an exercise in creativity and resourcefulness, takes your mind off more mundane problems and is a great stress-releaser. The food garden, which is where we should be concentrating our efforts at growing fresh, safe veggies and herbs for good health and vitality, becomes a *rubbish-disposing, inflation-curbing, soil-building and water conserving* exercise in creating better planetary health.

In a previous article we looked at the use of all biodegradable materials in feeding the soil. Let’s now consider some of the other materials produced in and around our homes and businesses that could be used in the vegetable garden and that will not break down in Nature.

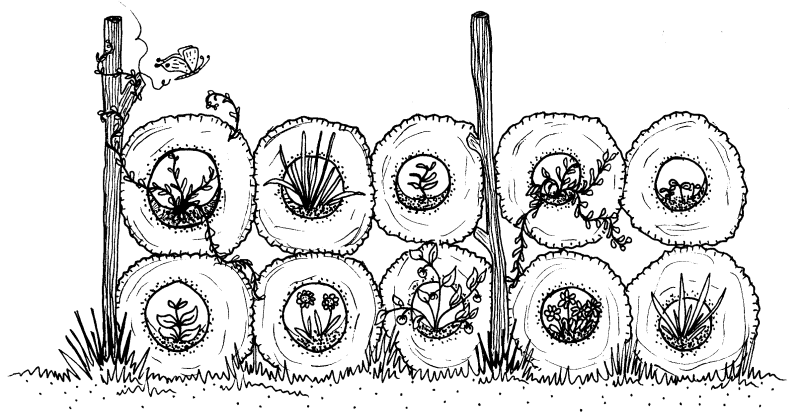
It is estimated that there are over 100 000 tons of motor vehicle tyres dumped in South Africa every year. Many are used by industry to make other products, but we’re all too familiar with the black palls of toxic smoke that periodically fill the skies as yet another tyre fire is lit – either for warmth, or, more likely, to obtain the metal which is sold to scrap merchants. What else can you do with tyres? What problems are associated with their use in the garden? Here are a few suggestions for this no-cost resource, the judicious use of which eases the burden on landfill sites and our already stressed environment:

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## **Turn old tyres into a fence around your veggie garden**

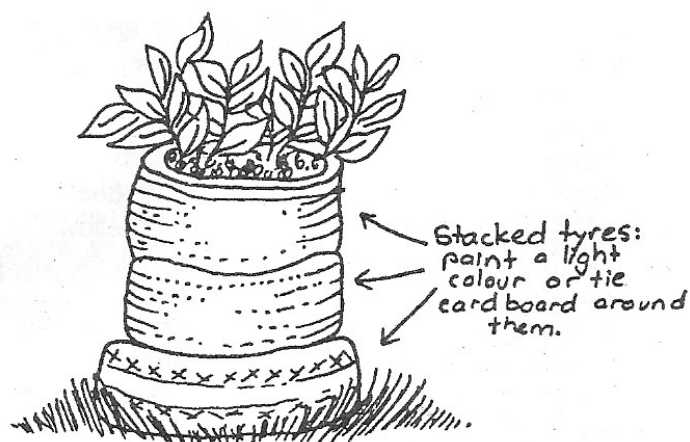
With a little extra effort, you can grow herbs and other hanging plants in it and turn them into a *living* fence.

Don’t forget to make holes in the base of each tyre for drainage, put stones in the bottom and fill with a mixture of half good garden soil and half compost with a dash of wood ash (to stimulate root growth). Good plants to grow in your fence are thyme, oregano, bulbine, lemon balm, catmint, mint and parsley. Water them frequently and give a regular feeding with manure or compost tea.



## Grow potatoes and sweet potatoes in tyre towers

Sweet potatoes enjoy the heat absorbed by the black surface, and produce giant tubers. Paint the tyres in light colours to keep the soil cooler for other potatoes. Either way, you maximise the use of horizontal space in a small garden by going upwards, and increase the yield of ordinary potatoes. The more tyres you add as the potatoes grow, the more tubers are formed.



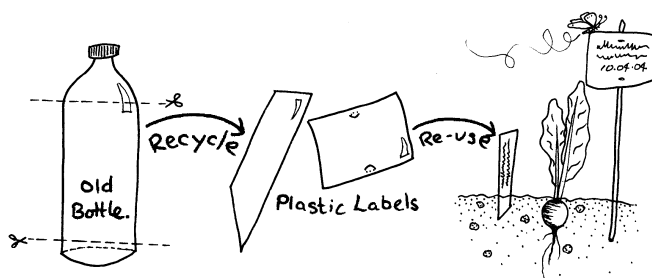
## Use tyres as planters on verandahs, or where soil is poor or badly contaminated.

Tyres are ideal as containers for plants, and can be layered, one, two or three deep, and in whatever arrangement suits your site. A thick layer of newspaper or cardboard underneath will prevent grass from growing into it. On a verandah you may want to put a sheet of plastic down first to prevent stains should you want to move the container in the future.

Fill the bottom layer of tyres with a good potting mix (half compost, half good garden soil and a handful of wood ash) and pack the soil well into the side walls before filling the centre. Smooth and level the soil and you're ready to plant – either seeds or seedlings. The depth of your tyre construction will determine what you plant. Also remember that it is a good idea to plant cut'n-come-again crops like beans, spinach, tomatoes and green peppers because they will give you a supply of food over a long period without having to keep re-planting. Don't forget to cover the soil with something brown and dry (mulch) to conserve water, feed the soil, prevent weed growth and control temperature.

Cucumbers and climbing beans need trellises for support and these can be erected using old broomsticks and odd pieces of wood. Stop the cat from peeing in the pot plants with used plastic forks and knives arranged menacingly around the base of the plants.

And, if it's seeds that you're planting, label the containers with the name of the seeds and the date of planting. If you're anything like most of us you'll forget what you've planted. Plastic cool drink bottles make good plant labels: cut up the bottles with a sharp knife. Make a sharp point at one end so the label can stick in the ground. Alternatively, make them rectangular, poke holes through the top and bottom in the middle, and then tread a stick through. Use a permanent marker to write on the label. And remember, they can be reused when you replant after you have harvested.



## Give your Spring and Summer crops a head start in a tyre.

Use a tyre container as a seed bed. Cut away the wall from one side of tyre creating a larger surface for planting. Fill with a good fine potting soil to 8cm from the top. Sow the seeds, water them and cover with a piece of glass or clear plastic. The warmth created by the absorption of heat by the black tyre surface and trapped by the glass stimulates germination and growth in the cold snaps before Spring.

## **Fashion a fish pond, or entice bug-catching frogs to the veggie patch.**

Tractor, or motor car, tyres stacked on one another, or sunk into the ground make an ideal pond or water feature in a garden. Just use your imagination. Line with 4mm black plastic (cut to at least twice the size of the tyre structure) and fill with water. Add a few fish or water plants after a few days, or leave it to nature to supply the critters. They'll come, that's for sure. Frog, and their insatiable appetites for bugs, are excellent allies in the garden.

## **Hold back the soil on the slopes and prevent soil erosion.**

Instead of spending hard-earned money on concrete blocks to shore up the terraces in a garden, arrange all the tyres you can collect in the same way you would the blocks. Fill them with good soil and plant creeping herbs, New Zealand Spinach, comfrey, Bulbine and vygies.

## **Chopped tyres are being used as a mulch.**

But, be careful! With our concern over reducing water consumption in the garden we are being urged to mulch. However shredded tyres must be used with discretion. Yes, a shredded tyre mulch does not blow away, does not break down and helps to control weeds, **but** tyre rubber leaches zinc into the soil. This is exacerbated by acidic soils with a pH of 6.5 or less and may affect growth in plants such as cabbage, tomatoes and beans which are zinc-sensitive.

It is advisable to test your soil and, where tyres are planned as containers, paint them first, inside and out, with a good quality latex paint. Instead of tyre mulch, use what you can find in the way of dry grass, wood chips, paper, cardboard and partially composted household and garden waste. The tyres can then be used for other things like children's swings, shoe soles, door mats and for building houses.

## **The aquatrap – an economical solution to water conservation**

South African, Mark Algra, has introduced the idea of burying horizontally slit tyres below the soil to conserve water. He first saw this practice in the desert areas in America, and where it is also used to conserve water on golf courses. The side wall of a tyre, a piece of inner tube and some contact adhesive are all that are needed to create a simply ingenious device for preventing water from draining too quickly from the upper layers of the soil and away from plant roots, leaching essential nutrients with it. Mark has encouraged community groups to manufacture the Aquatrap, and to use them in vegetable gardens on the Cape Flats where sandy soil creates an inhospitable substrate for vegetable crops.

There are many, many innovative ways for re-using tyres. We, at Soil for Life, would be interested in learning from your creative ideas if you would like to share them with us. Your brainchild could make a great impact in solving some of the problems that people face on a daily basis and assist us with our mission to create a healthy world, in more ways than one. Phone us in Cape Town on (021) 794 4982.

*Remember, there is always a choice. Collectively we can make a difference. 'It is possible to redefine the parameters of prophecy for our future.'*

### **Next issue:**

Soil for Life membership costs very little and entitles you to access to fresh, low cost seed (R2.50 a packet), access to the Resource Centre, a telephone advice service, a quarterly newsletter **and** an opportunity to help others to help themselves. Become a part of the food-growing culture in South Africa.

Membership forms can be obtained by phoning Pat or Moira on 021-794 4982 during normal office hour

