Beginner gardening guide 2024.
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Site Analysis:

Understanding the conditions that make up your site. Your area climate is the general area surrounding your site. It includes your town, city or region. Your microclimate includes all of the conditions specific to the site on your property.

When doing a site analysis, watch which areas get a lot of sun, at what times of the day, where water tends to naturally flow and pool, what trees may have roots which will inhibit growth, block the sun or provide shade. Some plants like full sun, and some like partial shade. Check on your plant's needs before choosing a spot in the garden for it.

Lasagne gardening:

A method of building a garden bed by adding layers of organic materials that will break down over time. Also known as 'sheet composting' or 'in bed composting' lasagne gardening is great for the environment because you're using your garden and kitchen waste and composting it in place to make a new garden. In urban gardens faced with poor or contaminated soil, it's also a great way to fill a raised bed with a healthy growing medium for edibles.

One of the best things about lasagne gardening is how easy it is. The first layer of your lasagne garden consists of cardboard laid directly on top of the grass or weeds in the area you've selected for your garden. Wet this layer down to keep everything in place and start the decomposition process. This layer also provides a dark, moist area to attract earthworms that will loosen up the soil as they tunnel through it. Anything you'd put in a compost pile, you can put into a lasagne garden. The following materials are all perfect for lasagne gardens: grass clippings, leaves, fruit and vegetable scraps, coffee grounds and tea leaves, weeds (if they haven't gone to seed), manure, compost, seaweed, shredded paper, trimmings from the garden.

You want to alternate layers of "browns" (leaves, shredded paper) with layers of "greens" (vegetable scraps, garden trimmings and grass clippings). In general, you want your "brown" layers to be about twice as deep as your "green" layers, but there's no need to get finicky about this. Just layer browns and greens, and a lasagne garden will result. What you want at the end of your layering process is a 50 – 60cm tall layered bed. You'll be amazed at how much this will shrink down in a few short weeks.

Adding more “soil-like” amendments to the bed, such as peat or topsoil, means you can plant in the garden right away. Layer as many greens and browns as you can, with layers of finished compost, peat, or topsoil interspersed in them. Finish off the entire bed with 7-10cms of finished compost or topsoil, and plant. The bed will settle some over the season as the layers underneath decompose.

Soil building & soil health:

Plants take a lot out of soil to help them grow. Replenish your garden by giving your soil plenty of organic matter. Branches, leaves, weeds, old plants and household scraps can all be returned to the soil using a compost heap, in lasagne beds, or by burying household scraps.

Healthy soil contains air and water. All plants need air and water to grow, as do the good bugs, soil fungi, microbes and earthworms that are essential for a healthy soil. If there's too much water in your soil, plant roots will not be able to respire (or breathe). If there's too much air, organic matter will decompose quickly.

So no matter what kind of soil you have, add organic matter at every opportunity: layer on compost, aged animal manure, green manures and chopped-up seaweed. You can even just dig a trench and pile in compostable material, such as vege scraps, grass clippings and newspaper.

Crop rotation:

Moving vegetable groups around the garden to maintain soil fertility. By rotating crops from one spot to another each season, you can preserve and even boost nutrients in the soil as well as avoid disease. Differing crops use different amounts of soil nutrients and a few crops add nutrients to the soil. Some crops are heavy feeders, some crops are light feeders, some crops are soil builders.

Crop rotation in small gardens can be difficult; let’s say you only have one or two planting beds. In that case you can still rotate crops simply to differing spots. You can follow a tomato with a bean one year after the other. Or you can replace a heavy feeding crop such as broccoli with peas in the spring or beans in summer. You can also replace a heavy feeder with a green manure cover crop that feeds the soil. Adding plenty of compost to planting beds before the season starts, after harvest, and as a side dressing during the growing season is another way to boost or replace nutrients in the soil.

Crop rotation by plant family is perhaps the most traditional way to rotate crops. In the plant family rotation, crops from the same family are not planted in the same spot any

more often than every three years. Crop rotation by plant family not only maintains soil fertility but also is the best way to avoid attacks by pests and diseases; specific pests and diseases tend to attack plants from the same family.

Notable vegetable plant families

- Squash: cucumber, zucchini, pumpkin, melons (heavy feeders)
- Brassicas: broccoli, brussels sprouts, cabbage, kale, cauliflower (heavy feeders)
- Nightshades: tomatoes, capsicum, eggplant, potatoes (mostly heavy feeders)
- Bean: beans and peas (soil enrichers)
- Lettuce: (heavy feeders)
- Root vegetables: parsnips, carrots, beetroot,
- Alliums: onions, shallots, leeks, chives (light feeders)
- Leafy greens: beetroot, spinach, silverbeet (light to medium feeders)

Rotation by plant family will take some planning; you can match up light feeders to rotate with heavy feeders and separate the two with the soil builders.

Natural Liquid Fertilizers:

These do wonders to ensure healthy growth, getting the nutrients to your plants quickly, so you can feed them when they need it most.

You probably have what you need at home for at least one of these recipes.

MANURE TEA: An excellent source of nitrogen. You'll need 1 part well-aged chicken, horse or sheep manure and 5 parts water, a large bucket (with a lid) and a sack/pillowcase. Shovel the manure into the sack or pillow case and place it in the bucket. Top up with water and cover (it's like a giant tea bag). Let it sit for one to two weeks. When you're ready to use it, dilute it to the ratio of 1:16. You can empty the manure-filled sack into your compost afterwards.

COMPOST TEA: Use the same ratio as above, 1 part organic matter to 5 parts water. This time, you'll be using some homemade compost instead of manure. In a bucket, shovel in 1 part homemade compost and top it up with 5 parts water. Stir and let it sit for four days. When it's ready to use, strain it through some sort of cloth. Use it immediately and dilute to the ratio of 1:10.

SEAWEED: Living in New Zealand means this one is an easy one to make as there's nearly always a beach close by. Seaweed is packed full of goodies for your plants,

including potassium, nitrogen, phosphate and magnesium. It also helps combat transplant shock when moving plants and seedlings. Scour your local beach for the seaweed, you won't need a huge amount. Rinse the seaweed well to remove excess salt, then place it in a bucket, cover with water and let it sit. The seaweed needs to decompose for this fertiliser so let it sit for about eight weeks in a dark place, away from your house - this one can get a bit stinky. Dilute to a ratio of 1:2.

BANANA PEEL LIQUID FERTILISER(S): Packed with potassium, phosphorus and calcium. You can make a banana peel fertiliser in a few different ways.

Banana peel tea: soak two to three banana skins in roughly 600ml of water for a few days. The minerals will leach into the water, which you can then use as it is for your plants, with no need to dilute. Give the soaked peels to your worms or put it in the compost.

Banana peel smoothie: blitz your peels together with a cup of water to make a banana peel slurry.

Banana smoothie: spoiled, old bananas can be blitzed into liquid too and poured around your plants. Try it in your vegetable garden.

WEEDY TEA: This has to be the easiest one to source and make. You can use all sorts of weeds from around your garden for this, especially those with tap roots, such as dock, comfrey, dandelions or wild fennel. The long tap roots mean the plant can absorb more nutrients, which are passed into the leaves. When these leaves are put in the weed tea, the nutrients will leach into the water, ready to be poured back into the garden. Sticking with the 1:5 ratio (1 part weeds, 5 parts water), fill a bucket with your sourced weeds. Cover them with water then put a lid on the bucket. Let it steep for about two weeks. Dilute it to a ratio of 1:10 and use it anywhere in the garden. Once the weeds have decomposed in the bucket, chuck them in your compost and start again.

Mulch:

A protective layer of material on top of your soil to insulate it from dryness, warm the soil up, add nutrients or suppress weeds. In spring and summer, when plants are growing rapidly and conditions are heating up, it's particularly important to mulch your garden because it prevents the soil from drying out. It also allows plants to put their roots down deeply so you don't need to water as often. Plants that are stressed by a lack of water are less productive and more likely to be mauled by sucking bugs like aphids

and green shield beetles. By acting like an insulating blanket, mulch ensures that moisture levels are consistent. Mulch can extend the growing season by trapping warmth around crops in the cooler months.

Commercial mulches such as pea straw and bark-based mulches are popular choices and can be bought from garden centres. Pea straw lasts around one season but improves your soil structure as it breaks down. Bark lasts three years or longer and also improves the structure of your soil. Note: bark can pull nitrogen from the soil as it breaks down. Leafy greens need lots of nitrogen, root vegetables not so much. So make sure there's nitrogen heavy fertiliser in the soil for greens.

If you're mulching on a budget, use what you've got. Tree leaves, seaweed, shredded cardboard or newspaper are good options. Compost can be used as a mulch too, (although that won't help you to suppress weeds).

All plants benefit from mulch. Spread it around your trees, shrubs, fruit trees and bushes, perennials, bulbs and annuals in the flower garden, and vegetables. However be careful that the mulch doesn't smother small plants or touch the trunks of woody ones as this can burn the stems or soften them, making them vulnerable to disease.
Go for a donut shape of mulch around trees. Other plants such as strawberries and lettuces are happy to be tucked up in their mulch though and, in the case of strawberries, this also keeps their fruit clean.

And the golden rule is also to water well before you mulch or mulch after rain, so you're not locking dry soil in.

Natural Pest Control Ideas:

For aphids and caterpillars: GARLIC. Gather vegetable oil, water, a bleach-free dish soap, and a head of garlic. Crush the garlic with the oil and add water and the dish soap. Sit it overnight, strain it, then spray it on the plants.

For fungal problems: BAKING SODA. If you live in one of the wettest parts of NZ, then you might find yourself combating fungal problems in your garden from time to time. Fungus is quite common in wet or humid areas, or even in gardens with plants that are too close together. You can combine baking soda with vegetable oil, bleach-free dish soap, and water. Mix these ingredients thoroughly, put them in a spray bottle.

For pests and bugs: GARLIC, CHILI & ONIONS. To create an effective natural plant pesticide, crush or puree four onions, two garlic cloves, and four hot chillies. Mix these with two tablespoons of bleach-free dish soap and two cups of water. Let it sit overnight, strain it, then add five litres of water. Pop it into a spray bottle and take action on those pesky bugs and insects.

For beetles and mites: If you're facing an uphill battle with mites or beetles, or even aphids and whiteflies, then a soap spray could be the best form of natural pest control for you. It's also far easier and safer to use than many other chemical-laden pesticides for sale. Mix one and a half teaspoons of liquid soap with one litre of water. Spray it onto the infected surface. Avoid applying it during a hot or sunny day.

For aphids and mites: Aphids and mites can do significant damage to your favourite plants, but why give them a chance? You can make a vegetable oil-based spray that will take care of business. They'll be gone before you have an opportunity to say 'nature knows best'. Mix one cup of vegetable oil with a tablespoon of mild liquid soap. Cover the container and shake it until it has mixed. You can then add two teaspoons of the blend and mix it with one litre of water. Shake it again in a spray bottle, then spray it onto the affected plants. The oil in this mixture covers the insects' pores, which stops them from being able to breathe.