

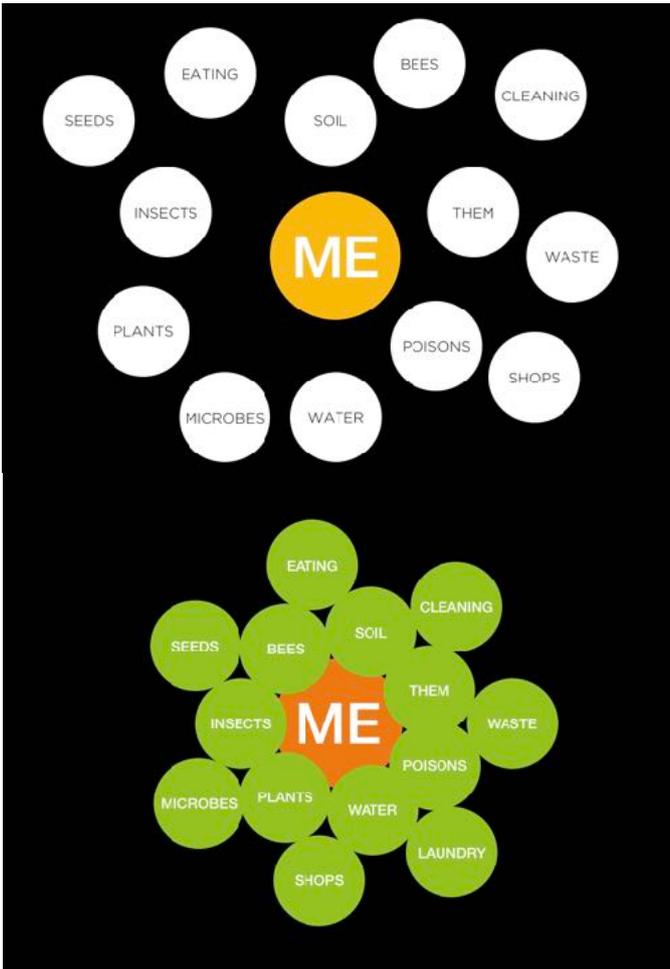


We started our business in 2010. Karen, my wife and boss, had this idea that food waste could be repositioned from waste to a recyclable in that it could be used as a soil amendment.

And so our Bokashi business was borne. “Bokashi” means “fermented organic matter” in Japanese and is a two step composting process.

I’ll talk about this in more detail later.

What I really want to talk about today, and I’ll cover composting, is how we can do a few small things and, together, make a big difference to our environment.



Many of us tend to see the things we do as separate from each other. Even big companies do this: look at Nivea and its “micro-bead” products which has had a devastating impact on our environment. These plastic beads are now even found in fish.

We need to think of our actions as all being related to one another. What we do in one aspect of our lives can have consequences on another aspect which we haven’t really thought about.

Systems thinking comes naturally for some of us. But for most, including myself, one has to deliberately think about “unforeseen consequences.”

The fact is that everything we do impacts on everything else. The chemicals we use in our toilets impacts negatively on the sewage system. The plastic we throw away comes back to use in the water we drink (ironically in plastic water bottles!).

So the first thing I’d like to emphasise is that we need to think of our lives holistically and note that everything we do impacts on everything.



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The “Butterfly Effect” is this idea that the flapping of a butterfly’s wings in Siberia can create a cyclone in the Mozambique channel.

But really it is the idea that small actions have major effects.

And here I’m talking about our positive actions (enough of this negativity). Sometimes the environmental crisis in which we are living feels overwhelming; and stops us from taking action.

But a lot of us doing small good things can have a more positive impact - literally “the butterfly effect”.

So this talk is about “6 Easy Things You Can Do Today”.

If we break down some of our behaviours there is a lot we can do. From thinking differently about how we clean, limiting our use of plastic, how we shop, how we manage and define waste, saving water and gardening itself.

Yes I did say we’d get to gardening in the end!

Traditionally when we clean we kill everything. We’ve been brought up to think of ALL bacteria as a health hazard and those use toxic chemicals to eliminate them.

The problem is that these always come back (and the bad guys come back first). The second thing is that these chemicals are not healthy for us - remember that chlorine was the first chemical agent used in warfare!

So use a natural cleaner (there are lots available). These cleaners are bio-degradable and use beneficial microbes to break down dirt. The other benefit of these is that these microbes populate your home and out compete the bad guys - thus giving you an ongoing cleaning benefit.



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Just be careful. Some of these products are not as environmentally friendly as they make out as they use Palm Oil.

The destruction of rain forests in Asia for Palm plantations is having a devastating impact on the environment and pushing orangutang and other animals to extinction.

The problem is that Palm Oil is everywhere and is often disguised under some other name. [Just check out this list of some of the ingredients which are not obviously Palm Oil.](#)



Plastic has been an environmental menace for decades. But only in the last few years has the problem reached public consciousness. Plastic waste is everywhere and is having a devastating impact on our oceans.

It's really difficult to get away from plastic, but we can do a few good things:

1. Stop using plastic straws. Just say "no".
2. I never knew this, but our tea bags are sealed with a heat resistant plastic seal. Start using loose tea (like our mothers did!). Who know we might enjoy this ritual.
3. Use reusable containers. Cling wrap is a major issue - use Tupperware (it will last for years - if you can find the lid!).
4. Support fast food outlets that serve in paper and not polystyrene. Also tell them not to add plastic utensils into the bag - we have perfectly good metal forks or spoons at home.
5. Use glass or metal containers instead of plastic - coke in a can vs. a plastic bottle; or even soda stream.
6. Up-cycle old plastic containers into flower pots, vertical gardens, etc. Just make sure that they are used more than once and don't immediately go to a landfill.



Yes plastic is recyclable. But in reality the vast majority just ends up in a landfill.



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The how, where and when we shop has a major impact.

1. Shop local - and support local. This reduces food miles and supports local jobs and farmers.
2. Buy seasonally. There's a reason why citrus is a winter fruit - the Vitamin C helps us fight off colds and flu in winter. And it means that we are not going to be buying, in Winter, an orange from Morocco or Spain in December.
3. Buy fresh food. Limit the use of canned food (I struggle with not buying canned tomatoes).
4. Remember to take your bags to the supermarket (I'm guilty of this!).
5. Buy organic. It has a major impact on your health and also reduces your consumption of chemicals (the herbicide glyphosate is found in the bread we eat).
6. Think about who deserves your hard earned money and support those chains or grocers. I absolutely hate the way Woolworths over packages (with plastic) its products.



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1. Reduce your waste first. Given our low recycling rates in South Africa, recycling is the last solution (not the first). But when we do have waste please make sure that it can be easily recycled.
2. Organics (food waste and garden waste) is recyclable (or compostable - so maybe it's up-cyclable!).
3. Have a couple of chickens (not roosters if you are in the suburbs). They can process a lot of your food waste. And provide eggs!
4. They're also very very funny.
5. Keep your recyclable waste clean so that the hard working waste pickers can find it easier to collect and also make more money (these people work incredibly hard and should be respected and appreciated).



Bokashi composting is a great way to compost all your food waste. It uses beneficial microbes to ferment food waste so that it doesn't rot or smell.

Our Earth Bokashi is made using indigenous South African microbes (like everything else, even our bacteria are "local ones").



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We live in a water scarce country. The problem with us Jo'burgers is that when it rains here we think the drought is over!

But it wasn't that long ago that we were on the verge of hectic restrictions (and were saved by Cyclone X coming in from Mozambique).

So we still need to be wary and conscious of our use of water in Jo'burg. If Cape Town gets it's required rain it will take decades for them to go back to their old profligate ways.

Water saving is the "new normal".

Easy things you can do:

1. Put a basin in your shower to catch water. Use this for irrigation or to flush your toilet (it's astounding that we use potable water to flush our faeces!).
2. Build a grey water harvesting system. This can be expensive, but Youtube (the best DIY learning channel on the planet) has great simple and easy to implement ideas (especially when it comes to diverting your laundry water).
3. Stop irrigating your grass! Our grass is green, healthy and incredible robust. What's our secret:
 - a) We never irrigate. This causes grass roots to grow deeper and also helps percolate water into the water table.
 - b) Leave the grass clippings on the lawn, this is a natural fertiliser high in Nitrogen.
 - c) Let your grass go brown in Winter. This is it's natural cycle - even grass needs a break.



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So now we come to gardening. There are a great many easy things you can do to help the environment (in reality just being a gardener means that you are an environmental activist!).

1. Compost all your organic waste. This is the best stuff for your garden. For small spaces we manufacture a “composting bag”.
2. Think about your soil before you think about your plants. Soil is one of earth's key resources - as important as air and water. Manage it's biology by using organic fertilisers - this helps build the soil-food-web.
3. Choose the right seeds. I prefer heirloom open pollinated varieties. They are expensive but their own seeds are 100% viable - I'm still enjoying beans, chilli and lettuce from seeds I purchased years ago.



Additionally, this is a rebellious act. We have less diversity in the fruit and veg that we buy than 50 years ago. So buying heirlooms not only helps us protect plant diversity it also ensures that the food system is not gong to be wholly controlled by companies like Monsanto.

4. Keep bees. We need to help these important pollinators: over $\frac{1}{3}$ of our food is pollinated by bees. Having a bee hive in one's garden is a massive gift; all of our plants are happier and healthier, Flowers bloom for longer. Our fruit is healthier. Everything is just better.
5. Go indigenous. Doing this is more water wise. We protect our own plant diversity.
6. Stop using synthetic fertiliser. This kills our soil biome. Use organic fertiliser. These are slow release and earth friendly.
7. As mentioned stop irrigating your lawn. It's autumn now. There's soil gold waiting for you. Collect your leaves. Make leaf mould. Your spring garden will reward you.
8. Finally, encourage biodiversity in your garden. Be a little wilder and provide nesting and hiding places for birds, lizards, butterflies and other insects. This is important



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Have you noticed how fewer insect splatters you get on your windscreen? This is a major crisis as it really means that we have declining insect populations. This means less pollination, less food for our birds and other insectivorous animals (when last did you see a chameleon in your garden?).

I don't know if this will work. But put up an "insect hotel". They look cute even if they might not work. But at least you'll be doing some good for just that one beneficial insect which will have the opportunity to reproduce.

Well we've gone over time. I suspect that some of these points are a talk in and of themselves.

But the point I'm really trying to make is that you can take some small steps right now.

There is no need to feel overwhelmed and feel that you're impotent to the destruction we see around us.

Just doing one of these six things is a step in the right direction.

And as mentioned, as a gardener you're already a rebel, an activist and a climate change fighter.



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