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FRONT COVER

The Christmas turkey. We wish our readers everything of the best over the festive season.

COMMENT, by Pete Bower nterconnectedr

he permaculturists get it. Prince Charles gets it. And a few of us smallholders get it, too. And that's the realisation that everything, but everything, on this little ball of slowly-cooling lava we call Earth is interconnected.

As mankind's great and good meet this month in Paris, that beleagured City of Lights, to discuss our environmental future at the COP21 summit on climate change, it's worth reflecting on just how our actions ~ and inactions ~ affect what happens around us, now and in the future.

And also to reflect on how big, and yet how small, the issue of environmental change, degradation and management really is.

To make the issue manageable to somebody not seeking fame and glory on the political world stage ~ most of us, in other words ~ let's look at our own environments, namely our smallholdings.

You've heard of companion planting? That's a prime example of the interconnectedness of plants and insects, (and also a prime example of natural chemical engineering). Plant a marigold in among your tomatoes and the natural pyrethrins in the marigold act as a deterrent to the whiteflies and other bugs that you would otherwise need to zap with chemical sprays if you wish to harvest unblemished fruit.

Encourage ladybirds into your vegetable patch and they will feast on the aphids that suck the sap from the leaves and stems of your otherwise healthy plants, leaving them weakened and therefore unable to provide you with fruit.

Even out in your fields, a hedgerow of bushes and trees along a boundary fence, apart from providing shade and a windbreak for your animals, will provide a habitat for birds, feeding grounds for bees, and a safe haven for small invertebrates, rodents and mammals. These in turn, will feed on worms, grubs and other bugs, in turn providing live food for magnificent owls and other birds of prey.

Conversely, when you decide to fell a tree that has been growing for decades, because you wish to grade a new road, plough the field in which it grows or do anything similar in the name of "progress", be aware that you are destroying a habitat for creatures of all sizes and varieties, many of which will simply die as a result. If you cut down enough trees, like in destroying a forest in the name of progress, you risk driving entire species to extinction.

Look at the sea: ultimately everything we do ends up there. The carbon dioxide and sulphur dioxide we produce in our power stations and by forest burning and myriad other industrial activities is absorbed into the sea, and changes into acid. The plastic rubbish we produce when we buy packaged foodstuffs in supermarkets, and cooldrinks in cafes, finishes up in the oceans, in the central Pacific and central Atlantic forming huge (and I mean HUGE ... many hundreds of kilometres across) floating islands, slowly revolving at the epicentre of the ocean currents. Into this spaghetti of industrial waste become entangled turtles, birds and other marine predators mistaking the mess for food.

Even the acid mine drainage out of the old gold mines of the Witwatersrand, more than 1 000km from the sea and about which so much has been written and not so much done to prevent it, eventually finishes up in the ocean, simply flowing, like all water does, downhill from stream to river, to bigger river and on out into the sea. Day after day, slowly raising the pH (acidity) of the sea water to the extent that it can no longer support marine life. (Ask anybody who has kept salt water fish in a tank how critical the pH balance of the water is to the life of the fish and you will have an idea of the problem at sea.)

As the year winds down we reflect on the future and to us at the Smallholder it is quite clear that there is no quick-fix solution to the climate change problem or the environmental disasters that are taking place around us. To a great degree ordinary humans are going to have to adapt to a new reality which will include a hotter environment and more violent weather. Over this individuals will have no control. What we will have control over individually, however, is the degree to which such changes affect us. It's a cliche, we know, but it's also very true that the current generation is only the custodian of the Earth for future generations \sim at an individual level for our children, grandchildren and their children. (With whom which, incidentally, we are most inextricably interconnected). It's time we started to take this to heart.

Looking around at what we have under our control, and holistically nurturing it rather than destroying it, is a start.

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MAILBAG He helps others with veg garde

 \sim ir \sim I am in Springs and always have a vegetable garden and help others with establishing them if interest is shown and I find your magazine excellent. I have only found one before in a tractor spares outlet in Benoni. The November edition I got at Garden World in Muldersdrift.

I especially liked the Editor's Comment "Teach Your Kids to grow vegetables, as I read endlessly for years about food

insecurity in South Africa while the unemployed in shack settlements do nothing with the vast amounts of fertile ground next to them. Ouite often there is a dam nearby too.

If khakibos and blackjacks will grow so will beans and tomatoes etc.

While in Rotary for 21 years I tried numerous times to establish veg gardens with the local men but with no success. The will to work. without pay, for their own good for future times is just

not there. Seeds are in abundance in South Africa and substantial amounts of veg can be grown from a single packet which can even be shared between gardeners. Water may be the problem in some areas and from time to time but when there is rain there is no effort to capture any of it with simple gadgets! If I get 4mm of rain on my 38 m² garage roof my 140 litre wheelie bin connected to the gutter is filled and I then use that water to start seedlings and water young plants

before having to use municipal water that might have had the chlorine dumped in it the day before.

I shred all my garden cuttings as I sell the Bosch range of shredders and I collect manure from the area I go fishing in and this is milled and added to the soil regularly to enhance moisture holding especially in periods of dry weather, and it works well.

I really valued the rainfall

Continued on page 6



Borehole drilling, pumps, yield tests & water quality tests 011 791-3490

The Editor welcomes your letters, comments and opinions, but reserves the right to edit and shorten as necessary. Senders' names and addresses must be included.

Afrikaans letters will be translated. Post mail to: Letters, PO Box 14648, Bredell 1623 or fax 086 602-3882 or e-mail gautengsmallholder@gmail.com







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MAILBAG

Rainfall: Why no explanation as to why?

ir - I found your article about spring rainfall in our area to be very informative, but I feel that you could have delved more into the reason we are asking (pleading/praying/begging) when are the rains coming? I am located in Walker's Fruit Farms and I grow crops which I supply to City Deep Market.

Cash & Collect

My biggest concerns about our weather over the last few weeks are the intensity of the heat and the persistent wind we have been experiencing. It is the combination of the unusually high temperatures and the wind factor that is drying out my land too quickly and causing me to ask "when are the rains coming?"

Fred Pearson

Walkerville

We did, in fact, highlight the coming of a drought this season earlier in the year, and covered guite extensively the cause, namely the El Nino

effect in the Pacific Ocean. Read more about the weather, and what rain you can expect (not a helluva lot, as it turns out) in this edition.

GROWER

chart (Smallholder November). A dry spring so far, 2000 to 2015 and it is clear how one year has differed from another. Springs is near Delmas, which has one of the highest rainfalls in South Africa but like Cape Town versus Robben Island, a few kilometres can get vastly different rainfalls. Generally Springs gets its fair share, but nothing is happening yet. Where in Springs can this magazine be found? If necessary I would offer a subscription for a year to be

posted to me as the magazine is of such great content and interest.

Bob Gillies

Springs

~ Editor

In Springs itself you can pick up copies from The Lawnmower Shop, Stewarts & Lloyds and Multifire & Power. In Largo you can get copies at Elco Steel and Pages Timber. You can also read the magazine online, as printed, on our website, www.sasmallholder.co.za.

~ Editor





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MAILBAG-

A snake catcher made from scrap

ir ~ Firstly, what an amazing magazine. Well done for all your hard work. Great and informative. Thank you.

I've lived on a farm in the Rhenosterspruit Conservancy, Hennops area for eleven

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vears now and in summer the snakes are radical. From Mozambican cobras, adders, pythons and everything in between, to earthworms: we've got 'em all. As we prefer not to kill the snakes but rather to co-exist, my buddy, owner of the farm, invented this novel snake catcher.

It's a piece of square galvanised gutter, 1.5m long, covered in bubble wrap with packaging tape, with a used chick food bag taped to the gutter.

It works every time. Place it

Snake-catching tube made from guttering and bubblewrap and bag

next to the wall close to the snake. Snakes generally move away to the wall. Some directing with a softish kitchen broom might be needed, while talking to the

snake telling it your intention and, presto! The snake goes into gutter tunnel. Viewing it through the bubble wrap, lift the gutter from the entrance end and you have your snake in the bag. We then tie the bag with cord, put it in a 25l . bucket with lid, cord squashed closed, hanging out for release elsewhere. Cool hey? It

really works. Try it! Genius is simplicity. Hilton Rhenosterspruit By email



Position the tube alongside a wall for best effect



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AOC	25.4 x 12.7	1.25
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AOE	25.4 x 12.7	1.6
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APD	25.4 x 25.4	1.5
APE	25.4 x 25.4	1.6
APF	25.4 x 25.4	2
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SM413	50 x 50	4	12
SM635	50×50	5	18
SM190	100×50	3.15	6
SM313	100×50	4	9
SM481	100×50	5	14
SM212	100 x 100		6
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Drought: STILL not the worst

We!ve had even drier early-season months ... try 2002!

outh Africa is in the grip concomitant high prices. of a drought, and a number of provinces have been declared disaster areas: this, by now, we all know. What is interesting, however, is that, on the East Rand at least, this year's rainfall from September to November, while low, is by no means the lowest it has been in the past two decades.

The driest three first months of the rainy season that we have recorded in Bredell was in 2002, when only 65mm fell. 2004 was a bit better, with 101mm and this year, to Nov 23 when we went to press we had recorded 106mm. The long-range forecasts for the last week of November appeared hopeful of further showers by month

The average rainfall for the first three months that we have measured since 1999 is 192mm, and the wettest first three months were in 2001 and again in 2012 when we recorded 322mm.

So, while this season is dry and below average, it is not the worst we have experienced.

The problem is, however, that many smallholders cannot rely on their own grazing to feed their livestock, their plots being too small to sustain even their small herds and flocks. As a result they are forced to rely on bought-in fodder and feed; fodder which is grown on extensive farms often quite distant from Gauteng. It's fine if Gauteng is enjoying a dry summer so long as these areas receive decent rains. However, when the fodder producing areas are in the grip of a drought as they are this year, smallholders can expect feed scarcities during next year, with

What of the prognosis for the rest of summer? Weather pundits are forecasting that we South Africa only revert to average rainfall patterns after March next year, by which time it is too late for good crops in the summer rainfall regions. In addition, it is likely that, in

Gauteng at least, we will experience higher than average temperatures during the period to end-March.

Right: Rainfall in Bredell, East Rand Sep-Nov. 1999-2015. The average is 199mm

	SEP	ОСТ	NOV	TOTAL
2002	20	28	17	65
2004	0	19	82	101
2015	26	21	59 ³	* 106
2010	0	15	96	111
2003	10	86	25	121
1999	5	11	113	129
2006	0	29	123	152
2011	5	94	77	176
2008	0	66	121	187
2014	11	63	117	190
2005	0	19	198	217
2009	46	60	132	237
2013	6	117	150	272
2000	34	120	119	273
2007	35	182	63	280
2001	55	144	123	322
2012	120	103	100	322
* Nov	2015 to	23rd Nov	ember on	ly



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Get the skinny on GN

earing in mind that it is compiled and written by Greenpeace, which has a pretty substantial anti-GM axe to grind, one of the more lucid and comprehensive explanations of genetic modification (GM) and its effect on foodstuffs, agriculture and food consumption is contained in a 40-page ebook entitled Twenty Years of Failure: Why GM crops have failed to deliver on their promises.

The book offers up seven myths about GM and elucidates their failures. quoting extensively from the two main producers of GM seeds and agro-chemicals, namely Syngenta and Monsanto. They remind us that twenty years ago, the first genetically modified (GM) crops were planted in the USA, alongside dazzling promises about this new technology. Yet despite these promises, GM crops are

grown on only 3% of global agricultural land. The report unpacks the myths about GM crops and then describes the reality for each one.

Myth 1: GM crops can feed the world

Reality: There are no GM crops designed to deliver high yields. Genetic engineering is ill-adapted to solve the problems underpinning hunger and malnutrition - it

NEWS WHY GM CROPS HAVE FAILED TO DELIVER ON THEIR reinforces the industrial

Minimum wages for domestic workers

inimum wages for domestic workers have been increased from December 1. In Gauteng the minimum hourly rate for a full-time domestic worker is R11,44, the weekly equivalent R514,82 and the monthly rate R2 230,70.

These figures are for domestics only.

Different minimums apply for farm workers.

To put the minimum figures into perspective, research from the School of Economic & Business Sciences at the University of Witwatersrand showed that the estimated

cost of essential food and non-food items needed to survive is R1 319 for one person – and R5 276 for a household of four. Research showed that as many as 45% of workers are paid below the established minimum wage.

agriculture model that has failed to feed the world so far. Mvth 2: GM crops hold the key to climate resilience **Reality:** Genetic engineering lags behind conventional breeding in developing plant varieties that can help agriculture cope with climate change. Climate resilience heavily depends on farming practices promoting diversity and nurturing the soil, not on Continued on page 15





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FLUID CONTROL DIVISION

From page 13

the over-simplified farming system GM crops are designed for.

Myth 3: GM crops are safe for humans and the environment

Reality: Long term environmental and health monitoring programmes either do not exist or are inadequate. Independent researchers

The truth about GMO's failure ... the Greenpeace version

complain that they are denied access to material for research.

Myth 4: GM crops simplify crop protection

Reality: After a few years, problems such as herbicideresistant weeds and super-

pests emerge in response to herbicide tolerant and insect resistant GM crops, resulting in the application of additional pesticides.

Myth 5: GM crops are economically viable for farmers

NEWS

Reality: GM seed prices are protected by patents and their prices have soared over the last 20 years. The emergence of herbicideresistant weeds and superpests increases farmers' costs, reducing their economic profits even further.

<u>Myth 6:</u> GM crops can coexist with other agricultural

Continued on page 16

Cellphone-based GPS tracker for livestock

GPS-based animal tracking device now available in Gauteng is yet another application for your cellphone

The device is fitted into a sturdy collar and can be used by farmers of sheep, cattle, goats or game.

It is also endorsed by the

Transvaal Agriculture Union. In addition to use with a cellphone you can track animals via a laptop computer.

The collar uses cellphone reception to transmit an SMS to your phone, so the signal strength does not have to be of voice quality. Should signal

Continued on page 16

Plot-based chef's school

eTala Chefs Academy is situated on a smallholding east of Pretoria, combining nature with a farm experience and bringing a holistic environment into the kitchen and training centre. A small class

hands-on approach is followed which makes for a holistic learning experience. More and more students are choosing to attend farm-like chef schools where students receive training in additional skills, such as irrigation, composting and soil management. Students work the soil, grow vegetables, harvest fruits, nuts and herbs and are actively involved in cultivating the "go green" conscious campus. The seed-to-table

Continued on page 16



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Coop cup with nut clamp 130ml, 7.5cm, R18 290ml, 9.5cm, R25 5250ml, 12.5cm, R32

NEWS

From page 15

systems

Reality: GM crops contaminate non-GM crops. Nearly 400 incidents of GM contamination have been recorded globally so far. Staying GM-free imposes considerable additional, and sometimes impossible, costs for farmers.

Myth 7: Genetic engineering is the most promising pathway of innovation for food systems

Reality: Non-GM advanced methods of plant breeding are already delivering the sorts of traits promised by GM crops, including resistance to diseases, flood and drought tolerance. GM

crops are not only an ineffective type of innovation but they also restrict innovation due to intellectual property rights owned by a handful of multinational corporations.

The book also has some interesting graphs and maps, highlighting where GM crops are being used worldwide, where they have failed, and additionally where GM crop protection measures have also failed.

The document is too long to publish in full, or even summarise cogently, but it is available for download off our website.

www.sasmallholder.co.za.

LIVESTOCK GPS

be lost completely the unit will notify you that signal was lost but is now restored, as well as where the animal is at that point.

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From page 15

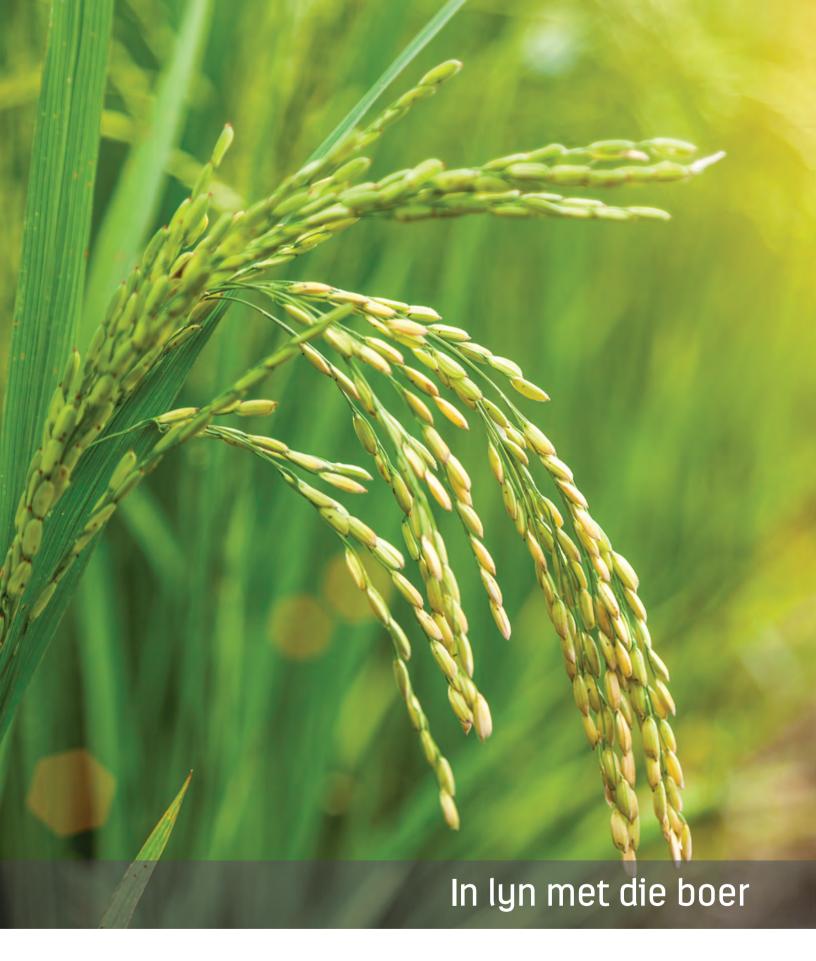
philosophy provides students with a unique opportunity to gain experience which will set them apart from their fellow city chefs.

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LIVESTOCK

Choosing the animals right for you

t's an issue that exercises the minds of most smallholders, especially newly-arrived ones, as they look out over their land and wonder what to do with it. Is it possible for a smallholder to make money out of livestock and, if so, what species should he keep? And how

New to smallholding life? This will help you choose the right animals for your plot.

many?

For, keeping farm animals on one's plot can range from a few chickens scrabbling around in one's garden to a stable-yard full of horses. And that doesn't include domestic pets such as dogs, cats and birds.

According to research undertaken by the Smallholder in 2012, most (80%) Gauteng smallholdings have livestock of some sort or another, with a substantial majority (63% of all plots) having two or more species. So, if you're newly-arrived on a plot, what should you keep? Your choice will be informed by your interests and those of your family.

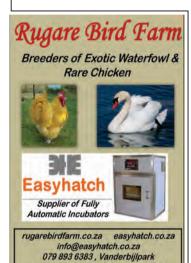
Poultry, mainly for their eggs, are the most popular farm animals, being found on 44% of plots in Gauteng. These can range from four or five hens and a rooster freeranging around the garden and, hopefully, laying their

eggs daily in a chicken coop rather than all over the yard. Apart from providing entertainment for the family as they go about their day, four or five hens should, if they are good layers, provide sufficient eggs for the family, and there's nothing nicer than a freshly-laid free range egg with its deep yellow yolk. Occasionally in the spring,

Continued on page 19



A few free-ranging hens will keep you in eggs





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LIVESTOCK

From page 18 and depending on the breed, one or more of your hens may "disappear" and if you don't find evidence of attack by a predator in the form of feathers in the garden you can be sure she has hidden herself away to sit on a clutch of eggs. About three weeks after her disappearance she will reappear, hopefully with a clutch of chicks in tow. As these grow you can either use the pullets to replace or enhance your existing layers, or you can sell them as young stock for a small profit.

If after three weeks your hen doesn't reappear, chances are that the clutch of eggs she's sitting on are infertile and, by that time, vrot, too.

Move her off the clutch (taking care not to be pecked in the process) and dispose of the eggs so that she can come back into lay again.

If your hens never disappear to sit on a clutch it could be because they are of a more highly-bred commercial variety, the broody instinct having been bred out of them. In this case, to ensure you have replacement birds you will need to incubate eggs artificially. There are two ways to do this: Either buy a small hobbyist's incubator or acquire a hen of a breed which has not lost its brooding instinct.

Once you have trained your dogs not to attack them, freerange chickens will prettymuch take care of them-

selves, although good advice is to feed them in their coop in the evening to encourage them not to find their own nesting sites. And, of course, provision of clean water is a must (although they will drink out of dogs' bowls, from leaky taps and from any other source as they roam.) A small commercial layer or broiler farm is a perfect farming enterprise for a smallholding and specialist housing is available on a turnkey basis from various suppliers.

If you wish to farm broilers or layers commercially you should be aware of your local by-laws regarding housing, odours, disposal of waste etc. And, before you introduce your first batch of either broilers or layers, ensure that you have established a market \sim and have buyers lined up \sim for your eggs or birds.

Turkeys are, of course, bigger than chickens and are a bit more finicky to rear, but a good market exists for plump free-range birds around Christmas time.

Waterfowl: Ducks and geese can be reared for their eggs, for their meat and for their down. A duck egg is about twice the size of a medium chicken egg, and a goose egg about twice the size of a duck egg. Ducks lay their eggs wherever the mood takes them, often in mud,

Continued on page 21

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There is a misguided belief that a gaggle of geese makes for a substitute watchdog.

From page 19

and the shell is more porous than a chicken egg so the chance of contamination by bacteria is greater. Duck eggs, therefore, should be collected two or three times a day, and carefully washed and dried to minimise this danger.

With the exception of Muscovies which don't require water except for drinking, ducks need a pond on which to swim and preen. Ducks and geese will also decimate your garden if allowed to free-range (although they will keep it free of slugs, snails and other pests, too).

And, there is a commonly-

held view that geese make good "watchdogs" by setting up a good squawk when alarmed. While this part is true, they will also set up a good squawk in the middle of the night for no apparent reason so that

if you rely on them to be your burglar detection system you will find yourself frequently awakened by false alarms.

Ostriches and Emus can also be kept on a smallholding. Both require sturdy fencing and dedicated camps with no other species grazing. On smallholdings ostriches are kept for breeding and sale of the chicks, and for meat, while emus are kept for breeding and sale of chicks, meat and their oil which is highly prized for medicinal and cosmetic uses.

Ostriches, being dangerous and fleet-footed, are less prone to stock theft than other species.

Of the four-footed species

sheep are the most popular on smallholdings and some smallholders run successful small stud operations, producing top quality animals which fetch good prices at breed auctions.

Most smallholders who keep sheep, however, short-change themselves by breeding poor quality mixed-breed animals that are low in both meat quantity and quality, and reproductive vigour.

And here's the rub: a poor quality animal (of whatever species) costs just the same to feed and maintain as a good quality one, yet will fetch a fraction of the value of a decent animal when sold on or sent for slaughter. So, if you are serious about starting out with livestock on your plot don't make the mistake that many do and start with cheap, locally-sourced low-

LIVESTOC

Continued on page 23





Ostriches and emus can successfully be kept on a smallholding.





Dorpers make good mothers, have a high multiple- terms there are birth rate and are kept for their meat.

From page 21

quality animals in the belief that you will upgrade as time goes on. Experience shows that that's unlikely to happen and you will be condemned to keeping rubbish animals. Rather start small and set out to buy a top-quality ram and a couple of quality ewes, join the appropriate breed society, learn a bit about breeding and genetics. This may mean making contact with a commercial stud farmer and transporting in your stock from many miles away, or buying from a breed auction, rather than buying animals locally.

Sheep are among the most-stolen of all livestock and so must be kept under lock and key at night.
In commercial terms there are sheep breeds

especially for wool, breeds especially for meat and dualpurpose breeds. On a smallholding the small numbers would make it uneconomic to keep the animals for wool, so dualpurpose and meat breeds are

more popular. If the idea of slaughtering your own animals doesn't appeal you can take your surplus stock to one of the lamb abattoirs in your area or you can breed purely for sale of live animals.

Goats are similar to sheep in their husbandry and manage-

ment, with the major difference being that they are more intelligent and inquisitive and so require very wellkept fencing and gates to contain them.

Goats are kept for their skins, meat and milk and are particularly useful therefore for people who are allergic to cow's milk.

☐ Pigs, by virtue of the bylaws surrounding their housing, are not found in great numbers on smaller smallholdings. That's because the regulations state that pig



On a small plot, to remain legal you will be restricted to keeping a potbelly pig as a pet

LIVESTOCK

enclosures may be no closer than 100m from any dwelling or boundary fence and it is thus unlikely that one can site a pigsty within these parameters on a property of less than five or six hectares.

Pigs are the most intelligent and inquisitive ~ and persistent ~ of all small stock species and if a sow or a boar sees something that interests it outside of its field it will dig its way under, or push its way through, any fence it encoun-

Continued on page 24



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ters to get to it. So keeping pigs "free-range" in a fenced field is not a viable long-term solution. Which is why most pigs are reared in sturdy pigstys built with impermeable concrete floors which can be hosed down to remove manure and urine which, while a potent fertilizer, also has a potent

The exception in the case of this species are the miniature exotic varieties such as Cameroonians and potbellied breeds which are often kept as pets.

☐ Cattle can be kept in small numbers but, as is the case



Smaller cattle breeds, such as Dexters, are more suitable for a plot.

with horses, they will decimate any grazing you have and will rely on boughtin fodder (and hard rations). The idea of having a cow for her milk is a dream of many a smallholder but the reality is more of a nightmare.

A cow in milk requires milking twice a day, on a regular schedule, if she is to remain comfortable and avoid udder complications such as mastitis. If you decide to milk at 5pm each afternoon, you will therefore have to milk at 5am each morning. Every morning. Saturdays, Sundays and holidays included. This

means that there must be at least two people on your smallholding who have the skill and time to milk, even if you go to the expense of buying a milking machine rather than doing the job by hand.

Unless you intend to make cheese, where 15 or more litres a day of milk is required, the prospect of this amount of milk arriving in the kitchen daily soon becomes daunting. The result is that you will need to find an outlet for the surplus, which will mean selling it to neighbours. This involves you in procuring and

cleaning a constant supply of bottles, usually 2 litre colddrink bottles and having a stream of neighbours at your door, or in daily deliveries. It is also against by-laws to sell raw milk.

So if keeping a cow for her milk is not really practical, why would one keep cattle at all? For their meat. This involves buying in calves, growing them to a decent weight, and shipping them off to an abattoir. This involves buying in feed (or growing your own in the form of a green barley feed) and will only work if you can procure the young animals and all their feed and medicines for less than you can sell them

If you do decide to keep cattle, the smaller breeds such as Dexters and Jerseys are probably more practical and economical than the larger beasts.

☐ Horses are found on a

Continued on page 25



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LIVESTOCK

From page 24 quarter of Gauteng's smallholdings. In many cases they spend their days idly in a paddock, unridden, and often uncared-for, their owners having found other interests. Thus, before succumbing to your child's plaintive "Daddy, I want a pony" wheedling, consider the following: If the child (or adult, for that matter) has no riding experience housing a pony or a horse on your property is the wrong way around. Rather enrol the aspirant rider at a reputable riding school in the area because very few people teach themselves to ride, at least not properly.

After at least a year of regular lessons at a riding school, on one or more of the school's ponies, as well as attendance and competing at suitable training shows, and joining the local branch of the SA Pony Club, the rider should have developed sufficient skill



Horses eat continually, so will decimate your fields of grazing. They are also social animals, so enjoy companions

as a rider and knowledge as a horseman (or woman) for you to consider buying a suitable mount.

But before you do, look at the rider's daily schedule. Is there sufficient time in the day after school, ballet, sport, homework, and the daily commute to and from these activities for the rider to exercise and look after the horse? If the horse, even a relatively placid old dobbin, is not exercised for at least 30 minutes at least a couple of times a week, and preferably more, it will become frisky, and will eventually unseat the rider or

at least scare him or her to such an extent that he or she becomes fearful of mounting up and a cycle begins with you nagging the child to ride, threatening to sell the horse, tears and arguments, with the horse ending up forlornly standing in a paddock all day. Also, horses are social animals and keeping one only, particularly if it is neglected by its owners as well, can lead to all sorts of psychological problems, which will inevitably manifest themselves in difficult behaviour when ridden.

But there's another aspect to

consider: the number of years your child is likely to ride. This is a function of the age at which the child shows an interest in starting to ride.

Continued on page 27





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From page 25

Realistically, the child will not have time to ride much in its matric year, and riding while at college or university is also problematical in most cases. So if the child starts with the "Daddy I want a pony" wheedling at the age of eight and you put her into a riding school for two years, you will have, at most, seven years of active riding (from age ten to 17, in Grade 11) whereafter her level of involvement will likely drop off. Furthermore, if your child competes at any decent level you will have a change of horse midway through the process as he or she outgrows the pony (less than 15hh) and moves to a horse.

And there's yet another factor to consider. Two years of lessons does not make a fully competent horseman. Lessons will have to continue and if you have the horse stabled at home you will require an instructor to come to you,

LIVESTOCK

Right: Alpacas, a South American member of the camel family, are small enough to keep on a smallholding and there is a growing demand for quality-bred animals in South Africa.

rather than going to the instructor at a riding school. The individual tuition is very much more expensive than lessons at a school, and the cost of the tuition is compounded by the cost of providing suitable arenas and equipment to facilitate the lessons, such as a dressage arena, fixed and moveable jumps, bending poles etc Gauteng Smallholder, November 2015), not to mention the cost of a stable, tack and feed room.

Finally, alpacas are a suitable animal for a small-holding. Kept for their wool, these South American relatives of the camel have become popular in recent years and breeding them for resale, as well as keeping them for wool can be lucrative.









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eople are quick to use terms such as "organic" and "sustainable" when it comes to agricultural practices and products, yet often the labels have not truly been earned.

☐ Organic farming refers to the type of farming that is done without the use synthetic chemicals such as pesticides, fertilizers, fungicides and insecticides or



Know you terminology?

genetically modified seeds. Organic farmers use a range of techniques that help sustain ecosystems and reduce pollution, while improving both the production and quality of nutrition. linked to improved social and economic viability.

In the case of plant production it involves the use of crop rotation, natural methods, composting, approved environmentally friendly pest control and homeopathic remedies to produce food that is free of all artificial additives. In case of animal production, the animals raised on organic farms must be allowed to range as freely as possible and eat only organically produced feeds. Most critically, organic food production is based on genuinely sustainable systems.

Also, to be certified as organic farmers must be able to prove that not only were their production methods organic, but that their production inputs (eg feed and plant nutrients such as manure) are organic as well.

☐ Sustainable agriculture is the efficient production of safe, high quality agricultural products, in a way that protects and improves the natural environment, the social and economic conditions of farmers, their employees and local communities, and safeguards the health and welfare of all farmed species.

☐ And what about permaculture? Permaculture is an approach towards designing human settlements and agricultural systems that mimic the relationships found

in natural ecologies. In permaculture, practitioners learn from the working systems of nature to plan to fix the damaged landscapes of human and agricultural systems. Permaculture practitioners apply everything deemed necessary to build a sustainable future.

☐ Biological farming focuses particularly on the soil: it is a system that uses nature and science to build the quality of the soil with the understanding that healthy soil will be able to support healthy crops and livestock.

It takes advantage of natural processes, which promote good soil, healthy crops, and healthy animals. These natural processes include crop rotations; best tillage methods; growing green manures; proper livestock manure use; reducing toxins;

Continued on page 32



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ALTERNATIVE AGRICULTURE

From page 30

promoting soil life, and balancing the soil's minerals. These terms mean using natural systems to improve soil structure, control weeds, pests, and diseases, and improve crop quality.

☐ Traditional farming is an indigenous practice of cultivating land to produce crops, breeding, and raising

livestock while managing natural resources in order to produce nutritious and continual food supply without external contribution, but using self-reliance and locally available resources.

☐ Biodynamic agriculture is a worldwide movement that uses an approach to sustainable agriculture based on the Anthroposophy philosophy of Rudolf Steiner.

His approach is based on a spiritual understanding of man's connection to the earth and cosmos and the concept of a self-contained farm individuality.

Biodynamic agriculture differs from many forms of organic agriculture in its spiritual, mystical, and astrological orientation. A central aspect of biodynamics is that the farm as a whole is seen as an organism, and therefore should be a largely selfsustaining system, producing its own manure and animal

Plant or animal disease is seen as a symptom of problems in the whole

Continued on page 34



Two of the compounds used to improve soil spiritually in the biodynamic system as described in the text.

Left: Chamomile

Right: A cow's horn filled with manure







ALTERNATIVE AGRICULTURE

From page 32

organism. Steiner also suggested timing such agricultural activities as sowing, weeding and harvesting to utilise the influences on plant growth of the moon and planets, as he believed that the whole of the universe, ie, the planet earth and the whole surrounding cosmic space with all its heavenly bodies, forms one indivisible whole and should be managed as such. Biodynamic farmers use a range of specially formulated

herbal and/or organic

preparations to enhance soil,

plant and animal life, fertility

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Steiner believed his preparations mediated terrestrial and cosmic forces into the soil

and vitality.

Biodynamic principles are similar to those defined above, in that the proponents constantly work at building up soil humus content and use no artificial fertilisers or pesticides, opting rather to work towards sustainability by using a minimum of external inputs and ensuring that these are eco-friendly.

Where they are different is in their use of a range of specially formulated herbal and mineral preparations to re-enliven the soil.

Steiner prescribed nine different preparations to aid fertilisation. He believed that these preparations mediated terrestrial and cosmic forces into the soil. The prepared substances are numbered 500 to 508, where the first two are used for preparing fields, and seven are used for enhancing compost.

The field preparations are made in cow horns:

- □ 500: (horn-manure) is a humus mixture prepared by filling the horn of a cow with cow manure and burying it in the ground (40–60 cm below the surface) in the autumn. It is left to decompose during the winter and recovered for use the following spring. □ 501: Crushed powdered
- ☐ 501: Crushed powdered quartz is stuffed into a horn of a cow and buried into the ground in spring and taken out in autumn. It can be mixed with 500 but usually

prepared on its own (mixture of 1 tablespoon of quartz powder to 250 liters of water). This brings a 'light effect' to the plants. It is sprayed over the aerial part of the plants and "draws the plants upwards". The mixture is sprayed under very low pressure over the crop during the wet season, in an attempt to prevent fungal diseases. It should be sprayed on an overcast day or early in the morning to prevent burning of the leaves.

The compost preparations are made from specific herbs: yarrow flowers, chamomile blossoms, the whole aerial portion of the stinging nettle while in flower, oak bark, dandelion blossoms and valerian flowers.

Four of these six preparations are enveloped in sheaths of animal organs. All are made with a sensitivity to the rhythms of the sun and zodiac. All but one are buried

Continued on page 35







POLYETHYLENE ROOF SHEETING





-VEGETABLES

Community supported agriculture

ou may know of the concept of providing clients with a box of fresh vegetables from your smallholding once a week. However there is concept known as Community Supported Agriculture, where the townies actually buy shares in the crop. They pay the grower at the beginning of the growing season, and then receive a portion of the crops as they're harvested. The produce is supplied over a set number of weeks of the season.

This is in principle a win-win situation. Farmers earn important early-season revenue and have a guaranteed market for their produce.

Barring a disastrous harvest, consumers enjoy overall lower food costs, field-fresh produce, and greater access to high-demand fruits and vegetables like long-stem strawberries and heirloom tomatoes.

Some farms have spring, summer, autumn, and even winter shares. Typically, there is a drop-off site or sites where CSA members pick up their weekly shares, or they come directly to the plot. As the grower, you get paid early in the season, before you have to spend on seeds and labour, so your cash flow is easier. And, CSAs allow you to connect better with your community, really letting you get to know the people who want your food. You can adjust your offerings to their desires and needs and create a more successful, responsive business.

To effectively market your Continued on page 36

BIODYNAMIC AGRI

From page 34 in the ground for a specified period of time.

When the preparations are finished, they have the appearance of well-ripened compost, with the exception of the valerian preparation, which is in a liquid form. They are then added to compost heaps.

All activities such as seed sowing, cultivation and harvesting are timed according to cosmic and seasonal rhythms.

The Biodynamic Agriculture Association of Southern Africa regards Demeter certification as the benchmark for biodynamic practice. Demeter is the certification for biodynamic farming and food.

Assessment is according to internationally agreed Demeter International Standards.

The BDAASA is a non-profit, voluntary association of individuals who are practicing and supporting the practice of, or simply, are interested in learning more about biodynamic farming. They offer a two year, farm based training programme. Applications are open throughout the year. For more information or to request a prospectus, email the academic administrator: training@bdaasa.org.za or phone 021 881-3628 during office hours.



VEGETABL

CSA, you also need to understand why your potential customers would want to pay up front for an entire season's worth of produce. These are the advantages that you can use to encourage their buy-in:

☐ Ultra-fresh, locally grown produce: This is by far the leading reason for participating in CSA. Smallholders give their members the very best of their produce, and many even offer flowers, honey, eggs, and more.

Unique varieties are often given to CSA members before others, as well as test types of produce that the grower is thinking of growing for a larger market. In short, CSA members get the best of the best that a smallholding has to offer.

Learn about new vegetables and fruits: Members never know what might show up in their box. Well, with most growers they have a



It's a connection to the land and the seasons that is rare for urban dwellers, and immensely satisfying

fairly good idea because they keep the members informed. Still, CSAs have a way of getting people to try new things simply because they are presented with them in the box.

☐ Serious understanding of the seasons and what grows in your area: There is nothing like unpacking a weekly CSA box to get in touch with the

seasons ~ and the weather of each particular season ~ in your area. Many CSA boxes come with newsletters, which often explain field conditions, why the smallholder is harvesting something early or late (or, sadly, not at all). It's a connection to the land and the seasons that is rare for urban and suburban dwellers, and immensely satisfying.

☐ Relationship with the growers: CSA membership involves some relationship to a small farm that one often didn't have before. Knowing a person and their specific situation can be a real eyeopener, especially if your "relationship to a farmer" has been limited to that of singing "Old MacDonald Had a Farm."

☐ Access to special buys: Smallholders can offer seasonal deals to their CSA members. Boxes of tomatoes to can, a neighbour farmer's grass-fed beef, are perks of CSA.

☐ Invitations to membersonly u-picks at the plot: Smallholdings can hold members-only pick-your-own events for high-demand produce in peak season. . These can be amazing deals, but the real fun is being out in the field and seeing a farm from a farmer's perspective. ☐ Special events at the

Continued on page 38



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VEGETABLES

smallholdings: Children's birthday parties or other celebrations can, for a fee, be hosted by the smallholder.

☐ Saves money: Most CSA members will save money over a similar amount of quality produce bought at the supermarket or from a farmers' market.

☐ Saves time: What you give up in choice you gain in



convenience. Picking up a box simply takes less time that going to the farmer's market or supermarket - it's the ultimate in one-stop shop-

Definite local eating: With a CSA membership you know the plot of land on which the food was grown. If eating local and supporting the local food system is important to a town dweller, joining a CSA is an easy way to do it.

The first step in starting a CSA is to think about how you want to structure the shares. How many weeks will be in your season? (It's probably a good idea to start with just the summer season, and add others as demand grows.) What vegetables are popular with your customers and grow well on your smallholding? Will you use a tunnel, greenhouse or other season extension methods to add weeks to your shares? Next, you'll want to consider

the logistics. Will you require full payment up front or will you consider offering the option of spreading payment over several months for a slightly higher cost? Although you don't get as much cash flow benefit, this can make the difference between selling a share or not, so consider carefully whether you can handle the cash flow difference in exchange for potentially more customers. You'll also need to figure out how customers will pick up their shares. Will they come to the plot? Perhaps they can take it in turns to collect and drop off within their own suburb. Would you be able to organize drop-off sites? Who will pack the boxes or bags, and when will that be done? You will need to make sure your produce is picked as close to the pick-up time as possible. You may need to refrigerate your CSA boxes until pickup.

Think about whether you will require shareholders to return the previous week's empty box to minimise your investment in packaging, or whether shareholders provide their own bags and pack their own shares when they arrive. One good opportunity for shareholders who want to trade work for a discount on their shares is to offer to have them divide and package the freshly picked produce into the share boxes or bags. Another way to add value and creativity to your CSA is to develop a repertoire of recipes that you can include with your CSA. For example, when tomatoes might dominate your share boxes, print out and include (or email to members) a sheet with some popular recipes for tomato jam, chutney, pickles, sauces or explanations of how to dry tomatoes.

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WATER CRISIS

The great grey-water usage debate

ith Gauteng in the grip of a drought, and with heatwaves causing, or at least exacerbating, municipal water shortages, many eco-nuts are making the suggestion that householders should divert their grey water from whatever drainage system they have

and use it to water their gardens, wash cars etc. Is this a bright suggestion? Yes. And no.

Firstly, let's define what constitutes grey water and compare it to the infinitely more sinister "black" water. Simply put, grey water is that which flows into your drain from everything other than your toilets (toilet water is black water).

Thus, in a domestic setting grey water comes from kitchen sinks, dishwashers and washing machines, basins, showers and baths. As such, it contains:

- ☐ Small food scraps off dirty plates, vegetable peelings, soil particles from vegetable washing, raw animal blood and meat scraps.
- ☐ Fats, oils and greases (called "fogs" in the trade) from food preparation, cooking and cleaning up, even if most of it is wiped off plates and pans before they are washed, but also bath oils, and residues of lotions and potions applied as moisturisers and makeup, not to mention the natural oils produced by your body that are washed off when you shower or bath.

☐ Residual fluid foodstuffs

that are poured down the drain such as stale milk.

parties, wine dregs, whey

from butter, yoghurt and

cheesemaking, etc.

vinegar, coffee and tea dregs, drink dregs left in glasses after

Hair, including that which

falls out when you wash your

scalp, that which you cut off

No, it's NOT safe to use grey water untreated, but treatment isn't difficult

when you shave and that which comes from pets, from washing blankets etc.

Sundry unpleasant solids and semi-solids that are wiped up and disposed of when scrubbing floors, washing windows, wiping down kitchen counters etc.

☐ Soaps and detergents

bacteria, and, finally,

Residues of medicines,

which can range from gentle

conditioners and shower-gels

hand-soaps, shampoos,

to aggressive household

mouthwashes etc from rinsing out dosing containers, syringes etc.

And all of that does not take into account those who choose to pee in the shower. Neither does it take into account those who allow chemicals to enter their drains from hobbies and pastimes such as photography and painting.

Neither, for that matter, does Continued on page 40



WATER CRISIS

From page 39

it take into account fluids that end up in the drain as a result of agricultural pursuits on a smallholding such as dairy, abattoir or stable-yard washdown water.

Not surprisingly, the resultant liquid containing these substances, if allowed to stand for a short time soon starts to smell as the solids and organic components putrefy, giving off the familiar sulphurous odour of a blocked drain.

And also, not surprisingly, if the water is not filtered the solids contained in this stew will soon clog up any form of fine delivery you may wish to use, including sprinklers, drip irrigators and the like.

Plus, the combination of soap residue, human hair and the fats, oils and greases, combine in the cool water to form a white, semi-hard solid which will build up on the sides of storage tanks and pipework in much the same way that cholesterol clogs your arteries.

Just from what it contains, it is not difficult to see that using this liquid as-is on one's garden will soon result in smelly patches, an increase in flies and other insects and, soon enough, illness among workers, children and animals using the garden.

Not to mention that the "fogs" will eventually clog the soil, coating soil particles and making it impossible for the soil to absorb moisture and release nutrients.

So before using grey water on the garden it is necessary, at the bare minimum, to pass it Examples of simple grease traps

through a couple of rudimentary filters to take out the worst of the contaminants. To remove the solid food particles, hair and much of the fats, oils and greases, at the very least the fluid should flow through a conventional grease trap, which should be regularly emptied (you'll be surprised how quickly the grease trap fills with gunk). You can buy a simple grease trap from any good plumber's merchant and installing one is a simple case of digging a hole and plumbing it into your drain line. Next, a combination of a

gravel-and-sand filter, with an anaerobic digestion chamber will, hopefully, rid the water of remaining organic matter, with the anaerobic digestion taking care of much of the bacterial load as well. The dimensions of such a filter will be dictated by to the daily volume of water it is to process but, basically it should comprise a tank at the bottom with an outlet high enough up so that the tank never empties fully. The tank should be partially filled with a honeycomb of bricks (even better if the bricks are of the Continued on page 41





From page 40

holey kind themselves) which will increase the surface area under the fluid to which anaerobic organisms (the same that are found in a septic tank) can attach themselves to do their work of digesting particles in the



Home-made domestic grey-water filter. Note algae-laden green water in pond.

water.

Above the tank should be layers of fine sand, then coarse sand (eg river sand) above it, then fine gravel, coarse gravel and finally a coarse, heavy covering of something like brick grog (broken brick) to keep the rest

of the filter medium in place. Similarly, at the bottom, you can keep the fine sand from sifting into the tank by placing down a mat of folded 80% or more shade-cloth.

The top few layers, eg the brick grog and coarse gravel will be aerobic, ie they will dry out between pumpings of the fluid, or at least allow air in to their inner spaces. The lower layers

and the tank itself, however, should be constantly moist if not soaked, and therefore anaerobic. In this way they will provide a fruitful habitat for the important anaerobic bacteria.

(And it makes sense to, firstly, kick-start the filter with a dose or two of a biological septic tank product such as Sannitree to "seed" the anaerobic part of the filter with bacteria and, secondly, to boost the bacteria periodically with additional occasional treatments).

The resultant fluid should emerge from this process relatively clear and odour-free. Note, however, that it is still unsuitable as anything other than plant irrigation water (ie can't be used to water livestock, and can't be allowed legally into a watercourse ... not that you'll have enough to do that anyway).

The fluid will still contain a load of dissolved chemicals, especially soaps, which are a

combination of phosphates and nitrates, which are the basic constituents of chemical fertilizers, but also other less desirable elements such as heavy metals.

If you store the water in a reservoir or dam at this stage you will notice that it very quickly goes bright green. That's the effect of algae

Continued on page 42









WATER CRISIS

multiplying in the nutrient-rich

As far as pH is concerned, the level of alkalinity the water reaches is related to the proportion of soap (being alkaline) in the water in the first place, related to the proportions of acids such as vinegar, wine etc.

At this stage it is fit to be used on your garden or lawn, either directly through a hose or leisloot, or through sprayers. The slope and layout of your garden, and your ingenuity with pumps and piping will inform your decision as to how you want to use the water.

To render the water potable to livestock and legally safe (after testing by a laboratory to certify it so) for discharge into a watercourse requires two further stages. Firstly it should pass through a vegetation filter ~ basically a mini-wetland ~ where the plants will take up the nutrients in the water through their roots. And secondly it should settle in a shallow pond, in full sunlight, where the ultraviolet rays of the sun will kill off any remaining bacterial load. By now you will be wondering if all this effort is worthwhile. After all, how much water is going to be lost in the filtration process, either through transpiration (ie taken up by plants) or evaporation? And how much do you actually generate in the first place? Here's the rub: An average household, assuming its members shower rather than bath, and assuming the house's showers have been fitted with water-saving shower-heads (as they should be), and assuming that clothes washing is done by a modern machine and dishes are likewise washed in a watersaving device, should produce no more than a couple of hundred litres of grey water daily. Hardly enough to water a garden with in a heatwave.

slopes or spaces suitable for the construction of sand filters, ponds and miniwetlands.

There is, however, one use for grey water which is an overall water-saving strategy, and which does not require the abovementioned elaborate filtration. And that's to use it to flush your toilets

To do so will require a grease trap, an underground holding tank, a submersible pump attached to a pressure switch, and reconnection of all your toilet cistern inlets to a separate piping system. You will also wish to install some form of deodorising system in each toilet (which must be septic tank-friendly) and perhaps a colourant because the water you are now using is in effect already "sewage-lite" and possibly a bit stinky, not to mention cloudy rather than clear. (Hint: Dosing your holding tank regularly with septic tank additives such as Sannitree will remove much of the odour from the water as well as clarifying it to an acceptable degree.)

Using your grey water as toilet flush water means you are getting a second use out of it for very little effort and in the process are saving eight to twelve litres of drinking water every time you pull the chain. But there's another good reason to go to the effort of separating the disposal of your grey and black waters and re-using grey water in one or other way, if you have a septic tank, and that's to extend the life of the tank between pumpings. With your grey water being diverted and only your toilet water flowing into the septic system the tanks will likely never fill and the anaerobic bacteria they contain will never become "diluted". Moreover, the flow of fluid out of the tanks into the soakaway will be greatly Continued on page 43

Herb Garden How to make money with herbs

ooking to make extra income from your plot?
Look to your herb garden for a value-added business.

Products can include the ideas listed below, namely tinctures, teas, oils and vinegars, or can expand beyond that, to whatever your imagination can dream up. If you enjoy making healthy, simple, effective beauty and health products, having a smallholder business making herbal products could be right for you.

Depending on what you are going to do with the herbs, you will need certain equipment. A blender or food processor is useful, along with funnels, sieves or a colander. If you need jars or bottles, recycle what you already have, rather than buying new ones. Friends are usually only too happy to collect their bottles for you as well. You will need to wash the bottles and lids in very hot

soapy water, or better still, in a dishwasher. Then sterilise them by pouring a little water in each and putting them in the microwave for five minutes. Dry them upside down in a warm oven. Boil the lids.

Most herbs dry easily. You can tie them in a bunch and hang them in a warm, dry and dark room. The kitchen is not the best place because of condensation there.

If you are drying roots, wash them well and chop them up while still fresh. You can dry them in an oven at 100° C for two to three hours. Leave them in a warm, dry spot until they are completely dry. Flowers and leaves can also be dried in the oven if you are in a hurry.

Dried herbs are ideal for teas. Remove the stems and chop the herbs to a fine, regular size that can be used in tea bags or in submersible strainers.

Continued on page 44

WATER CRISIS

From page 42

reduced, making it impossible for the soakaway to become overloaded and blocked. An alternative to all of this separation of grey and black water and construction of sand filters and ponds, is to install a multi-chamber minisewage treatment plant which combines a conventional twochamber septic tank with further settling and aeration tanks to produce a fluid, from both your grey and black water, which is legally potable by livestock and dischargeable into a watercourse and which is also, of course, safely used

in all forms of garden irrigation use.

One such system, which is available through the pages of the Smallholder, is designed, manufactured and installed by Scarab Water of Bela Bela. In addition to producing clean water from raw sewage, a Scarab system has further advantages: Firstly, no untreated (and therefore toxic) effluent is soaked into the soil, potentially contaminating ground water, and secondly, you never have to worry about pumping out your septic tank again, or repairing a clogged drain field.



HERB GARDEN

From page 43

You can make your own blends of herbs for teas. For a relaxing blend experiment with combinations of basil, chamomile flowers, lavender, lemon balm, perlargonium, marjoram or St John's wort. An "energy" tea that helps focus, stamina and energy can be just what someone is seeking to help with productivity - try basil, chickweed, rosemary or sage.

There are many local books and websites available to help your research. You are only limited by your imagination (and your herb planting) in terms of the teas that you can offer. They don't all have to be medicinal. You can blend herbs purely for taste, to influence mood, or to promote health.

Provide instructions on how to make the infusions. Use just-boiled water to make herbal tea, not vigorously

boiling water, which affects the valuable oils in the herbs. Generally for 500 ml water use 30g of dried herbs. Put the herbs in a tea pot, pour water over them and leave for ten minutes to infuse. If you are only making one cup, use a teaspoon of herbs.

A tincture is more potent than an infusion and it lasts longer. Making herbal tinctures can seem complex, but it really is quite simple.

Take 200g of dried herbs or 600g of fresh herbs, chop them. Place the herbs in a large bottle, cover it with one litre of alcohol ~ vodka works well ~ seal, shake regularly, and let it steep in a cool, dark place for about two weeks. Then strain the tincture into a bowl. You can wrap the herbs in cheesecloth and twist it to squeeze the last of the tincture out.

It will help to use a funnel when you pour it into dark

glass bottles. Herbal tinctures are used for many chronic and acute health complaints. The standard dose is 5ml three times a day, taken diluted in water. Again you need to research the medicinal effects of the herbs that vou have or that you need to plant. Herbal bath

products can help improve skin, reduce stress, open up the lungs, and relax one. You can use all kinds of herbs in vour bath blends, but some favourites include chamomile, lavender, rosemary, tea tree, eucalyptus, lemon balm, sage and calendula.

To make a bath blend, you will harvest and dry herbs as though for tea. Blend them as for tea as well, and offer



Basil drying in an oven

herbal sachets or bags to hold the dried herbs in the water so that they don't clog the drain. A very warm, tenminute soak or longer will provide the benefits of the herbs absorbed through the skin and inhaled via hot steam.

Herbal oils are made by steeping the plant material in oil. Infused oils are not as concentrated as essential oils

Continued on page 46





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HERB GARDEN

From page 44

and are much easier to make. They can be used as massage oils or as culinary oils.

There are two ways to make oil infusions. For the cold version you simply pack a sterilised bottle with dried or fresh herbs and cover them with oil. You can use sunflower oil or olive oil, or you can try jojoba oil,

almond oil, coconut oil (popular with the Banting brigade), grape seed oil or flax seed oil. Obviously these are much more expensive. Seal your bottle and leave in a sunny spot for two to three weeks. Strain the mixture into a jug, before pouring into a bottle and sealing. For a stronger flavour, you can use the infused oil to pour over a

new batch of herbs to steep for another two to three weeks.

A quicker version of oil infusion is to use heat. Take 1,5 parts fresh herb or one part dried herb to two parts oil and mix them together in a double boiler, heating them gently for about three hours. Strain the mixture into a jug,

And lastly, you can make herbal vinegars. You may use any vinegar - spirit, white wine, red wine or apple cider, remembering that they each have their own

pour into a sterilised, airtight

glass bottle.

distinctive flavour. You may use most herbs and can use combinations of herbs and even add spices if you so desire.

You will need one litre of vinegar (or multiples thereof, depending on



Herbal oil

how many bottles you want to make), 250 ml of fresh herbs per litre of vinegar (eg, thyme, rosemary, tarragon, parsley, basil) and sterilised battles.

Heat the vinegar in a glass jug in the microwave for two minutes or until it is just warm. Rinse the herbs, pat Confinued on page 47



Herbal vinegar





IN THE KITCHEN

How to preserve your mealies

ost smallholdings in Gauteng have a stand of mealies – it is almost compulsory. And some of us keep chickens, so we dry and store the maize to feed the poultry for the rest of the year.

However if you have a good crop you can also consider freezing some for the family to enjoy in winter.

You will need a large pot of boiling water, plenty of ice, a vacuum food sealer or freezer bags (Ziploc or bags with tie twists), two large bowls or sinks, one filled with cold water and ice, a sharp knife and a large spoon.

When you are picking your mealies a good rule of thumb is to "shake hands with your mealie" - if the cob fills your hand nicely and the silk on the top is brown, it's ready to pick. If it feels too scrawny,

ost smallholdings in Gauteng have a Three ways you can preserve your summer mealies to enjoy next winter.

look for larger cobs to freeze. The kernels should still be tender (easily punctured with your fingernail and juicy). Pick early in the morning and deal with them immediately. If there is a delay between harvesting and freezing, put them in the refrigerator or put ice on them. The sugars break down quickly at room temperature.

Take all the husks (leaves) off the cobs.

Clean the mealie by rubbing the silky fibres off the cleaned cobs with your hands or with Continued on page 48

HERBS

From page 46

dry and place in a glass jar or directly into the bottles. Pour the vinegar over. Seal and stand for about two weeks, then strain into a clean bottle, seal and label. A fresh sprig of the relevant herb can be placed in the bottle at this final stage.

Herbed vinegar can be used whenever plain vinegar is called for. You can also use it in cooking in place of wine, fruit juice, lemon or lime juice. It can be added to bottled sauces, marinades and homemade mustard recipes. Use it to make salad dressing: one part vinegar to two or three parts olive oil, salt and pepper to taste.

Small bottles of homemade herbed vinegar make lovely gifts, so seek out pretty bottles.

Certain herbed vinegars are very effective as insect repellents.

There is an old story about the Vinegar of the Four Thieves: during the great plague, four men were arrested for robbing the houses of the dead. It was

decided that they would be forced to bury the dead and if they did not succumb to the plague, they would be set free. One of them was a herbalist and he made a tincture using vinegar and lavender, peppermint, rosemary, sage and wormwood. They rubbed the mixture on their skin and apparently cheated the Black Death. It can be made today and used externally to prevent insect bites.



IN THE KITCHEN-

a soft brush. It helps to keep a bowl of water on the table while working to dip your hands into, as they become sticky.

You can freeze the whole cob or you can take the kernels off the cob to freeze in bags, which takes less space in the freezer. Either way you will need to blanch the cobs first. Fill the largest pot you have to 3/4 full with hot water, put it on your largest burner or straddle two stove plates and bring it to a full roiling boil. Next, fill a large bowl with ice and cold water. You may need to buy a bag or two of ice if you are planning to do

Kernels and cobs ready for the freezer

more than a dozen mealies. All fruits and vegetables contain enzymes that, over time, break down the nutrients and change the colour, flavour, and texture of food during frozen storage. That is why one blanches food, as this destroys the enzymes before freezing. Put the mealies in the boiling water, put the lid on and bring the water back to a roiling boil. Blanching times vary according to the size: seven minutes for small cobs, nine minutes for medium sized and eleven minutes for large mealies. Begin counting the blanching time as soon as you place the cobs in the boiling

> water. Cover the pot and boil at a high temperature for the required length of time. You may use the same blanching water several times (up to five). Be sure to add more hot water from the tap from time to time to keep up the water level.

After blanching, cool them quickly to prevent overcooking, by putting them into the large bowl of ice-cold water. To take the kernels off the cob, press along the rows with the side of a knife. Don't cut the kernels or you'll lose the richly flavoured heart and juice.

Don't overfill the bags. You don't want them totally full, just enough so you can close them easily and then flatten them out so they store easily. If you are using freezer bags, try hard to remove as much air as possible from a bag by sucking it out with a straw before you seal it.

Put them into the freezer, on the quick freeze shelf, if you

have one.

When you want to eat the mealies you can poach the cobs in half-milk/half water with a dash of salt until just tender or you can

grill them while they are partially frozen on the braai.



kernels partially thaw them for about five minutes before cooking them. They can be simmered in a little butter until tender.

You might also want to consider bottling the mealies. Parboil the cobs, cut off the kernels, fill the jars, add water, boil in jars in a large pot, allow to cool and then seal.



Bottled kernels







POULTRY

Keep your chickens cool in a heatwave

he recent heatwayes in Gauteng highlight the likelihood of extreme warmer temperatures throughout the summer season, which can be stressful to livestock, and especially to poultry confined to coops and broody houses, most of which are constructed of, or at least roofed with, heat-trapping galvanised iron.

Chickens are warm-blooded animals with a body temperature between 40,6°C to 41,7°C. When they start to feel hot, they cool themselves down by panting, which is effective. But if the temperature rises, the birds pant more and so their respiration rate increases. As they inhale and exhale faster and faster, the effort increases their body temperature. When the body absorbs or produces more heat than it can get rid of, the result is a serious condition called hyperthermia, or heat

stress.

Symptoms of heat stress are: apanting, with beak open, ☐ lying around with wings

outstretched. no interest in eating,

☐ slow response to stimuli, unresponsive.

Persistent heat stress affects the bird's metabolic processes, including nutrient digestion, leading to poor weight gain and a low feed conversion ratio. With prolonged panting, broilers become dehydrated and experience a rapid loss of carbon dioxide from the blood and tissues, as this gas is exhaled during panting. Rapid carbon dioxide loss changes the blood, reducing the amount of minerals (including calcium) it can carry through the body. The increase in body temperature, coupled with the change in the composition of the blood, eventually leads to the

collapse and death of the birds.

If your chickens are kept in a coop, you should aim to maintain a temperature range of 15 to 33°C.

There are a few things that an owner can do to keep chickens comfortable during hot weather.

Sufficient supplies of water are necessary for a couple of reasons. Obviously all living creatures need water to survive. However, an egg contains a great deal of fluid, so producing an egg absorbs much of the water a chicken drinks.

It is also suggested that you put ice in the water on really hot days. Poultry will not drink water if it is too warm. You should also provide shallow pans of water. The chickens stand in water to cool their feet and legs, which helps to lower the body temperature.

They also like to dip their heads into water. This is because the combs and wattles also act as a kind of radiator by allowing heat to escape their bodies, so dunking their heads in the water and cooling their wattles and combs immediately lowers their body temperature. This means that the larger-combed breeds are more heat-tolerant than other breeds.

Lighter-coloured chickens also tolerate heat better than the dark breeds whose feathers absorb the sunlight. Experts disagree on misting the hens, with some swearing by it and others warning of respiratory problems. If high temperatures are accompanied by drought conditions a handyman smallholder might consider investigating the misting tubing that is used outside restaurants.





SAUTENG SMALLHOLDER CLASSIFIED ADVERTISEMENTS

ABSOLUTELY FREE TO PRIVATE INDIVIDUALS. CONDITIONS:

- 1. Animals (including horses), birds, poultry, fodder, bedding, etc must be paid for as SuperSmalls (see p 56).
 2. Wanted ads, services of any kind are also SuperSmalls.
- 4. No Commercial ads accepted as classifieds (see display ad tariff p 1).
 5. Placement maximum of 3 months

SIIPERSMALLS

Entries in this yellow-shaded section cost R120 VAT included for 25 words, plus R1/word thereafter.

WANTED

White Chinese Goose Cock. Please contact Karen on 072 072-7788.

Gesoek: Stukkende tweede-handse brei masjiene benodig vir parte. Vir skool vir mense met geleerdheids probleme. Rosa 082 684-9534.

FOR SALE

POULTRY

Indian Runner Ducks for sale. R150 each.

Contact Karen on 072 072-7788

Potch Koekoek chicks from show-quality parents, available after Christmas at five weeks old, R50 each. Pete 072 587-9137

Boschvelder chickens: I have day old to 4 week old Boschvelder chickens for sale. We hatch weekly. Contact Peter 082 330-4096 Roodepoort.

LIVESTOCK

Swartkop Dorper en Meatmaster ooie te koop, hartwater gebied R1 800 stuk. Asook los volstruis wyfie te koop. Christian 073 230-6474. Hartbeespoort

Kolbroek piglets for sale: R800. Heidelberg. 082 508-4920.

Blackhead Dorper lambs, six months old, males only, R850 ea. Pete 072 587-9137 Bredell.

Miniature Cameroon goats of various ages. 7 male and 7 female. Contact Jill 082 886-5985.

MISCELLANEOUS

Stainless steel farm donkey. 210 litre, fire-heated. Constant hot water. From R3 730 incl VAT. Contact 011 762-1212, 082 456-0973 or stainlessspecial@absamail.co.za.

Stop thieves: Outdoor wireless alarms for houses, cottages, outbuildings. 4 outdoor wireless sensors, Main control panel, 2 remote controls, siren, battery, etc. R2 495 installed in JHB or DIY. Also cut fence alarm, www.stopthieves.co.za or contact Colin 079 180-2853.

Ek vra veilige staanplek vir 'n paar byekorwe naby Pretoria en omgewing asb. Skakel Fanie Booysen 082 332 8007.

PRODUCE, PLANTS & FODDER

Saagsels 350 x 1.3m sakke R15 per sak. Geskik vir enige diere. Aflewering kan gereel word. Kontakl Dalene 082 555-5773 Delmas.

Plus/minus 2m high Outeniqua Yellowood, Combretum (Vaderlandswilg) and Black Karee trees in 20 litre bags. East Rand near Bapsfontien. Phone 083 508-2481.

Game meat: potjie and stew available. Biltong also available. Contact Corrie 011 362-1551. Lucerne R75 per square bale, sweepings R40 per bag. Veld grass R45 per bale. Contact 078 442-4265 or lucerneltd123@gmail.com.

Fruit and nut trees. Olive, peach, nectarine, plum, almond, apricot, walnut, prune, pomegranate, pecan nut, apple, cherry, pear, fig, quince, mulberry, lemon and grape vines. Contact Douw 084 506-5125 Vereeniging.

Indigenous trees. 40 varieties available. Aloes also in stock. Contact 082 801-9555.

FOR SALE

Entries in this section are FREE OF CHARGE, but are for used items, private property sales/rentals and employment offered/wanted only.

EQUESTRIAN GOODS

Saddle, Saint Martin, Swiss made, 17 inch, genuine leather, fully fitted, excellent condition, plus bridle and martingale, horse cleaning equipment included. Owner not riding. R5 000. Contact Dave 083 682-1624.

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Free Classified Ads

FARMING REQUISITES

Freezer/cold room in excellent condition 2.4m x 2.4m x 2.4m. R30 000. Phone 083 508-2481

Green feed tunnel, complete but dismantled. With pressure pump and pipes Contact Carl 083 431-2773 Eloff

Bosch Rapid 180 leaf shredder and Bosch AXT 1600HP branch shredder. Both in good working order. R3 000 for both. Contact Ahmed 079 949-2685 Vereeniging.

Reservoir lining with roof cover, 5.7m diameter x 1.5m. Never used R3 000. Contact 083 302-2149.

Walk-behind cultivator, Gutbrod, R7 000. Contact Werner 074 789-0645

MISCELLANEOUS

Canvas, PVC, yellow, 11.5m x 11.5m R3 000. Contact Werner 074 789-0645.

Single bed. Headboard and base in mahogany plus pedestal R800.00. Call Jean 082 295-9996.

PROPERTY FOR SALE/TO LET

Petit: Old house with double garage and 2 x double carport available from the 1st December 2015. Ideal for mechanic, autoelectrician, builder, carpenter, plumber etc. to use as a workshop and office. Ample parking space available. Safe and secure. R 5 000 pm plus water & electricity. Maryna 082 744-4191 or Hugo 082 561-0443.

Botswana: "Virgin"farm for sale, 15 km from Selebi-Phikwe Botswana. 226Ha of

grassland wooded with Mopane, Acacia, Combretum. 2 km of forested river frontage. 2 cased boreholes. Plus 90% arable. 9 km from Letsibogo Dam 40 km from Dikgathong Dam. USD150K. Contact Maurice +267 7183-8985.

Eloff: 2 adjacent plots. Total 5.3Ha. One with large house and 3 x one bedroom flats. All fields under irrigation. Lucern and vegetables currently established. Large herd of boer goats. 2 x tractors and implements. POA. Contact Carl 083 431-

Benoni: Parkhome te koop. R60 000 kontant, Parkhome 7, Pretoria road, Plot 27 Zestfontein, Benoni. Dis veilig en maak deel uit van 'n gesellige kompleks. Kontak Naomi de Bruin 071 725-6180.

Mooiplaats: Pretoria East 4.2ha vacant land. 3 phase Eskom power pole and borehole drilled. Very nice soil for planting. Beautiful and quiet area. 8km gravel road from the Donkerhoek offramp on the N4

highway. Price R600 000 negotiable. Gerhard 082 301 7125.

Pretoria: 1.98Ha upmarket agricultural holding with going concern, double-storey thatched, 4 bedroom house, 1 bedroom cottage, lapa. Includes onsite garden centre, parrot/bird section and breeding facilities, goldfish/Koi section, kid's party venue with touch farm, greenhouse, all stock included. Excellent deal! R6 700 000. Contact 079 240-9188.

Zesfontein: 1 bedroom flat available 1 December. No pets R3 500 water and electricity extra. Deposit required. Contact Tvs 083 285-5378.

Vereeniging: (Uitvlught) 9ha on Sugarbush River, a 4 bedroom house and a 2 bedroom house, plenty outbuildings and irrigation from river, borehole. Offers from R3.5mil. Direct on R54 Road. Contact Dries 083 288-9015





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R15-90

R24-96

R36-00 R54-90

R99-00

R189-00

R88-92

6m

6m

Square Bar

10mm

12mm

20 x 3

20 x 5

25 x 3

25 x 5

30 x 3

30 x 5

40 x 3

40 x 5

50 x 3

50 x 5

6mm

8mm

10mm

12mm 16mm

20mm

Round Bar

Flat Bar



2.0m

2.4m

Pales

0.6m

0.9m

1.0m

1.5m

1.8m

2.0m

2.4m

.2m

R633-27

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Per m

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ATTENTION CRAFT MARKETS, CLUBS ETC: If you would like details of your events included in the Diary, please fax or email your information to the Editor. For noncommercial enterprises this service is

NOTE: FARMERS' & CRAFT MARKETS. For a listing of REGULARLY HELD markets and fairs please see the separate section on page 55. Only markets that are held infrequently are now listed in this calendar

Every Sunday Cattle drive with City Slickers breakfast, Diamond X Cowboy Ranch, near Cullinan. Call Rudan on 082 410-3180 horses@diamondxranch.co.za, www.diamondx.co.za., R400 per person.

Mnandi Methodist Church, 09:00. Mnandi Centre, cnr Tulip and

Short Streets, Jen 012 651-5509. Gail 072 477-0708., A small community who worship together. We have a Youth and Children's church.

Premier Mine Presbyterian Church, Lower Oak Ave, Cullinan. Garden of Remembrance (Columbarium), 079 060-9990 or 012 734-1640. Worship and Sunday school. Holy Communion for all on

Classified A

TOOLS

2x Kuhn 4 disc cutter gearboxes for sale R2 800 each. Contact Dries 083 288-9015.

Radial arm drilling machine complete with table. TOSVR4, 380 volt, 1.5m swing spindle, No 4 socket, good working order. R20 000. Contact Willie 071 269-0332.

TRACTORS, **IMPLEMENTS &**

Farmtrac 60 4 x 2 tractor, excellent condition (Cape region). R78 500 (ex VAT). Region), R252 500 (Ex VAT). Contact M

Ford 3000 Dexta for sale, reconditioned, good condition. R30 000. Phone Dries 083 288-9015

236 MF block with pistons and crank/sump for sale R3 000. Contact Dries 083 288-9015.

SR270 13hp 2cyl Lister with original manuals for sale R6 000. Phone 083 288-

2-skaar raamploeg; 5 tand tiller; 14 skottel offset dis en 'n skraper. Christian 073 230-6474 Hartbeespoort

VEHICLES & SPARES

Travelight trailer, licenced, new tyres and spare R8 000. Contact Jean 011 964-1071.

Camper: RV motorhome, 5 speed Ford engine, sleeps 5, very good condition, recently refurbished. R95 000 cash. Contact Gary 084 504-0332.

SPARES



2 off-road trailers, excellent condition (Cape Davison 082 403-8702

Nethout

kaste

391 9867







Auctions: Bronkhorstspruit - Every Tuesday

Gys Taute 083 253 6906 Delmas - 2nd & 4th Thursday Johan Taute 073 204 7646

Belfast: Wednesdays - Ermelo: Thursdays - Standerton: Fridays

Vleissentraal Ermelo 017 819 1106 www.vleissentraal.co.za





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DIARY

the 1st Sunday of every month.

Every Monday

Alcoholics Anonymous. 'Courage to Change' Group meeting, 19:30, Benoni Agricultural Holdings, Marcus 082 042-7730. Warren 082 335-0049. Glen 072 239-3024., If you want to drink – that's your problem! If you want to stop – that's our problem! No fees; no dues; just concerned fellowship.

2015

December

3: Last Quarter

3: Carols by Candlelight at Garden World, Beyers Naude Drive, Muldersdrift. Contact Magriet or Corne on 011 956-3003, 011 957-2545 or 083 997-6142.

Olive, peach, nectarine, plum, almond, apricot, walnut, prune, pomegranate, pecan nut, apple, cherry

pear, fig, quince, mulberry, lemon and grape vines.
Shade Trees
Vrugtebome

Olyf, perske, kaal perskes, pruim, amandel, appelkoos, okkerneut, pruimedant, granaat, druiwe, pekanneut, appel, kersie, peer, vy, kweper, moerbei en suurlemoen.

Skadubome Vereeniging Douw 084 506 5125 5: Bokkie Park Craft Market. 09:00 to 14:30 At the Bokkie Park, Southvale Rd, Parkdene, Boksburg. Contact: Janine Richardson at 072 713-3332 or Joan Gould 011 896-3637.

6: Country Fair at Uncle Tim's Centre, 40 High Road, Brentwood Park. Contact 011 967-1816.

6: Dog walk for Dogs For Cats at Smuts House Museum, Jan Smuts Ave, Irene. Contact Cheryl 083 376-1734 or info@smutshouse.co.za.

11: New Moon

12: Christmas Market. 09:00 to 14.30 At the Bunny Park, Rynfield, Benoni. Contact: Janine Richardson at 072 713-3332 or Joan Gould 011 896-3637.

12: Victus Christi Farmers Market at Reformed Church, 24 Miles Sharp St, Rynfield, Benoni. Call George 081 381-0824 or info@victuschrist.org.za 13: Antiques & Crafts at Uncle Tim's Centre, 40 High Road, Brentwood Park. Contact 011 967-1816.

18: First Quarter

19: Christmas Market. 09:00 to 14.30 At the Bokkie Park, Southvale Rd, Parkdene, Boksburg. Contact: Janine Richardson at 072 713-3332 or Joan Gould 011 896-3637.

22: Solstice

25: Full Moon

26: Dog walk for Dogs For Cats at Smuts House Museum, Jan Smuts Ave, Irene. Contact Cheryl 083 376-1734 or info@smutshouse.co.za.

2016

<u>January</u>

2: Last Quarter

3: Country Fair at Uncle Tim's Centre, 40 High Road, Brentwood Park. Contact 011 967-1816.

3: Perihelion

10: New Moon

10: Antiques & Crafts at Uncle Tim's Centre, 40 High Road, Brentwood Park. Contact 011 967-1816.

16: First Quarter

24: Full Moon

25-27: Artificial Insemination for Cattle. Rothman Livestock Training Services, Irene. Call Andy 082 770-0480, Norman 082 547-7949 or Di 082 772-1208. www.rltsafrica.com.

28: Pregnancy Awareness for Cattle. Rothman Livestock Training Services, Irene. Call Andy 082 770-0480, Norman 082 547-7949 or Di 082 772-1208. www.rltsafrica.com.

29: Calf Rearing. Rothman Livestock Training Services, Irene. Call Andy 082 770-0480, Norman 082 547-7949 or Di 082 772-1208. www.rltsafrica.com.

February

1: Last Quarter

7: Country Fair at Uncle Tim's Centre, 40 High Road, Brentwood Park. Contact 011



967-1816.

8: New Moon

14: Antiques & Crafts at Uncle Tim's Centre, 40 High Road, Brentwood Park. Contact 011 967-1816.

15: First Quarter

22: Full Moon

March

1: Last Quarter

6: Country Fair at Uncle Tim's Centre, 40 High Road, Brentwood Park. Contact 011 967-1816

9: New Moon



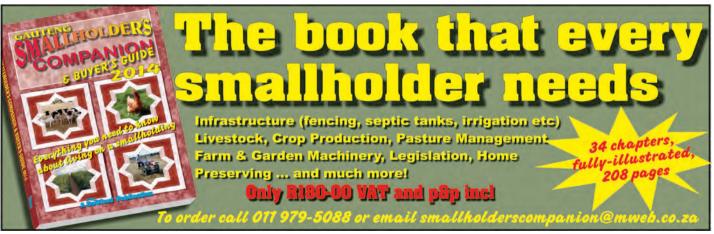


Regular Gauteng Farmers' Food Markets

NOTE: This is a listing ONLY of markets held to a regular weekly or monthly schedule. Markets held less frequently are listed in the DIARY section of the magazine and we urge readers to check each month for dates and events of interest.

We would like this list of food markets to be as comprehensive as possible. If you know of farmers' food markets that are not listed here, please email us the contact details of the organisers, and details of the market. Only FOOD markets are included. Similarly, if you know of markets in this list that have CLOSED please inform us so that we can delete incorrect or outdated information. We invite you to tell us of your experiences when visiting these markets so that we can better inform our readers. Were they as advertised? Was the produce on sale plentiful, well-priced, well-presented and fresh? Email your comments to gautengsmallholder@gmail.com

DAY	WHAT	WHEN	WHERE	WHO TO CONTACT	WHAT TO EXPECT
Thursday					
Every Thursday	Bryanston Organic & Natural Market	09:00 to 15:00	Culross Road (off Main Road), Bryanston.	Konrad or Glenda 011 706-3671 or glenda@bryanstonorganicmarket.co.za	Quality hand crafted goods, unique art and fresh organic and naturally grown produce
Friday					
1st Friday	The Shed Night Market	18:00 to 22:00	109 Malcolm Road, Randvaal	Felicity 073 232-0017 or 081 011-9456	Food & craft market.
Saturday					
Every Saturday	Wholefood Country Market	09:00 to 14:00	Sawasdee Exotic Nursery, cnr Main & Zinnia Roads, Kyalami	Robyn 083 311-4768 wholefoodmarket@gmail.com	Variety of organic & homemade foods.
Every Saturday	The Shed Food & Craft Market	08:00 to 15:00	109 Malcolm Road, Randvaal	Felicity 073 232-0017 or 081 011-9456	Food & craft market.
Every Saturday	Pretoria Boeremark	05:30 to 09:30	Pioneer Open Air Museum, Silverton.	012 804-8031 or 082 416-3900 blinsga@lantic.net	Fresh produce and traditional bazaar treats like jaffles, kaiings with pap and boerewors rolls.
Every Saturday	Bryanston Organic & Natural Market	09:00 to 15:00	Culross Road (off Main Road), Bryanston	Konrad or Glenda on 011 706-3671 glenda@bryanstonorganicmarket.co.za	Quality hand crafted goods, unique art and fresh organic and naturally grown produce
Every Saturday	The Hazel Food Market	08:00 to 14:00	Greenlyn Village Centre, cor Thomas Edison & Mackenzie Sts, Menlo Park, Pta	Rietha 083 554-5636. www.hazelfoodmarket.co.za	Fresh produce straight from the producer. Coffee, eats on sale
Every Saturday	Walkerville Farmers Market	09:00 to 15:00	112 Main Road (R82), Walkerville.	079 076-7680 info@wfmarket.co.za	Organic produce and Crafter's Market. www.wfmarket.co.za.
Every Saturday	Bosheuvel Fresh Produce	09:00 to 15:00	54 Glory Road, Muldersdrift	Mitch 082 553-2846	Meats and vegetables, delicacies, honey, cheese, brewery, crafter's market and children's entertainment.
Every Saturday	Jozi Real Food Market	08:30 to 13:00	Pirates Sports Club, Braeside Avenue, Greenside	083 532 2992 whitespace@mweb.co.za	Arts & crafts, music & entertainment, inspired cuisine organic vegetables & coffee, pet products
1st Saturday	The Green Market	09:00 to 12:00	Pretoria Botanical Gardens 2 Cussonia Avenue, Brummeria, Pretoria	Melissa 083 562-5249	Products ranging from solar equipment to organic food
1st Saturday	Victus Christi Arts & Crafts Market	08:00 to 14:00	24b Miles Sharp Street, Rynfield, Benoni	Schalk 082 561-9409 info@victuschristi.org.za	Arts & crafts, fine art, food, fresh meat & produce and home industry
2nd Saturday	Brakpan Boeremark	09:00 to 14:00	cnr van der Walt and Dirk van der Hoff Brakpan	Marius 011 744-2322 082 904-8852	Over 50 stalls. Food, arts, crafts, etc.
Last Saturday	Rynoue Plaas Mark/ Rynoue Country Market	07:00 to 14:00	Cnr Moloto Road (R573) and Protea Road Opposite Roodeplaat Spar	Bruce 083 442-2552 Sue 082 891-7546 waydack@worldonline.co.za	Fresh vegetables, fruit in season, preserves, flower and plants, homemade food and cakes, arts and crafts.
Last Saturday	Fresh2U Farmers Market	08:00 to 14:00	Corner Main Street and High Street Modderfontein (behind 33 High Street)	Jane 083 376 5567 Chantelle 082 338 7818 wardek@iafrica.com	Over 50 stalls. Fresh produce, home made goods, plants, food and more.
Sunday					
Every Sunday	Fourways Farmers Market	10:00 to 15:00	Corner Montecasino Boulevard and William Nicol Drive, Fourways	011 465 0827 www.ffmarket.co.za	Get your groceriesIn the garden!
Every Sunday	Jozi Real Food Market	09:00 to 14:00	Northcliff Country Club, Fir Avenue, Northcliff	083 532 2992 whitespace@mweb.co.za	Arts & crafts, music & entertainment, inspired cuisine organic vegetables & coffee, pet productsy
Last Sunday	Aloe Valley Food, Arts & Craft Market	10:00 to 14:00	48, R511 Doornrandjies	012 669-3043 info@serendiptiycafe.co.za www.serendipitycafe.co.za	Community market to promote local business



THE BACK PAGE From stupidity to sadness

sually at this time of year, this column has something to do with Christmas, sometimes funny, hopefully uplifting. Not this time.

For as I sit here the Metro rail system in Brussels is closed for the weekend due to the threat of terror attacks and the news is filled with pictures of heavily armed soldiers patrolling the ancient streets of European capitals, accompanied by interviews with survivors of terrorist attacks and analysis by all manner of so-called pundits.

And I am left with a feeling of deep melancholy and a yearning for a more innocent and peaceful age.

For many months now I have been telling anybody who will listen (and even those who won't) that the world is embroiled in the Third World War which, if it is allowed to escalate, will be every bit as ruinous as the previous two. While many say I am alarmist and delusional, I am not alone in my view. Following the Paris massacre no less an eminence than the Pope also described the current situation as the Third World War.

Because while the media's focus has, lazily, been on Paris this time around, what about Australia, the plane in the Sinai desert, Beirut, the Sudan, Nairobi, Mombasa, Bamako? And elsewhere. Maybe now, if the realisation catches on, world leaders will start to take the whole thing more seriously, stop making stupid, halfbaked decisions and come up with a multi-faceted plan which addresses the issue politically, militarily, economically, humanitarianly, and religiously.

Because thus far the decision making and foresight has been no more advanced than that of a bunch of Grade One kids squabbling over marbles on a playground.

In Europe at least, at the heart of the problem is that bureaucratic lunacy named the European Union with its stupid single currency and supposedly open borders.

Then there's George W Bush and his British crony Tony Blair who went on a wild goose chase in Iraq looking for WOMADS (weapons of mass destruction, which they didn't find). In the process they destroyed a country and left it bereft of a civil, political and economic infrastructure when the heat became too much at home, after they had been revealed to be lying about their cherished WOMADS.

Into the civil, economic and educational void that resulted came a bunch of turban-wearing fanatics carrying all manner of murderous weaponry in their hands and a twisted, perverted and thoroughly obnoxious version of the Muslim religion in

their heads, if not their hearts. In time these fanatics coalesced into what we now know variously as ISIS, ISIL, IS or, as Francois Hollande insists on calling it DERSCH.

Waging war, raping women, killing babies and beheading aid workers and journalists alike, this bunch forced middle-class Iragis and Syrians to flee their homes and countries on foot, boating, swimming (and drowning) in the Mediterranean, and

then walking westwards across Europe. In their thousands. Did nobody in power stop to think and say "Hang on, maybe among this endless trail of staggering human misery there just might be some who are intent on infiltrating our countries to perform horrendous acts of violence." Nope, seems not.

On the outskirts of Brussels lies Molenbeek, a suburb now being described as a "hotbed for jihadists." Knowing this, would it not have made sense for the Belgian police to have rounded up the known Islamist

hotheads of Molenbeek and given them a "stern talking to" before they were able to get up to mischief? Maybe to have got a few search warrants and found the AK47s, and suicide vests BEFORE they could be used in Paris.

If kids in their bedrooms can hack into high-security computer systems, could Europe's security agencies not have hacked into and closed down the jihadists social media networks used to recruit new members?

After the Paris atrocities I heard a French journalist remark how it seems that every Parisian knows somebody, or knows somebody who knows somebody, who was killed or hurt in the attacks. I was reminded how, after SAA's Helderberg crashed, it seemed that every (White) South African similarly knew somebody who died on the aircraft that night. Life has moved on for us, now, although it is different. In time, life will move on for those in Paris and elsewhere, too.



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