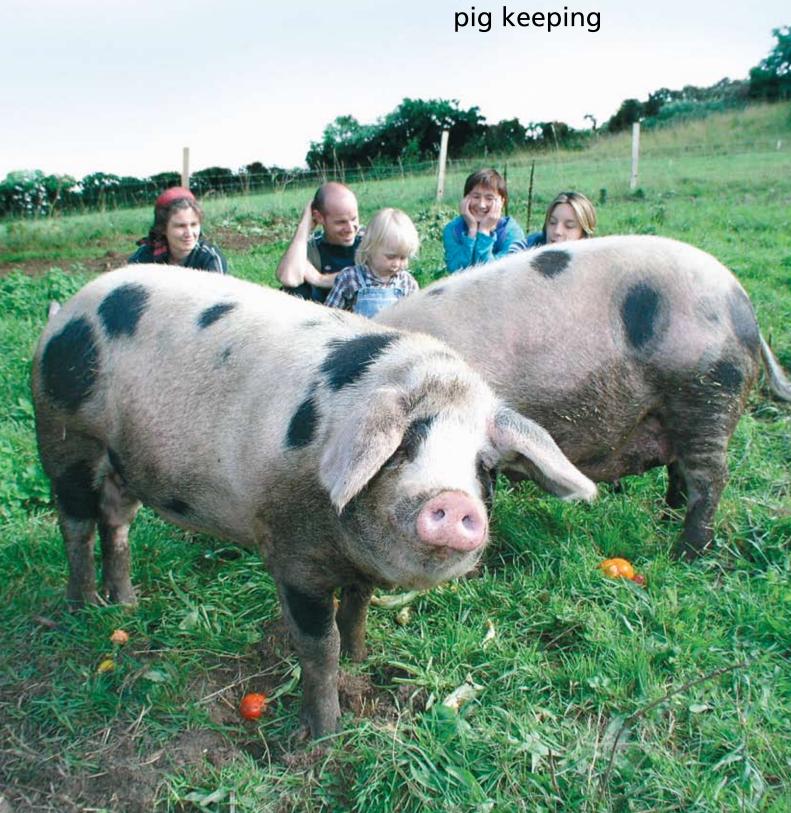


Pig ignorant?

A Soil Association guide to small scale pia keeping



Foreword



Local food is the cornerstone of truly sustainable agriculture systems, and increasingly the wider economic, environmental and social benefits are being recognised.

The Soil Association promotes and supports the development

of initiatives that link farmers and consumers in a relationship of mutual support. This includes approaches such as community supported agriculture (CSA) in which communities share the responsibility and commitment of building a more local and equitable agricultural system. This allows farmers to focus on land stewardship and still maintain productive and profitable farms that provide an opportunity to bring sustainable food production back to the heart of our culture.

This guide has been written in response to a growing interest by community groups in pig keeping as their first foray into keeping livestock. We discovered that Jim Pettipher was a founding member of just such an initiative – Pelican Pigs – and possessed the flair and wisdom to commit his experience in writing. Jim draws together the pooled piggy wisdom from several community food projects but the guide is largely based on Jim's own experience.

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1. Consider the pig...

When you are cooking, do you think about where your food has come from and – in the case of meat – what kind of a life the animal had before it wound up in your kitchen? If so, you may wish to think about keeping pigs.

Why pigs?

Pigs have probably been around for as long as we have. Certainly they have featured on humans' menus for a long time and there are very good reasons for this.

Most importantly, they provide good food. "You can eat everything but the oink" is an-oft quoted piggy adage and it is true, depending on how squeamish you are. Traditionally and widely enjoyed pig products include the joint for the Sunday lunch, the Christmas ham from the back leg or the neck¹, streaky² or back³ bacon, and sausages from just about anywhere – although these days good sausages tend to come from the shoulder. Those of us with a more adventurous palate may enjoy everything from brawn⁴ to the trotters⁵. The ears and tail too can be cooked and eaten.

Also, pigs are a good introduction to keeping livestock. After a little careful preparation, and when treated properly, pigs are relatively trouble-free to rear. There was a time, not so long ago, when many houses kept a pig which they fattened up for Christmas. Pigs are not as big as cows (difficult to move and control) or as small as sheep (too easy to move themselves and too difficult to control). They can be kept in small numbers in small areas. They are relatively inexpensive and easy to feed. A well looked after pig tends to be a healthy pig, and healthy pigs tend to be robust, relatively disease free and at the end of the day, extremely tasty.

In addition, pigs can be readily bought as weaners⁶, which means that you need only keep them for about six months before they will be porkers⁷ or baconers⁸. We would advise novice pig keepers to buy weaners and to avoid the more complex business of farrowing⁹.

We have deliberately thrown a lot of piggy jargon at you early on, but please don't worry, there will be no test at the end. Piggy jargon is used because as you grow more familiar with pigs and looking after them these terms provide useful shorthand for what you will be doing. If they weren't useful these words

1. In piggy parlance the collar is the meat from the neck. Ham can come from the neck, but may also come from the hams, i.e. the back leg above the knee.

- 2. Streaky is bacon made from the belly.
- 3. You guessed it, bacon from the back.
- 4. A sort of paté or confit made from the meat of the head.
- 5. Trotters are the pigs' feet (from toe to ankle).
- 6. When piglets are taken away or 'weaned' from their mum (the sow) they become weaners.
- 7. These are pigs that have grown to the right size for cutting for pork joints.
- 8. These are pigs that have grown beyond porkers to the right size for cutting for bacon.
- 9. Farrowing is the sow giving birth to the piglets

would have died out. If they don't prove useful to you then don't use them. We want you and your pigs to be happy.

1.1 Community pigs

Why get involved in a community food project?

In the modern world, providing food has become an industry. Recipe ingredients have become internationally traded commodities and the harvest from your local farm has become a product, possibly shipped many miles through a distribution network before returning pre-packed as a homogenised 'line' on the shelf of your supermarket. Your local farmer may have grown some of the food for your Sunday lunch, but you are unlikely ever to know. Nor are you likely to know how it was grown, or what fertilisers, chemicals and growth promoters may have contributed to the way it looks, smells and tastes. There is every likelihood in fact that the food on your plate did not come from your local farmer at all. Sadly, these days it is more likely to have been flown from the other side of the world, undermining our environment and undercutting your local farmer.

There have always been people who wanted a more direct connection with the food on their plate. Perhaps they grew their own food in their garden. If they had more time or were more passionate about growing their own food perhaps they took an allotment. Many of us would be nervous of such a commitment. In the modern world, relatively few people feel able to produce much of their own food in this way, even though they might wish to.

Community food projects are a way of helping us with this problem. If a group of people is able to work together making the best use of their various individual resources, the group or community can grow much more of its own food, or work with local farmers to do so.

And so it is with pigs. I am a member of a community food project myself. Of course, I didn't know that when I started. I thought I was just one of four friends who wanted to produce our own bacon and sausages. Our project grew from there. People within our group have very different levels of involvement. We range from those that feed the pigs every day, through the man who deals with the abattoir and butcher, to the people whose only involvement is to buy into our project and have some of the meat in return, which pays for us to keep our pigs. Our group is very, very far from being the only model for a community food project. In

fact, there are probably as many models as there are groups, and you will find some examples later on in this guidebook. But an agreed way of sharing the load and the harvest is common to them all.

Keeping any livestock is quite a commitment. Pigs need looking after every day of the year, usually twice a day. They need to be bought, moved, fenced and fed, for which someone has to pay. Eventually they will produce a fair amount of meat, which if you can't eat it all yourself will need to be shared or sold. So, grouping together with like-minded people to share the money, time and work responsibilities as well as the fruits of all your labours, makes sense.

But most importantly for me, it makes the whole business fun. A camaraderie that cannot be bought may develop on a wet February morning when you and your fellow pig fanciers have to turn out and move the electric fence, even though the prospect of staying tucked under that duvet is so appealing. Honestly. I will share my favourite pig keeping moment with you.

It was deep in the midst of the 2001 foot and mouth crisis. The disease seemed to be closing in all around us. After months of worry, our weaners had reached killing weight and we had managed to get them off to the abattoir. Our only remaining worry was our sow, Sausage (for that is her name). She is not happy being kept on her own (pigs are sociable animals) unless she is in pig. At that time the restrictions on the movement of animals made it nigh impossible to match her with her boyfriend. So in the end, and with a sad heart, we opted for no romance and artificial insemination (AI).

One of our number spoke with a nice man. Following a discussion of Sausage's brimming dates (in season), three plastic tubs and a corkscrew-shaped applicator arrived on the appointed day. I won't ask you to suffer the detail of our combined first attempt at AI. Suffice it to say that tears of laughter were shed. Oh yes, and make sure you wear your waterproof trousers over your wellies, not tucked into them, when addressing the rear of a brimming sow.

in ways you and the pigs can feel good about and that do not damage the environment. Your group may choose not to register as an organic producer, but we recommend that you strive to achieve the *Soil Association Organic* standards (SA standards) if your pig farming is to be sustainable. The SA standards cover all aspects of pig management to ensure a sound and sustainable organic farming system. If you decide to go organic, most farms will first need to go through a two-year conversion period where the land is managed organically, but crops and livestock may not be marketed as organic. SA standards can sometimes allow a one-year conversion for pigs and poultry.

The organic focus is on crop rotations and the use of animal manures and compost to maintain natural soil fertility, without the use of artificial/synthetic fertilisers. Pest, disease and weed control is achieved through rotation, choice of varieties, timings of cultivations and habitat management to encourage natural predators. All herbicides are prohibited. Where direct intervention for pest and disease control on organic crops is required a small range of approved inputs like sulphur may be used in a controlled manner.

The organic standards encourage the development of a healthy environment, enhancing landscape features, wild plants and animal species by, for example, maintaining hedges as an important wildlife habitat. The organic livestock standards cover livestock conversion, animal feed, housing and stocking densities, veterinary treatments and animal welfare. The emphasis is on a positive system of livestock management to maintain healthy stock and a balanced system.

Genetically modified organisms (GMOs) and their derivatives are strictly prohibited at every stage of production.

The full SA standards can be found by going to www. soilassociation.org/certification and following the links to 'standards online'. For more information on organic conversion contact the Soil Association business development team on 0117 914 2406.

1.2 A word on best practice

Industrial and intensive modern pig plants have shown how pigs can be efficiently bred, fattened and converted into the sort of pork products that tend to fill supermarket shelves. It is probably the most efficient way of profitably producing uniformly lean (bland) supermarket pork. However, we do not believe that it is the best way to rear pigs for food, either for us or for the pig. Just because pigs can be raised that way doesn't meant that they should be, and this is not a guide to producing industrial pigs or industrial food.

This guide aims to help you raise tasty, happy pigs

2. Planning

Before you begin, you should assess your assets. What resources (land, time, money) do you have? What do you need? There is likely to be a difference between the two and you need to know how big it is. Only then can you work out what extra resources you will need. After that you can prepare for your pigs, and only then do you get to look at pigs.

2.1 Time

In all things piggy, piggy preparation is infinitely preferable to piggy cure. Take your time. Ask around. Rushing or cutting corners at this stage will prove a false economy. Trying to sort out things that go wrong (like escaping pigs) is much, much more time consuming than any amount of well considered preparation.

As a very general guide, once you have your pigs established on your land, you will need to allow 20 minutes twice a day to feed them, water them, check their fences and look them over for any signs of problems. I have found that for all other piggy chores, such as moving them, taking them to the abattoir, and collecting meat from the butchers, you will need to allow additional time. I now allow half a day – morning or afternoon – for any of these things.

An occasional half-day is not so bad, especially since with good preparation you will be able to plan it. It becomes a problem when bad preparation leads to pigs getting out, so it becomes half a day right now. Or nobody thinks ahead to order food in advance. Or to book the pigs into the abattoir and the butcher. Or to borrow the trailer...

Preparation, preparation and preparation are the first three laws of pig keeping. OK I made that up. But they should be.

2.2 Land

Ideally your land will be free draining in a low rainfall area (less than 800 mm). It doesn't have to be flat, although as you become more experienced this may be an advantage for farrowing sows. Steeply sloping sites, or those with heavy land or high rainfall, can lead to problems with soil erosion and animal welfare. We keep our pigs in deciduous woodland. The trees provide them with shade and they love the acorns in the autumn.



Undergrowth cleared by pigs prior to tree felling

It is important not to have too many pigs in the same patch of land, or to let them stay too long in one patch. We deliberately kept three weaners in the small plot of larches shown here. The trees were becoming a hazard (rabbit warrens had undermined them and they were falling over) and so had to go anyway. The wood has become a very useful illustration of what happens if you don't regularly move your pigs. A forester recently offered me this useful rule of thumb for pigs in woodland:

- Using pigs to manage woodland = good
- Using woodlands to breed pigs = bad.

How much land do you need?

The number of pigs you should keep per hectare (ha)¹ depends on how big the pigs are and also how wet or dry the land is. The EU and UK organic livestock regulations give some guidance to how many pigs you can keep relative to the total area of land you have available and suitable to keep pigs on.

Organic pigs stocking rates

Type of pigs (weight)	No. allowed per ha
A sow and her litter (to 7kg)	9
Weaners (7–18kg)	60
Growers (18–35kg)	28
Cutters/porkers (35–85kg)	18
Baconers (over 85kg)	16

When you look at keeping a sow and rearing all her progeny to bacon weight a handy rule of thumb is that you need half a hectare of land. Or, put simply, one hectare will allow you to keep two sows and all their

Hectare (ha): in the metric system, a unit of land measurement equivalent to 10,000m2 or 2.47 acres. In plain English that's roughly two football pitches side by side

piglets born that year reared up to slaughter weight. If you don't keep sows and just buy weaners, your one hectare of land will support up to 54 weaners per year.

Some people allocate one area of land for the whole year, but having this amount of land assumes that you don't keep all of the pigs on all of it for the entire year. It allows for some of the land to be rested at any time so it can recover from the activities of your pigs and also so you might be able to grow some vegetables or other crops.

Moving the pigs onto a fresh area of land every few months often means more work, but can help in keeping ground cover on more marginal sites. Aside from allowing cropping behind the pigs as mentioned above, other farm livestock may be able to graze land ahead of them.

The type of land you have and other activities on it will affect the figures above. More land and fewer pigs may be needed to fit in with annual stock rotations and to ensure the survival of ground cover on your land. If you don't move them often enough pigs will eat everything. They will clear brambles (and more problematic weeds), they'll dig out and eat the roots and then they'll start on any available trees, as is clear in the previous photograph. Before they were taken out of the wood the pigs had begun to strip the bark from the larches.

2.3 Water

All pigs must have unlimited access to drinking water. In hot weather your pigs will also need a wallow to relieve them from heat and to avoid sunburn. If your land does not have a good supply and a backup supply in case of failure it may not be the right place for pigs. Water is heavy and you may have to carry a lot, every day. You will also need to provide a container for the water, which in all likelihood the pigs will turn over to make wallows. One of the containers we use is an old stone sink. I also use a cheap plastic paddling pool. When full of water this is heavy enough and large enough to stop them turning it over at which point they would chew it to death.

2.4 Fencing

Pig keeping laws four, five and six ought to be fencing, fencing and fencing. There are perhaps more stories about escaping pigs than any other piggy related subject. Nothing will cause you more worry, upset, inconvenience, aggravation, stress and possibly money than escaped pigs.

If you begin pig keeping, as I did, by buying some

weaners, when they arrive they will be about the size and weight of a smallish dog. And the chances are there will be a few of them. You will notice that your weaners have come equipped with a prominent and sturdy-looking nose, some fetching ears and a fine set of trotters. Now look again. That nose is a plough, the ears are armour and the trotters are caterpillar tracks. Yes, your pig is evolution's answer to the tank. And in the time you own them they will grow to more than 80kg (that's 176lbs or 12½ stones in old money). And they're strong.

Pigs do not escape because they are malicious – they escape because they can. When a pig awakes after dreaming of food, it will get up, sniff the ground, stick its nose into it and snuffle through it looking for food. And so on across its plot. Pigs are not looking where they are going. They are just going. When the pig reaches the other side of its patch it will meet whatever you have used to keep it in. Perhaps pig netting (a steel mesh fence readily available to buy) for which you will have paid good money in the vain hope that it alone will keep your pig in. Oh how it will laugh.

Actually it won't laugh because it won't see it, but it will feel that it has come up against something and it will push. If you have only used pig netting the chances are that it will push straight through it, if not first time then very soon. 80 kg is a lot of pig. Our sow weighs significantly over 100 kg and she takes lumps out of brick walls – literally. When you install a fence of pig netting you will need to make sure that the netting itself is on the outside of the fence posts. On the inside there should be a strand (at least one strand!) of barbed wire about 15–25 cm from the ground. As the pig walks forward, the bridge of its nose will meet the barbs of the barbed wire. It will turn and walk in another direction.

Electric fencing

To stop a pig pushing through its fencing you must provide something that it won't want to push against. We use an electric fence unit in some places and pig netting supplemented by barbed wire in others. With a little experience and with good maintenance both work equally well. Pig netting and barbed wire cost more to begin with but require less maintenance. Electric fencing is labour intensive, but it has the benefit of mobility. We move our pigs within woods and from wood to wood. Electric fencing makes more sense, but if we could afford it I would use electric fencing inside a wood that was permanently fenced with netting and barbed wire... and then I'd dig a ditch. You can't have too much fence.

Electric fences can be established as temporary, semi-permanent or permanent designs. You can buy steel fence cable, plastic cable or tape with metal wires running through it to carry the current. All types degrade over time from exposure to the elements. Tape degrades the fastest, plain wire lasts the longest. You will need to factor eventual



Improvised water trough/paddling pool





Fencing, fencing, fencing



This pig wallow created poor access

replacement costs into your budget.

You will need to provide three strands (my pigs are equally wary of wire and tape) of whichever type you choose. The bottom strand may need to be as low as 10cm above the ground when the weaners are small, with another strand maybe 10cm above that. These strands are to stop the pig and turn it around. If the lowest strand is too high it will touch the pig on the top of the head or on its back. It will then bolt straight ahead through the fence. This is a bad thing. The fence must shock the pig across the bridge of the nose to make it turn around. The top strand is to discourage jumping of the fence, which can be a particular problem with weaners. Your pigs are not likely to try to jump the fence as soon as they see it, unless something has spooked them, in which case they will approach it on the run the first time they see it. Handled carefully they will approach it gently with their snout, which will be the first thing to touch it.

You could introduce your weaners to an electric fence before releasing them by creating a mini electric fence running around the inside of a small – but solid – holding pen and keeping them in there for a few days. They will learn not to touch the fence.

Once a fence of either type is established it will need regular checking. As the pigs grub around they will shovel earth, sticks, bricks and anything else they find up against the fence. Please note, I do not say they might. They will do it. You will need to clear the fence line every day, some days twice a day. As they grow you will need to raise the bottom two strands slightly so that they are less able to shovel stuff onto the fence, and so that it still shocks them across the bridge of their now bigger noses.

Regular checking is particularly important with an electric fence. If the bottom strand connects with the ground it will make the fence useless by 'earthing' it. At best the battery will quickly run down and at worst your pigs will be out. You'll have to drop everything and go and find them, catch them, get them back in, make reparations, grovel...

Just don't let them get out, that's my advice. Fencing, fencing, fencing.

2.5 Gates and loading

When designing and installing your fence you will also need to give some thought to how you are going to get your pigs in and out of your land.

When they are small there is little problem. However, loading pigs in and out of a trailer is a skill you will need to master.

You may choose to pay for a proper gate. If you do, remember that you will still need to put barbed wire or electric fencing across it to stop your pigs trashing

it. Also many of these gates simply drop onto hinges that are hammered into wooden fence posts. You will need to modify this. Even a middle size pig will be perfectly capable of poking its nose under the bottom rail and lifting the gate off its hinges. Then your pigs will be out. You'll have to drop everything and go and find them, catch them, get them back in, make reparations, grovel...

The photograph (left), showing the old Belfast sink sunk into the ground and being used as a water trough, also shows an ill conceived entry and exit point for a pig wood. The fence was designed to be removable across the gate. A detachable electric fence ran across the gateway protecting the gate, which was good. However, the water supply and wallow created a quagmire. It was impossible to back in a trailer at that point to load the pigs. I did that. Whoops.

2.6 Housing

There are two reasons for providing pigs with a house. The first is for their shelter. Pigs, like people generally cope well with cold but they must still have shelter, particularly against the combination of wind and rain. It used to be easier to buy arks than it is today. However, if you have trouble finding one from a supplier, or perhaps from the classified section of your local paper, it is possible to make your own.

Below is a photograph of a friend (Chris Adeney)'s home-made ark. It is a wooden triangular ark, essentially made from bolted together bits of treated plywood. A similar ark to that shown, also made by Chris, is still in use three years on despite, on one memorable occasion, floating off in a flood (don't worry, we'd moved the pigs already). We retrieved it in a rowing boat. The design is appropriate for a sow with her litter (although this particular ark would not be big enough for that) as the triangular shape allows opportunity for an escape when mum lies down. A sow cannot look around as she lies down to make absolutely sure her piglets are clear – her neck is designed for looking down and ahead.

This guide is not intended as a guide to farrowing



Chris Adeney's pig ark

and so the shelter shown – or a similar shelter of your own design – will be adequate. Just make sure that your pigs can be dry and get protection from the sun, wind and rain when they need it. You will be amazed at the weather that they will happily stand out in.

Your pigs should always have clean bedding. Clean bedding generally means clean pigs. Straw is the most commonly used bedding.

2.7 Money

You must have a sound idea of how much money you will need to commit to fatten your pigs. The table below shows the estimated cost of fattening two weaners for meat, using organic feed:

The cost of fattening two weaners

Item	Cost
• Two organic rare breed 8 week old weaners	£120
• Electric fence unit, posts, cable, battery, etc	£250
• Pig ark	£300
Organic feed	
[(306kg per pig @39p per kg) x 2]	£238.68
Abattoir, cutting, curing and packing fees	£144
• 10% allowance for other costs	
(vet, transport, identity tags, etc)	£91

Total estimated cost £1143 68

The figures above are calculated for two pigs. Pigs are social animals and should not be kept alone. The more pigs you have the more you can spread the capital costs² but the greater will be the variable costs³. Also, we have assumed a worst possible case scenario – that you are completely new to pig keeping and will need to buy everything.⁴

Don't be too frightened – this table should only be used as a guide. It is possible to save money by doing things yourself instead of paying for them. On the other hand, we have not shown any cost for buying vehicles. We have always managed to borrow a trailer but you may have to pay a haulier.

As an example let us consider the cost of feeding your pigs. What you choose to feed your pigs will make the single largest difference to the cost of feeding them. For now let's assume that you will need to buy commercial feed and work with that:

- Over the last year or so the commodity price of grain (the key ingredient of pig food) has risen markedly and this makes pig food more expensive. Global changes in commodity price will affect the cost of raising your pigs.
- 2. Fences, arks, equipment. etc.
- 3. Pigs and feed basically.
- The figures are based on quotes at the time of revising this guide September 2008).

The difference per kilo on the prices paid for feed in January 2007 and January 2008 was an increase of 10p. Given that each weaner could be fed 306kg of feed during their lifetime, that equates to a cost increase of 630.60

• Your ability to shop wisely and develop good relationships with your suppliers will be at least as important. If your usual supplier quotes £9.75 per bag of organic feed and another supplier quotes £9.00 should you switch?

When making the decision you have to consider:

• Bag sizes

The first price quoted was for a 25kg bag of feed, equating to £390 per tonne, the second price is for a 20kg bag of feed which equates to £450 per tonne – quite the opposite of the saving it first appeared.

Cost of transport

If you can buy feed by the tonne (40 bags at a time) your feed supplier may deliver, saving you the cost of a round trip with land rover and trailer. Taking fuel and wear and tear into account these kind of trips must cost around 70 pence per mile. Having to pick up feed rather than having it delivered can make a big difference to your overall cost to say nothing of the extra time that may be involved.

 How much you actually feed your pigs I feed my pigs far less than the recommended maximum of the manufacturers. Because my pigs are used to manage woodland they have access to and eat an awful lot of forage⁵. They have some proper pig feed to ensure they are getting all the vitamins etc. that they need. But if they are getting some of their feed from forage they should not be fed the full amount indicated by feed suppliers. It will make them fat – contrary to popular myth a fat pig is not a happy pig - and it will cost you money. The rule of thumb is that they should have as much as they will eat in 20 minutes until they are 15 weeks old. From that point on be careful, as they can run to fat. This is particularly true for the slower growing breeds. Hay, silage etc. can also be added as forage to reduce costs.

2.8 Legislation

People who keep pigs – even pet pigs – must register their details with Defra⁶. Defra will then allocate a 'herd number'. Contact your local Animal Health Divisional Office to register. Defra have a useful 'Guide for New Pig Keepers' which gives details of the various registrations and licenses required for pig keepers. This can be found at http://www.defra.gov.uk/animalh/id-move/pigs/pdf/new_owner_guide.pdf

You must register the pigs even if you do not own

them but are responsible for their day-to-day care and management. If you move premises or stop keeping pigs, you must inform your local Animal Health Divisional Office. Look in the phone book or on the Defra website at http://www.defra.gov.uk/animalhealth/about-us/contact-us/search/index.asp for details of your local office

This is so movements of animals can be tracked properly. When you buy pigs, the person from whom you buy them must provide you with a copy of their movement licence. You must submit the appropriate reporting form to your Local Authority within three days of the pigs arriving on your holding. You then need to inform the Local Authority of every subsequent movement of pigs on or off your holding using the appropriate form.

When a pig moves onto your holding, no other pig can move off for 20 days except for slaughter or to a slaughter market. In addition your pigs will need to be marked in compliance with regulations using either approved ear tags with your herd mark on them, ear tattoos or an approved slap marker⁷.

You must obtain a copy of the full Defra rules to ensure compliance.

You should also check for local regulations with your local planning office and, as a matter of courtesy at the very least, with your neighbours.

Cross Compliance

Cross Compliance regulations are not specific to pig owners, but if you are keeping pigs outdoors you should at the very least be aware of them.

If you are claiming any payments from Defra on your land – this might be under the Single Payment Scheme (often known as 'Single Farm Payment), or an environmental scheme such as Entry Level Stewardship or Organic Entry Level Stewardship then you are required to meet Cross Compliance regulations.

Cross Compliance requires farmers to draw up a basic soil management plan called the Soil Protection Review that should take account of any problems like erosion or poaching on your land and the actions you will take to reduce these.

In rooting and removing vegetation pigs can cause soil to be more prone to erosion and run off. When you are considering the amount of land you have available for pigs and how many pigs you might keep bear in mind that they shouldn't be kept so tightly stocked, or on the same piece of land for so long that they cause these kind of problems. No one expects you to keep growing green vegetation across your entire pig pen all year round, but you should have some kind of rotation planned that allows land to rest in between batches of pigs and for vegetation to regenerate, or crops to be sown.

^{5.} Forage is food that the pigs scrub up or root out from the woods. Brambles (leaves, thorns, roots and all), any available vegetation, worms etc all count.

^{6.} Department for the environment, food and rural affairs (www.defra.gov.uk)

^{7.} A device for creating a tattoo on a pig's shoulder. Both shoulder's should be slap marked.

3. Choosing pigs

When choosing your breed you should think about its environment and what sort of food you want to make from it.

Your pigs are, we hope, going to be running outside on a non-additive natural diet consisting of commercial feed, fresh fruit or vegetables, grass and water. Your pig will not grow as quickly as intensively-reared commercial pigs, but it will be fitter, happier and, in our experience, taste a lot better, as its meat will have matured over a more natural timespan. Your pig is likely to take between 26–36 weeks to get to a size where it will produce good free-range pork.

If your pig is to live outside you will need to choose an appropriate breed. The traditional UK breeds include Berkshires, British Lops, Gloucestershire Old Spots, Large Blacks, Middle Whites, Oxford Sandy and Blacks, Tamworths, British Landrace, British Saddlebacks, Large Whites, and Welsh. These breeds are all appropriate and you will gain an inner glow from your support for the conservation efforts you will be making towards the preservation of British pig breeds, many of which nearly died out as the pig industry switched to provide supermarket pork. Also becoming popular amongst small-scale pig keepers – and worthy of a mention – is the Kune Kune, an import from New Zealand.

This guide is not the place to attempt to explain the pros and cons of the individual breeds. Some breeds grow faster to porker weight but have a tendency to run to fat beyond that weight. Some breeds provide not so good pork but superb bacon. Some pigs can provide both pork and bacon, as long as you send them off at the right time.¹ Each of the breeds mentioned above will do well as long as you follow best practice. There will be plenty of material available at your local library and/or on the internet to start your research. I am sure you will enjoy choosing a breed, or perhaps even a crossbreed. Go and talk to a few pig breeders and ask their opinion. Rest assured they will give it to you.

Ultimately the choice will be yours, but you will need to know the food that you are growing your pig for. You will need to consider four main options:

- Pigs grown for pork (joints, chops etc) are usually killed before they reach 80kg live weight. Dead weight is reckoned at about 72 per cent so a 75kg pig should provide about 54kg of meat
- Pigs grown for curing (bacon and ham), on the other hand, should be sent for killing at a weight of over 85 kg. This spreads the killing, transport and cutting costs over more meat, making it more cost effective.
 Suitable breeds tend to have longer backs for more rashers

- Sausages are the most popular piggy product. If you want to put a whole pig down to sausages you don't have to choose a bacon pig (the length of back makes no difference), but you shouldn't send it for killing until it reaches baconer weight. As with the baconer this is cost effective
- A mixture of the above.

3.1 Where should you buy your pigs?

Whatever breed or crossbreed you choose it is advisable to buy the pigs direct from the breeder and not through a market, as this reduces the risk of introducing infectious disease.

When choosing a breeder from whom to buy it may be helpful to look for membership of your chosen breed's society.² Membership should demonstrate a commitment to the breed and a willingness to submit to the scrutiny of one's peers. Beyond that I would recommend looking for a Soil Association approved organic breeder from within their ranks. This may not be an infallible guide to quality but it is as close as you will get in the UK. If a breeder has earned Soil Association approval (and it is earned, it is not a right and it is regularly reassessed), then the Association will have done much of the work for you.

Beyond that I will pass on some advice from a 1956 pig-keeping guide that has served me well when looking at pigs:

- A healthy young pig has bright eyes and a moist snout
- A healthy young pig has a shiny coat with the hairs lying close to the body. This is what is meant by 'bloom'. If the hairs stand on end, the coat is 'staring', and a sick or a cold pig generally has a dull, staring coat. Pigs can, therefore, best be judged when they are comfortably warm
- An unhealthy pig stands about in the pen with its back arched, or it may bury itself in the bedding
- Healthy pigs when suddenly disturbed may jump up and run about 'barking' furiously, or they may retreat into a corner and remain watchful. [Or they may, like mine, jump the bloomin' fence and run away! They came straight back – jumping the fence again – when they realised I was going to feed them, but I won't try that again]
- A curly tail is a good sign, but a tail that hangs down is not always a bad sign.
- 1. You may hear the term 'dual purpose pig'. This is what it means.
- 2. See www.britishpigs.org.uk/breedreps.htm or call 01223 845100.

I love the last point. What on earth does it mean? Generally, pigs' tails curl when they are moving and hang straight when they are relaxed!

3.2 How do I collect or move my pigs?

Firstly, don't forget your Defra movement licence if they are leaving your holding, and don't forget your copy of the supplier's licence if you are receiving or collecting pigs from someone else. Secondly, be sure that the pigs to be moved comply with the pig identification rules.

Contact the Defra helpline on 0845 050 9876 or see www.defra.gov.uk for more information

It may be possible for you to negotiate delivery of your pigs by your chosen breeder. If not, then you will need to transport them yourself. We are lucky enough to be able to gain access to a stock trailer, which we can tow behind a vehicle with a tow bar. In the past we have used a horsebox, which worked well, and a very old smaller wooden stock trailer, which didn't work so well as one of the pigs ate its way out through the wood. If you do not hire someone to move your pigs for you here are some useful tips.

- Pigs will do pretty much anything for food
 They will get to know feeding time and that you are
 their source of food. We half fill a bucket with food
 and shake it. With a little practice you will be able
 to get them to follow the bucket. (Remember this
 if they escape. I managed to get a sow and her litter
 to follow me for about 250 yards back into her pen
 using this technique)
- Pig fondling

Pigs, like all animals, should be treated gently. The way that you treat your pigs for their duration will have a direct bearing on how they behave when you need to move them. Like children, bad behaviour is learnt. Speak quietly to your pigs and credit them with a little sense, even though at times they may show few signs of having any. Spend 20 minutes with them at feeding time so that they are comfortable with you around. Remember that using your tact, cunning and patience will develop their trust. Haste, hustle and violence toward them will lead to hassle for you.

• Preparation

When you move the trailer into place it is likely to make the pigs nervous. This is a bad time to move them. Put the trailer in place the day before you need to move them and leave it for the pigs to get used to. During that time put the pigs' feed in the trailer at feeding times. I have found feeding them

morning and afternoon in the trailer the day before I need to move them very helpful. On the morning I want to move them I simply throw their morning feed into the trailer and they go in, at which point I shut the door behind them. One word of warning: if you do leave the trailer be sure to position it so that they can only get at the ramp and inside. Our pigs chew trailer tyres, lights, cables, in fact everything given half a chance.

• Stav calm

When we first started moving pigs we tried to do it as a team event. It was a bad experience. The more of you there are involved, the more you will be talking, somebody will squeal if they think the pigs are going the wrong way, somebody else will end up doing the wrong thing at the wrong time, you'll all end up shouting at each other and the pigs, not surprisingly, will be as stressed out as you are. Plan the move. Get everything in place the day before (people can help with this if they want to). Practise loading and unloading them if you have time. When actually loading use as few people as possible.

• Think about it

There is a reason why people keep pigs rather than the other way around. We are smarter than them... mostly. Use that to your advantage. You will often hear that pigs are as intelligent as dogs. This may be so. Sadly, piggy intelligence is less like that of a highly trained obedience breed, and more like that of a Jack Russell. An 80 kg Jack Russell. Think about what you want them to do and plan a strategy to get them to choose to do it. Use food as an incentive. If you tell them to do stuff, like with a Jack Russell, you're just handing intelligence to the enemy. Trying to make a pig do something is like trying to herd cats – it's not going to happen.

4. Keeping pigs

If you have prepared properly for the arrival of your pigs you will have minimised what now needs to be done.

4.1 Feed and water them

You will need to feed them twice a day, making sure that they have plenty of water available. The amount of food they receive daily will change as they grow. Your feed manufacturer will be able to provide specific guidance about how much of your particular feed they should get, but I have given a general indication in the table below.

Weights and food consumption at different ages

Approximate live weight	Total feed per head per day
9–23kg	0.5-1.1kg
23-36kg	1.1-2.0 kg
36-55kg	2.0-2.7kg
55-77kg	2.7-3.4kg
77-100 kg	3.4-4.1kg
	live weight 9-23kg 23-36kg 36-55kg 55-77kg

There is greater danger in over-feeding than under-feeding. Never give pigs more than they can clean up in 20 minutes. They should always be ready to eat a little more when they have finished a meal. For comparison purposes, the table below shows the feeding schedule recommended by the manufacturer of the feed I give my pigs (Allen & Page), and how much food a weaner would consume over time if fed according to the schedule. Each weaner would consume 306kg of food, which at a cost of 39 pence per kg equals a feeding cost of £119 per weaner.²

Allen & Page feeding guidance

Age	Feed per pig (per day)	Feed per pig (per week)
8–11 weeks	0.9kg	6.3 kg
12-15 weeks	1.4kg	9.8kg
16-19 weeks	1.8kg	12.6kg
20-25 weeks	2.3 kg	16.1kg
26-30 weeks	2.7 kg	18.9 kg
Total feed per pig	9	305.9kg

These figures are for home-made meal and are from a 1956 smallholders' guide. Typically, less modern commercially-made feed is necessary. Refer to manufacturers for details.

I have never fed my pigs more than 2.7kg each per day, and I had to cut back on that as they were running to fat. I now feed 1.8kg per pig per day from week 16 to week 20. This means that over the time I keep my pigs each weaner consumers 253kg of feed, 53kg less than it says on the bag saving me £20.67. But I don't do it for the money. At 2.7kg per day my pigs were too fat.

When your pigs are killed they are weighed and a fat depth measurement is taken. Make sure you ask your butcher for the tags or phone the abattoir yourself, they are a very good way of monitoring your pig husbandry.³ Traditional breeds raised outdoors do tend to be fatter than intensively-reared pigs raised for supermarket pork. I aim for my pigs to have a fat measurement of no more than 25 mm. I find that fat much deeper than that leads to an unacceptable ratio of fat to meat on joints and in particular on bacon. It also means added cost for less benefit.

Only experience will allow you to manage your pigs' growth properly. It will be affected by many external factors. The reason that intensively reared pigs tend to be raised entirely indoors is to eliminate as many variables as possible.

The quality of feed is one factor that will determine growth. Shop around but beware - many feeds contain genetically modified (GM) soya or growth promoters. The pig industry regards soya as the best crop for giving pigs the right amount of protein. Sadly, most soyas are now GM. There are three main soyaproducing countries - the US, Argentina and Brazil, and only Brazil is now offering GM-free soya in any quantity. If you want to offer pork that has not been fed with GM animal feed you will have to pay a premium. Organic standards require organic feed that has been checked to ensure it is GM-free. It is also possible to buy GM-free non-organic feed. But most of the pork people generally buy will have been fed on GM soya. Another source of protein for pigs used by some feedmills is fishmeal.

Hormones have not been used in UK pigs for a long time, and since 1 January 2006 all antibiotic growth promoters have been banned within the EU.

The veterinary use of antibiotics in farming now has to be authorised by a vet. The routine use of antibiotics is prohibited under SA standards. Copper diet supplements and probiotics for growth promotion are also prohibited in organic pig diets.

At one time I did experiment with buying cheaper feed in bulk. At the time, it was possible to buy additive free feed for 20 pence per kg and I tried it, but for me it didn't work. My pigs took noticeably longer to fatten (more food in the long run). Worst

3. When I had two boars killed their 'pay' weights (killed and gutted, heads and trotters on) were 76.3 kg and 71.4 kg. Their fat depths were 17mm and 14mm respectively. We're talking quality pig keeping here.

^{2.} Based on average organic pig price when buying bagged feed September

of all, the meat from them was the only meat about which I have ever had a complaint. Find a supplier of good quality food and stick with it.

I like to think that by roaming free in the woods my pigs have access to what was probably once their natural diet. They root around and eat forage. I do provide them with commercial feed in addition to ensure that they are receiving the necessary vitamins etc. I hope that the variety of food they find enhances the flavour of their pork.

The amount of space your pigs have will also affect their growth. It determines how active they can be. The more they move the more fuel they use for movement and less may be used for growth. On the up side, I believe that the freedom of movement enjoyed by my pigs encourages the growth of quality meat. And besides, the forage they find allows me to feed them less (as I mentioned above), saving a bit of money on food. I believe there is a trade-off between time and taste. You may wish to experiment with your own pigs. The time of year will affect their growth. I have found that litters raised over winter grow slower than those raised over summer. I presume they are burning more food to keep warm and there is less forage available.

Their place in the pecking order will also affect their growth. No, really! The number of piglets that a sow can raise is limited by the number of teats that she has (it varies from sow to sow). The first teat is the one closest to her head and this has the best supply of milk. The supply diminishes the further down the teats you go. The biggest piglet when born will get the first teat, and so on down the line. The piglets will keep to their adopted teat from that day until they are weaned about eight weeks later. This means that from the start the biggest piglet gets the most food and grows faster and that is why piglets from the same litter vary so much in size. It is strange but it is true.

Left alone, larger weaners will eat a disproportionate amount of the daily feed. You can compensate for this by making use of the 20 minute feeding rule and making sure that your pigs have enough space at the trough. A pig can only eat so much in a given time. Generally the little ones can eat as fast as the larger ones, as long as they get fair access. So make sure your piglets have a trough big enough for their number, or alternatively do as I do and scatter the feed on the ground. As my pigs are used to manage woodlands, I broadcast the feed into the areas of forage that I would like cleared. The pigs have to go and find it. My pigs work for a living and the harder they work, the more food they get.

You can also experiment with feeding them natural foods, and as part of a community food project you may be uniquely placed to do so. Other foods for your

pigs might include grass cuttings, weeds and waste from your garden or allotment (but not from your kitchen). As a rule it is best to provide some variety rather than too much of any one food. Not too many grass cuttings for example.

I was once given two tonnes of organic carrots. I gave the Berkshires I was then keeping too many and they got diarrhoea (and I couldn't sneak up on them in the dark anymore).

Are there any feeding restrictions?

Yes. Pigs cannot be fed catering waste, also known as swill. The Animal By-Products Regulations 2003 bans feeding animal by-products, including catering waste, to any farmed animal. Catering waste is defined as "all waste food, including cooking oil, originating in restaurants, catering facilities and kitchens, including central kitchens and household kitchens." Pigs, therefore, cannot be fed any kind of kitchen or restaurant waste, meat, old sandwiches, or animal by-products. Swill feeding has been banned since May 2001 because pigs are very susceptible to disease and can easily pass diseases onto other animals or humans.

The easiest way of ensuring compliance with this legislation is not to feed your pigs anything that may ever have been in any kitchen anywhere, or may have been in contact with any sort of meat or animal by-product.

And don't give them any citrus fruit. Their stomachs can't cope.

4.2 Healthy pigs

Prevention is better than cure

The prevention of pest and disease problems and high levels of management and husbandry is the key to healthy pigs. The Soil Association Organic Standards require producers to adopt an animal health plan. All producers must submit a health plan during the early stages of their conversion. An animal health plan should provide a written strategy for the management of animal health to organic standards during the conversion period, and beyond.

Whether or not you choose to go organic you should produce an animal health plan. By producing a plan, you will be able to demonstrate (to yourself as much as to anybody else) that you understand what is required for the management of your pigs' health.

^{4.} Intensively-reared pigs are weaned in days rather than weeks, specifically to avoid this

This paragraph is quoted directly from the Defra catering waste leaflet which can be found at http://www.defra.gov.uk/animalh/by-prods/pdf/swill-leaflet.pdf

A plan should:

- Identify all significant potential livestock pest and disease problems you might face
- Outline how you intend to prevent their occurrence
- Outline what treatments will be used
- Identify how you intend to improve overall herd health and reduce reliance on veterinary treatments.

As a rough guideline, under SA standards the animal health plan might:

- Identify all persistent mineral deficiencies, disease and parasite health problems that occur on the farm
- Identify husbandry changes that will be needed in order to remedy problems, such as the adoption of a clean grazing system, appropriate stocking levels, improved hygiene practices and improved housing ventilation
- Identify all treatments that are used or may have to be used – at all stages of the conversion period, and beyond. The plan should identify how the use of these treatments will change throughout the conversion process and how you intend to reduce reliance on veterinary treatments, ensure organic withdrawal periods are observed, and so on
- Identify different management practices for all ages of stock including the feeding regime, housing details, medication procedures, grazing policy and the management practices that will develop immunity (for example, selection for breeding, choice of land for use by farrowing sows and so on)
- Identify record-keeping procedures and systems.
 Producers are expected to keep detailed records and invoices of all bought-in feeds, livestock movements and veterinary treatments, along with field and crop records.

As a new pig keeper you are strongly advised to get advice from your veterinary surgeon in developing the plan – before you get your pigs.

The animal health plan should not be seen as a 'one-off' document, only to be filed away – never to darken the office desk again! It is extra work but provided the plan is revisited and revised on a regular basis (perhaps once a year) it can become a useful management tool for monitoring pest and disease problems in your pigs, identifying what has/hasn't worked – and any key problem areas. It should also be updated (preferably with your vet) according to the progress or problems that you experience.

The animal health plan should be drawn up so that a colleague could step in and maintain your pigs to the standards for a short time. Copies of the animal health plan should be made available to the people involved in caring for your pigs, the veterinary surgeon, farm consultants, the certification inspector and so on.

Look after them, literally

The health plan will help you to prepare for your pigs and will minimise any health problems. It should include spending 20 minutes with your pigs, twice daily at feeding times. You will be able to watch them eat during this time, the best time for checking their health and wellbeing. Very often the first time that something is not quite right with your pig will be that it does not eat, or does not show its usual enthusiasm at feeding time.

Another early sign may be 'scouring', probably the most common trouble in young pigs. Scouring is diarrhoea. The anal area looks sore and the droppings are liquid. As in people a lack of cleanliness is often to blame. You will need to discriminate between dirt and filth. As I have mentioned, I feed my pigs on the dirt of the forest floor with no ill effects. But a filthy trough or pail provides the perfect environment for harmful bacteria to thrive. As does food that has been allowed to get damp in the store. If you are feeding from a trough, keep it clean.

Another likely cause of scouring is something they may have eaten. Make sure they have plenty of water and monitor them more closely whilst feeding them a restricted diet (stick to bought-in feed perhaps) for 24 hours. If they show any additional signs of distress or if the problem does not clear up after this time you may need to isolate the pig and call in the vet.

What veterinary drugs can I use?

Where effective, the organic standards recommend the use of homeopathic and herbal preparations in preference to synthetic chemical medicines, such as antibiotics, anti-parasitic drugs, hormones, anti-inflammatory and analgesic drugs, and sedatives. However, the standards do permit the use of synthetic chemical medicines in order to avoid suffering and distress, and where homeopathic and herbal preparations would not be effective.

Will there be longer withdrawal periods?
Under organic livestock management, preventative husbandry and management practices must be introduced to avoid and minimise pest and disease problems – and reliance on chemical treatments. Homeopathic preparations have no organic withdrawal period. There will be an extended meat withdrawal period for any chemically synthesised and non-synthesised veterinary product used in organic pig systems.

As a rough guideline the organic withdrawal periods for chemically synthesised veterinary products, such as wormers or antibiotics, will be:

- 48 hours where no withdrawal is specified
- Seven days for products with a non-organic withdrawal period of 0–48 hours
- Three times the non-organic withdrawal period for products with a withdrawal period of between 2–18 days

- 56 days for products with a non-organic withdrawal period of between 18–27 days
- Twice the non-organic withdrawal period for products with a withdrawal period of 56 days or more.

For more detailed information on the organic withdrawal periods, please refer to the SA standards.

Antibiotics, copper diet supplements and probiotics for growth promotion are all prohibited.

Soil Association licensees and food and farming members can contact the Soil Association advisory team for information on organic withdrawal times at any time (T 0117 914 2400). You should also ring this number if you wish to become a food and farming member – and you do not have to become organic to join.

Full records of all treatments must be kept and made available at inspection. A veterinary record sheet is available from the Soil Association or from following the links for 'looking for a form' on the website at www.soilassociation.org/certification

If you want further details on using homeopathy in pigs there is a useful book by George Macleod referenced at the end of this guide.

In addition a group called Homeopathy At Wellie Level (HAWL) regularly hold training courses on the use of homeopathy in farm animal production. They can be contacted by calling 01666 841213 or go to www.hawl.co.uk

When caring for the health of your pigs, I would argue that the SA standards are not just best practice, they also represent plain common sense. In all the years I have been keeping pigs I have only had to call the vet out once. I had to get him to sign off so that I could send some healthy pigs for slaughter during the foot and mouth epidemic of 2001.

Prevention really can work.

5. 'Harvesting' your pig

I had not properly prepared the first time I sent pigs to the abattoir. To start with I didn't know where one was, how to choose between abattoirs and I certainly was not ready for the myriad complexities of dealing with a butcher. As with everything, a little preparation goes a long way when harvesting your pigs.

5.1 Abattoirs

Make sure you use a licensed abattoir – that is one where the carcass of your pigs will be inspected by a Defra vet and the meat will be given its ministry stamp. Aside from ensuring that the abattoir complies with health and safety and animal health regulations, without a stamp you cannot sell the meat.

Ask around and get recommendations from pig keepers that you feel have a similar approach to you. If you spend up to 30 weeks caring for your pigs and treating them gently, you will not be best pleased if they are received at the abattoir by a thug who beats them to get them off the trailer. Your fellow pig keepers should be able to tell you which abattoir to go to, to whom you should speak when booking your 'private kill' and give help and advice about the actual process of delivering them (where the offloading ramp is at the abattoir, for example).

Delivery

If possible, go and reconnoitre the abattoir in advance of taking the pigs. This is particularly important if you are borrowing a trailer and have little or no experience of reversing it. Trust me – I've been there.

Be sure to negotiate a delivery time that will mean your pigs will be off the trailer, straight through into the run and killed. This is not a time for them to be standing around getting stressed. Get them off the trailer yourself. Mine are too happy lying about in the nice cosy trailer and occasionally need a gentle shove to encourage them to get up before ambling off the back and into the abattoir, much to the amusement of the abattoir staff who tellingly are not used to seeing happy and relaxed animals at this time.

Some abattoirs may offer lairage¹ to your pigs the night before killing. This can be more convenient for them and may be acceptable if you can be sure they will be kept in a well bedded pen and treated well.

Don't go mob handed, it's not a spectator sport. Your pigs will reflect your behaviour if you are calm and gentle throughout, as long as no one else spooks them.

 A lairage is a place where livestock is housed or 'laired', especially at markets, docks or abattoirs. Remember to provide a movement license, as mentioned earlier, and to mark your pigs accordingly. Since the 1 January 2008 abattoirs slaughtering pigs also have to "request, receive, check and act upon" Food Chain Information (FCI) for all pigs sent for slaughter. This means that the first time you send pigs to an abattoir you will have to submit production site details, which the abattoir will then keep on file.

You will also have to provide additional consignment details as well as notification of any casualties or pigs which have been treated with medication in the past 28 days

To comply with animal health legislation and to protect against the spread of disease you must clean your trailer and vehicle before leaving the premises, or notify the abattoir of when and where you are going to clean it. Usually there is a jet wash provided. You can check this when you reconnoitre.

5.2 Butchers

Again, preparation is the key. Ask around and get recommendations from pig keepers that you feel have a similar approach to you. You may be lucky and find that the butchery attached to your chosen abattoir has an excellent reputation. This is not the case with many of them as they are meat processors rather than butchers.

As with abattoirs, if you spend up to 30 weeks caring for your pigs and treating them gently, you will not be best pleased if they are cut and processed by a butcher who takes no pride in his profession. He may, for example, decide to save himself a bit of time and use a chopper to cut the leg into joints rather than a saw. This will leave bits of splintered bone in the meat. Your fellow pig keepers should be able to give you help and advice about making arrangements local to you.

You may wish to try your preferred local butcher. If so, bear in mind that in all likelihood he (I say he for convenience even though one of mine is a she, no offence intended) will not be geared up for cutting, packing and curing a large number of pigs, perhaps a whole litter. I have agreed with my butcher to send no more than three pigs at a time and I must agree a week or two in advance with him when they will be delivered. Doing the job well takes time that he is not able to spend serving his shop customers, and storage is an issue for him.

Cutting and curing plan

As with your pigs' health plan you cannot prepare

your pigs' cutting and curing plan too early. Your butcher will need to know whether your pigs are to be cut for pork, sausages, curing (ham and bacon) or any given combination. You will need to tell him whether or not you want to have back head, trotters, tails, ears and offal (you may also need to tell your abattoir). If you have a friendly abattoir they will collect the blood for you should you wish to make or have made black pudding, again as long as they know in advance.

I have found it best to supply my abattoir and my butcher with a complete set of the written killing and cutting instructions before delivering the pigs to be killed (keep a copy for yourself).

For the cutting of a pork pig you might ask your butcher for each back leg to be cut into two roasting joints with the bone in. The back (commonly known as the loin) can be either cut into two roasting joints (which can be boned and rolled if you want) or cut into chops. The tenderloin (a prime pure pork cut) also comes from the back and can be supplied separately. The shoulder (generally includes the neck in butcher's parlance) can be cut into another two roasting joints, which are often boned and rolled, as they are an awkward shape.

If you prefer more sausages and fewer joints, put the meat from the shoulder into sausages. The bottom of the front leg is called the hand, and makes a small joint that you would need to cook carefully and is really best put into sausages. The belly can be boned and rolled into two roasting joints, but they are quite fatty and again the meat is better used for sausages.

Remember to ask to have the ribs, as they are great for the barbecue, and the kidneys, liver and any other offal you desire. Some people like the trotters and head, but you will need to tell your butcher if you would like them as most people don't want them.

For roasting joints remember to ask the butcher to score the meat and always discuss and agree packing instructions. We insist on joints vacuum packed and labelled, chops sealed in twos on trays and sausages sealed in about 500g trays (the number of sausages will depend on the thickness you agree).

There are so many possible – even regional terminological – variations to the above that there is enough to fill another book. The important thing is to talk to your butcher and get it agreed and written down well in advance.

Sausages

Sausages are probably the most popular product from our pigs. Be very careful when dealing with your butcher about what goes into them. People usually worry about unseemly bits of pig being included, but that is not really an issue these days. Far more of a

worry are commercial sausage mixes. Just because your butcher sells homely looking 'pork and leek' sausages do not assume that there are any leeks in them, or that pork and leeks are the only ingredients.

It is unlikely that your butcher mixes his own blend of herbs, spices, meal and fresh leeks to make a batch of sausages. Most of these homely looking flavours arrive by the kilo in readily prepared sacks for the convenience and to add to the profitability of your butcher. They will in all likelihood contain a long list of additives that, if you knew what they were, you would not choose to mix with the meat from your beloved pigs.

If you can find a butcher who mixes his own sausage mix and will guarantee and explain any additives used, treasure him. If not I recommend once again falling back on SA organic standards. Insist that your butcher uses an association approved sausage mix that you are happy with. Also, be sure to ask for natural casings (sausage skin).

It is also likely that your sausage will not be the same colour as supermarket sausages, even horrendously expensive ones. Partly this may be explained by an avoidance of colour 'fixing' additives. It may also be explained by the percentage of real meat they contain. Most commercial blends list pork and pork fat as separate ingredients. The fat makes the sausage look whiter.

Bacon and hams

If you would like bacon and hams from your pigs you will need to be sure your butcher can accommodate you. The basic choice is between wet and dry cures. Wet cures use a brine recipe. If you are using a good butcher he will not consider injecting brine, a commercial practice, but instead will soak the meat in a brine solution for a specified period. Dry curing involves laying the meat to be cured in salt. Curing is a skill, so do not be too shy to test your butcher's wares before letting him cure your pigs.

Logistics

As a general guide at the time of revision of this guide (September 2008) it will cost about £20 per pig for killing. Butchers charge around 60 pence per kilo for a basic cut and pack (this works out at around £16 per side²). Sausages cost an additional £1.20 per kilo (some butchers add another 10 pence per tray for packing). Curing bacon and ham also costs around £1.20 per kilo and again there may be an additional charge for slicing and packing, which is fair enough given the time involved.

It is possible to choose a breed, choose a pig, fatten it to about 75–80kg and send it for killing with

2. Half a pig, split head to tail, is called a side

instructions to the butcher to cut some for joints, cure the hams, and make bacon from the belly and sausages from the remainder. (Or any similar combination.) A complication of this approach is that your ham and bacon will take time to cure. Your pork joints may be ready the day your butcher gets the carcass from the abattoir. And your sausages may take a few days, as they need to be minced, mixed, made and hung to dry before being packed. This approach will require several trips to the butcher and, since the meat comes back at different times, can make distribution more complicated.

I use a sort of natural selection process. By the time your pigs get to about 30 weeks there will be 'bigguns' and 'littluns'. I choose the bigguns and take them to the abattoir with instructions for the butcher to cut and cure them for bacon (the bits not used for ham/bacon can go into sausages). Two weeks later I take the remaining littluns (who have now had extra feeding and growing time) with instructions to cut them for pork and sausages. A week after that all is ready for collection and distribution.³

5.3 Legislation

The least complicated legislation with which you must comply will be relevant if all the meat from your pigs is going to be shared amongst your group. If that is the case the members of your group are the final customers of your butcher. In this case your butcher means whoever is cutting up your meat for you, be that the abattoir or your local butcher, and they have to comply with legislation relevant to their business.

If, however, money has changed hands between you and people – your customers – to whom you have sold meat, then things become a little more complicated. If you collect all the meat from the butcher and distribute it to your customers then you will have to comply with various acts of law relevant to food safety and hygiene.

As a rule of thumb how complicated things become is determined by whether or not the meat is returned to you in sealed packets (as in vacuum packed joints, sealed packets of sausages and bacon etc) or not, and whether you have to store it before it is collected or not.

- If the meat is sealed when it comes to you from the butcher and remains sealed until collected from you by the customer then you will need to comply with the same food health and safety legislation as a general grocers or delicatessen. The law will not regard you as acting as a butcher
- If the meat is not sealed when it comes to you, or

if it comes to you sealed but at any time between your taking possession of it and it passing to your customer it is unsealed, then the law will regard you as acting as a butcher. You will need to apply to register as a butcher's shop and comply with all the relevant legislation.

You will need to check your situation with the licensing authority (food hygiene) section of your local council. The guidance given above is very loose and only your local licensing authority will be able to guide you appropriately. My understanding comes mainly from guidance given on the website of the Food Standards Agency www.food.gov.uk

Up until 1 January 2006 butcher's shops had to be licensed with their local authorities. Since then, such businesses will no longer require a license to operate, but will still have to register with their local authority and operate Hazard Analysis and Critical Control Pathway (HACCP) -based food safety management procedures.

There is much useful advice on the Food Standards Agency website, but you really must talk to your own local licensing authority to be sure of your compliance. I recommend you come to an arrangement where any paying customers are recognised as members of your community food project. All can then collect their meat from your butcher – who can be asked to make sure everything is packed and labelled accordingly. Another solution – although not for the faint hearted – is to establish your own licensed cutting premises and to sub-contract your own butcher when you need to⁴. This is not cheap, although grants may be available, and is quite a commitment.

^{3.} The sausages from the bacon pigs can be either collected earlier or they can go to the butcher and be offset against his charges to save you a trip.

^{4.} See section 6.3, 'Whiteholme Farm', for further details.

6.1 Pelican Pigs

Jim Pettipher

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Pelican Pigs is made up of four people with different skills, but sufficiently similar ideas, who formed a community food project to raise our own rare breed pigs and persuaded other like-minded souls to invest in it. We wanted to produce food we could trust and have fun doing it. Our friends and family invest money in our project by buying themselves food from our pigs. The money pays the project's bills. The four members get 'free' pig as payment for our work. New investors are always welcome and all are encouraged to come and see the way we keep the pigs. They can then see where their food comes from.

How the project works

The four members have different things to offer. Whilst each of us lives close to the pigs we do not have equal amounts of time to offer. The workload is divided into daily jobs and other jobs. Twenty minutes feeding twice a day is the only daily job, but it accounts for most of the work. We operate a feeding rota, which is divided into weekdays (subdivided into mornings and evenings) and weekends. A person is responsible for weekday mornings, another is responsible for weekday afternoons and a third is responsible for weekends. The fourth member is available for feeding when needed but is also the project's treasurer, administrator and salesman. A mixture of negotiation and beer bartering agrees other jobs.

Cash flow is key to the project's successful operation. Over time a waiting list of investors has been built up. The project now owns and breeds from a sow called Sausage and she has on average two litters every three years – a low farrowing rate but we are not a purely commercial operation. Once Sausage has delivered a litter and the immediate danger period is past – usually after about a week – investors are contacted and offered the opportunity to invest in the piglets. A range of investment levels is available, from half a pig in weight made up of pork joints, ham, bacon and sausages through to a Sunday roast box. The contents and profit/loss levels of the latter are shown in the following tables.

Sunday roast box contents and prices³

Item	kg	Qty	£/kg	£	
Roasting joints	3	2	6.30	37.80	
Sausages	0.45	12	7.60	41.04	
Total				78.84	

Profit/loss of Sunday roast boxes1

Item	Cost (£)
Weaner	60.00
Feed (253.4kg per pig @ 30p per kg)	98.83
Abattoir, cutting, curing & packing fees	77.00
On costs (insurance, transport, etc)	30.00
Total estimated cost	265.83
Income (four £70 boxes per pig)	320.00
Profit/loss	54.17

It is crucial to the project that investors pay a £25 deposit at the time their order is confirmed. This money is used to pay for the upkeep of the pigs until they are ready to go for slaughter. Investors pay the balance when they receive their meat. Pelican Pigs has no formal constitution, other than a bank account to which we are all signatories. It is a loosely organised project but as we have been friends a long time it serves us well. We've been operating this way for about five years. Our waiting list now runs to about 40 families who always seem to want more pig than we have, so to satisfy demand we buy in weaners for fattening. And we're still having fun.

6.2 Hog Hands

Stroud Community Agriculture

T 0845 458 0814

E info@stroudcommunityagriculture.org www.stroudcommunityagriculture.org

As a way of introducing livestock to the Stroud Community Agriculture initiative we proposed that 'Hog Hands' should be established, and interested members could rear a litter of pigs as a cooperative venture

One member took responsibility for organising the scheme – drawing up a budget, ordering the pig feed, organising feeding/checking rota – but members shared the daily check and feeding equally.

How the project works

A budget was drawn up (see below) and the cost of each share was calculated at £150. This was either paid in full on entering the scheme or in two instalments – one on entering and a second at three months. The aim was to take the pigs to 'bacon' weight – approx 100kg.

1. All figures are as at January 2004

Once slaughtered, the estimated carcass weights should be approx 66kg with a meat weight of 50kg. 25kg of pork seemed a reasonable quantity for one share. So for convenience a share became equivalent to half a pig. A contingency of £100 was added to cover any unforeseen costs eg vet fees, additional feed, fence repairs, price rises etc. Any contingency remaining would have been refunded equally between participants.

A feeding/checking rota was drawn up with each 'Hog Hand' responsible for one full week at a time – one week on then eight weeks off.

The pigs needed two visits daily. Hog Hands did all the evening feeds. The farmer that Stroud Community Agriculture employed did the morning feeds as part of his normal working week. An allowance was made in the budget for the cost of his time. Hog Hands undertook both the morning and evening visits of their duty weekend. Bought-in feed was supplemented by waste fruit and vegetables from the local organic wholesaler.

Hog Hands budget

Item	Cost (£)
Fencing /pig proofing (share of £300)	£50
Feeding troughs and equipment	£50
Piglets (6)	£300
Feed (organic)	£60
Bedding straw	£25
Slaughter and butchering (@ £32/pig)	£192
Labour	£650
Contingency	£100
Total	£1,967

The butchering of the pigs was staggered and meat divided equally from each to reduce the load on members' freezers. Some of us have cured our own hams and we have arranged for a training day with a professional charcutiere to make sausages, salami, pates, faggots and hams.

6.3 Whiteholme Farm

John and Lynne Perkin

The farm is run on 243 acres, producing traditional breeds of beef, sheep and pigs to SA standards. The farm is part of the Soil Association's network of demonstration organic farms. People are welcomed and encouraged to walk the farm trail and can buy direct from the farm. It is important to the farm's philosophy to help people connect the food they eat with the landscape around them. The farm has recently moved its marketing beyond selling produce

direct to consumers, to develop a farm-scale community food project model, which involves its customers in putting meat on their tables.

How the project works

To launch the community food project the farm wrote to its existing customers and ran four local meetings, which were advertised in the local press and on posters. BBC Radio 4 also took up the story.

The farm has recruited 30–40 project members. Each member makes an annual financial commitment to support the farm. Monthly orders are set up from members' accounts to the farm. The entry level is £10 per calendar month. Members place orders for meat against their monthly charge. One of the scheme's members is an accountant. She is the scheme's treasurer and keeps a tally of members' monthly payments and meat orders. Twice a year she sends out statements notifying members of their balance. Members then know how much meat they can still buy, and are assured of a regular supply of the highest quality organic meat from a farm that they know. The farm is assured of a regular monthly income and can plan its future accordingly.

The absence of a local organic butcher and the availability of grants led to the setting up of an on-farm butchery and processing unit, in a converted barn using equipment bought from a butcher's shop that was closing down. A semi-retired butcher works two days a week, cutting the meat and training John Perkin, the farmer. People are able to order any cut they like and a variety of sausages and burgers are made on site. All the meat from the farms is sold directly to customers either through the community food project or through local farmers' markets.

John delivers meat orders to agreed drop-off points, where members can collect them. He uses the same refrigerated van that he uses for the weekly run to a small family-run abattoir in Lockerbie, when he is able to collect the carcasses from the previous week's run.

This year the farm has seen its turnover increase from £40,000 to £80,000. It is hoped in time to build to a turnover of £100,000. The biggest barrier to the scheme's growth is time. There is so much more to the scheme than farming – marketing through newsletters and the website, spending time on packaging and presentation of produce is very important. There are farmers' markets to go to, trips to and from the abattoir and deliveries to make.

John's top tip is to start slowly. Begin with family and friends, use a local butcher, learn how much there is to know and do. Only then will you know how you feel about growing your project and investing time and money in it. If you consider running your own butchery there is a lot of red tape to deal with, but don't be defeated by it. All necessary information and advice is available from your Environmental Health Officer, who it makes sense to involve from the start.

7. Animal health plan

The following are Soil Association guidance notes for a livestock management plan. They include a generic animal health plan.

7.1 Livestock conversion/ management plan

Before any livestock enterprises can be added to your licence we are required to have a livestock conversion/management plan on file. This plan is required for two primary reasons. First, it helps us to check that your plans are going to comply with the standards and secondly, it should also enable you to assess any areas of concern with regard to animal welfare. It may be useful to provide copies of the livestock conversion/management plan to your stockperson/s and vet.

You will need to submit a livestock conversion/ management plan at the start of the conversion period, or when you start up any new livestock enterprise. New enterprises will also need to be inspected before they can be added to your licence.

These guidance notes have been designed to indicate the type of information that you need to provide. However, there is no set format and for some farms not all the categories detailed below will be relevant.

Introduction

- Farm size, enterprises, current and future livestock numbers
- Conversion timetable. Please include land conversion dates
- If you have applied for simultaneous conversion please state this and ensure that your plan reflects this type of conversion
- The dates you intend to first produce organic products, for example milk, eggs, meat, etc. Please note that you must have a valid certificate of registration before you market or sell any products of agricultural origin as organic.

Housing

- Housing dimensions and intended stocking density in each building. A plan view diagram of the housing, including dimensions and stocking densities is a simple format to show this information
- Type of bedding, details of ventilation and access to water
- Length of normal housing period
- For poultry enterprises, please also include perch space and nest boxes per bird, outside stocking density, land resting periods and ranging distances.

Feeding

- Please include details of the proposed rations that you will feed to each group of livestock (for example milking cows, dry cows, heifers, etc) both during the conversion period and once the stock are being fed to full organic standards
- The proportions of organic/conversion/non organic feed that will make up the ration
- The proportion of forage to concentrate.
- Details of any brought in, compound or blended feeds. Please include the name of the feed, source, GMO status and whether it is approved or unapproved
- Details of any mineral/trace element supplements that you intend to use. Please note that once the livestock are being fed to full organic standards the use of these supplements must be justified (i.e. by your vet, forage/tissue analysis or details of historical problems).

Animal health plan

The animal health plan is fundamental to your organic management. It must identify all potential problems and put in place a framework to ensure that flock/herd health is maintained/improved and the reliance on any routine veterinary products is reduced. It is advisable to develop this plan in consultation with your vet and it should be reviewed on an annual basis to assess where any improvements can be made.

The following information must be provided for all groups of livestock:

- Identify any persistent health problems that occur on the farm, for example, mineral deficiencies, internal parasites, etc
- Identify what preventative husbandry techniques will be employed to reduce the incidence of these problems, for example:
 - Clean grazing strategy
 - Stocking rates
 - Hygiene
 - Breeding programs
 - Nutrition
 - Improved housing ventilation
 - Other management practices
- Identify all veterinary treatments that you are likely to use on a routine/regular basis both during conversion and once the stock are being managed to full organic standards. Please include details of any vaccination that you intend to use
- Quarantine measures taken for any sick andor bought-in livestock
- Youngstock management. This should include the following: weaning age, feeds offered, type of

housing, medication. Please also include any management practices employed to develop immunity. For example, weaning age, grazing practices selection for breeding, etc.

Record keeping

Record keeping is essential to effective management and forms a critical part of your organic registration.

- You will be expected to keep the records detailed in section 3.4 of the standards, including records of bought in feeds, livestock movements and veterinary treatments along with your field and crop records.
 The relevant invoices must also be kept.
- You will also need to demonstrate through your records that individual livestock rations have complied with the standards both on a daily and annual basis.
- Records can be kept in your own format (either computerised or on paper) as long as all the information required is provided. However, record keeping sheets provide a suggested format and can be obtained from SA Cert.

8. Further information

8.1 Sources and useful reading

- Feeding Organic Pigs A handbook of raw materials and recommendations for feeding practice*
 University of Newcastle (ISBN 0701701315)
- Optimising Organic Pig Production A guide to good practice*
 Anne Martins, Hilary Kelly, Jon Day, Christopher Stopes, Helen Browning & Sandra Edwards; edited by Jon Day. University of Newcastle
- Organic Pig Production Some questions answered
 Soil Association booklet
- Outdoor Pig Production
 Keith Thornton, Farming Press Books and Videos,
 1988. This is aimed at larger herds but provides useful management information
- Pigs The homeopathic approach to the treatment and prevention of diseases George Macloed, The CW Daniel Company (ISBN 0852072783)
- The River Cottage Meat Book
 Hugh Fearnley-Whittingstall, Hodder & Stoughton,
 2004 (ISBN 0340826355). This book is a must for all small scale meat producers! Very practical with lots of great recipes. Perfect when thinking about your cutting and curing plan
- * Available free from the Department of Agriculture, University of Newcastle. T 0191 2228350 E sandra.edwards@newcastle.ac.uk

8.2 Contacts

- For information on Soil Association certification see www.soilassociation.org/certification and follow the links to 'standards online'.
 For more information on organic conversion contact
 - the Soil Association business development team on 0117 914 2406
- Community Supported Agriculture (CSA)
 For comprehensive information on CSA see the
 Soil Association website: www.soilassociation.org/csa

Soil Association

The Soil Association is the UK's leading environmental charity campaigning for a global shift to sustainable, organic food and farming practices.

Founded in 1946 by a far-sighted group of farmers, doctors and concerned citizens, the organisation is dedicated to bringing about change by creating a growing body of public opinion that understands the direct link between farming practice and plant, animal, human and environmental health.

Today the Soil Association is an internationally respected authority on sustainable agriculture and recognised champion of healthy food, which uniquely represents and offers practical solutions to everyone involved in the food chain – farmers, food processors, retailers and consumers.

The Soil Association is reliant on the support of its members, donors and the public to carry out its work. You can help grow the organic movement, by joining the Soil Association you will be part of a dynamic organisation pressing to change the predominant food culture in this country. Single UK membership costs just £24 a year.

To join, visit www.soilassociation.org or call 0117 914 2447.

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The Soil Association continues to support the development of Community Supported Agriculture (CSA). To find out more visit www.soilassociation/csa

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