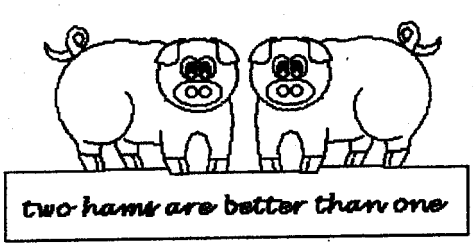
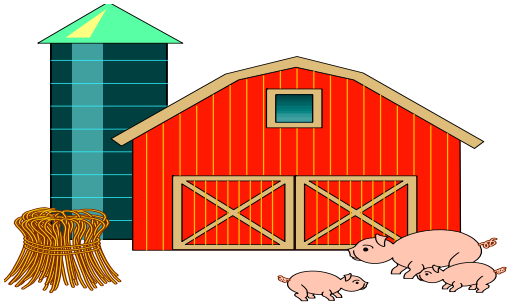
So, your interested in raising and showing a market hog. There are many things to consider when taking on such a big commitment. This book is designed to help guide you through the process. The first thing that you need to be aware of is that pigs are live animals and they have special needs. Not meeting these special needs becomes an animal welfare issue. Before you make the decision to take on this project, you need to ask yourself if you are capable and willing to do whatever possible to meet the animal's needs. Raising and showing an animal takes a lot of work no matter what species you choose. Remember that this is your project, not your parents. The more that you do yourself and the less your parents do, the better the experience will be. Raising and showing animals can be a lot of fun and is a great learning experience. This manual is designed to guide you through the process. Pigs are social animals and they grow better if they have company. If you are not keeping your pig with someone else's pig, then you should consider buying two. This will also give you a little buffer in case something happens to one of them or if one doesn't grow well.



HOUSING

Before you even look at pigs, you need to have their housing facility prepared. A high investment in a swine facility is not necessary. However, some factors should be considered when choosing a facility to raise your pigs. First, it should be dry and free of draft. Many of you will be getting your pigs when the outside temperatures are still cold. If the facility is drafty or wet, the temperature that the pig feels will be 10-15 degrees less than what the thermometer reads. If these conditions cannot be avoided, the use of straw as bedding will increase the temperature 5-10 degrees. Other heating sources can be used to maintain an adequate temperature for the pig, such as heatlamps. It is not recommended to use heatllamps if you are using straw as there is a high risk that it could catch fire. On the flip side, you want to make sure that the pig will be cool enough when the temperature outside gets hot. Insulating the shelter will minimize the temperature fluctuation. The less temperature fluctuation that the pig has to endure, the faster it will reach market weight.



HOW TO SELECT THE RIGHT SHOW PIG

Now that you have your housing ready, it is time to select a pig. Here is a list of questions that you need to ask yourself when selecting a pig.

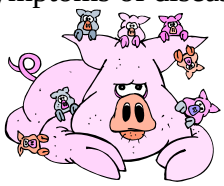
-Where do I get a quality pig?
-How much should I pay for a quality pig?
-What size/age of pig do I need to buy now to make weight for the show?
-What type/confirmation do I want in a pig?

Where do I get a quality pig?

When purchasing a feeder pig, do not just buy it anywhere. Make sure that you are getting it from a reliable source. Do not buy a pig from the livestock auction. Not only are you getting someone's culls, but you have no idea where it came from. If you don't know where it came from, you don't know the health status or history of the pig. Also, you can bring disease onto your place.

When you buy from a reliable source, you know what you are getting. These animals usually come with some kind of guarantee of physical soundness. Reliable people usually keep good records. These records should include all vaccinations and treatments that have been given to their pigs. Make sure that you ask questions about the source. Ask about vaccinations and de-wormer and when they were given. Most reliable people will be honest with you. If you don't feel that they are being honest with you, this may be an indicator of how good the source really is. If you are able to see the facility that you pig is coming from, you can check the cleanliness of it. You can tell a lot about the management and quality of the facility by the cleanliness. If the place looks like a dump, you can assume that the quality of the pigs is poor. If you have any questionable doubt about the source, you should go somewhere else.

You should avoid buying a pig that looks sick or listless. A healthy pig should be alert and look energetic. Pigs that are sick often look tired. They are sometimes underweight and may exhibit obvious symptoms of disease.



How much should I pay for a quality pig?

Paying a lot for a show pig does not necessarily mean that you are getting a good pig. You can expect to pay twice the market price and maybe up to 225% of market price for a good feeder pig from a good source. The price should not be the determining factor when selecting a show pig. Some sources may sell pigs for less than other sources, but the quality may not be as good.

What size/age of pig do I need to buy?

When purchasing a pig, do not buy one that is less than 35 lbs. These pigs are too small for most people to care for properly. The conditions that are necessary for these pigs to survive are far more regulated than the conditions that are necessary for a larger pig. The larger the pig, the more tolerant it will be to different conditions. In addition, many people don't have access to the proper nutrition for these smaller pigs.

In most conditions, a pig will reach market size in five to six months. It is easy to calculate the size of pig that you should be purchasing. The first step is to figure out how many days there are between the purchase date and the weigh in date. If there are three months to the show, buy a pig that is two to three months old. Below is a chart for you to use as a reference. Remember this is just a reference. Your pig may grow faster or slower depending on the genetics and feed intake.

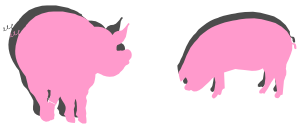
Average Daily Gain

50-110 lbs……..1.5 lbs/day
110-230 lbs…….1.8 lbs/day

Expected Weights

Age	Weight
3 wks	14 lbs
5 wks	23 lbs
8 wks	40-50 lbs*
11 wks	70-85 lbs
15 wks	110-130 lbs
20 wks	170-195 lbs
24 wks	220-260 lbs*

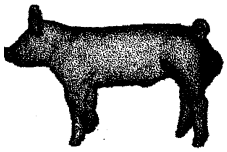
***3.7 months from 40 to 220 lbs**



What type/confirmation do I want in a pig?

When selecting a pig to buy, you want to make sure that it has good conformation. Muscling is the most important factor when choosing a pig. There are five views that you should be concerned with. The most important is the hind view. This shows the muscling in the hams. Since this is the most valuable cut of pork, a large bulging ham is desired. You also want to look at the front, side, top, and have a view of it walking. If the pig has a flat back it means that there is excessive fat. It is important to choose a pig that is long and lean. When watching it walk, make sure that it walks straight and is free moving. This means that the steps should be smooth and not choppy.

If the pig has trouble walking, it may not walk to the feeder as often as it should and this will affect the rate of gain.



Side View

Hind/Top View

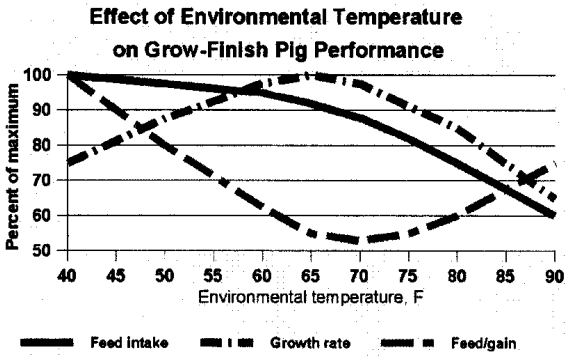
When selecting the pig, gender is not necessarily a critical trait. If you are getting a smaller pig, you may want to choose a barrow because they grow a little faster than gilts. Gilts tend to take longer to grow, but are usually leaner than barrows. With gilts, you take a chance on them being in heat during the show. This may make it difficult to show the pig. Both genders can have good show quality.

It is important to know that there are good pigs of all breeds. It is also true that all breeds have strong traits to offer. The white breeds such as Yorkshire and Landrace are known for their mothering ability. Durocs are known for rapid gain. Hampshires and Berkshires are known for their carcass quality. The crossbred hogs are usually the fastest growing. They have hybrid vigor along with the combination of traits from different breeds.Many people like to choose colored pigs. They feel that colored pigs will do better in the show ring. This is not always true. White is a dominant color, so if one parent is white, the litter will be white or blue butt. You cannot always tell what the breed is on one of these pigs. Some people are willing to select second rate colored pig over a first rate white pig. This is poor practice of selection. Color has no impact on the carcass quality.

Before you move on in this book, make sure that you have a good grasp on what you need to consider when preparing for and selecting your pig. Once you have selected your pig, you need to know how to properly raise it. The following sections will help educate you on the areas of environment, health, and feeding.

ENVIRONMENT

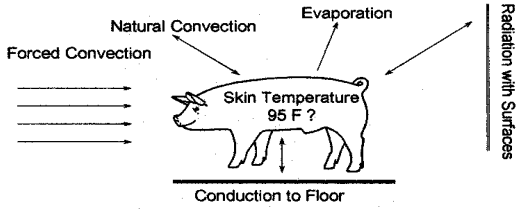
Here are some basic principles to take notice of when analyzing the environment for your pig. When pigs are too cold they must expend extra energy to maintain normal body temperature and essential body functions; eating, drinking, moving, and reproducing. Less energy is available for growth. When pigs are too hot they must eliminate extra heat energy or produce less heat. Normal body functions are altered. Less energy is available for growth.



You may be asking yourself "How can I tell if my pig is too cold?" Here are some signs that pigs are too cold; they huddle, pull legs and feet under themselves, increase activity levels, eat more, grow slower, poor feed efficiency, shiver, change sleeping location, seek the sun or heat source, burrow in bedding, and eventually get sick and eat less. They can get scours or pneumonia. Pigs can feel cold due to low environmental temperature or heat loss from the body. "How can I tell if my pig is too hot?" Here are some signs that pigs are too hot; they lie on their side, spread apart, decrease activity levels, drink more unless the water is too warm, seek out moist areas such as waterers, sprinklers, wallows, eat less/grow slower, change dunging and sleeping habits, increase respiration rates, pant, increase rectal temperature, and possibly die.

Heat loss from the body occurs from conduction, convection, evaporation, and radiation. Conduction is heat exchange by touching a surface of a different temperature. Convection is heat exchange with the air. This is caused by drafts. Evaporation is heat loss by water evaporation. Wet pigs will be cooler. Radiation is heat exchange between two surfaces of different temperatures that are not touching each other.

Exchange with the Environment



Pig Comfort Zones

	Weight (lb)	EET (degrees F)
Newborn	2-6	93-100
Nursing	6-12	85-95
Weaner	12-18	80-90
Feeder	18-50	70-85
Grower	50-130	60-75
Finisher	130-275	55-75
Lactating Sow		55-70
Gestating Sow		55-75
Boar		60-75

Effective Environmental Temperature (EET) is the temperature that the pig actually feels. The charts below show how to calculate the EET.

Adjustments for EET

Drafts	40 ft/min	-7 degrees
	100 ft/min	-14 degrees
Cold, wet floors	concrete, metal	-7 degrees
Poor insulation	Rodent damage, none	-7 degrees
Straw bedding	Dry, deep, coarse	+8-12 degrees

Calculation for EET

Thermometer at 5ft	=	80 degrees
Thermometer at 1ft	=	75 degrees
Slight draft, -7 degrees	=	68 degrees
Wet floor, -7 degrees	=	61 degrees
Poor insulation, -7 degrees	=	54 degrees
Add Straw, +10 degrees	=	64 degrees

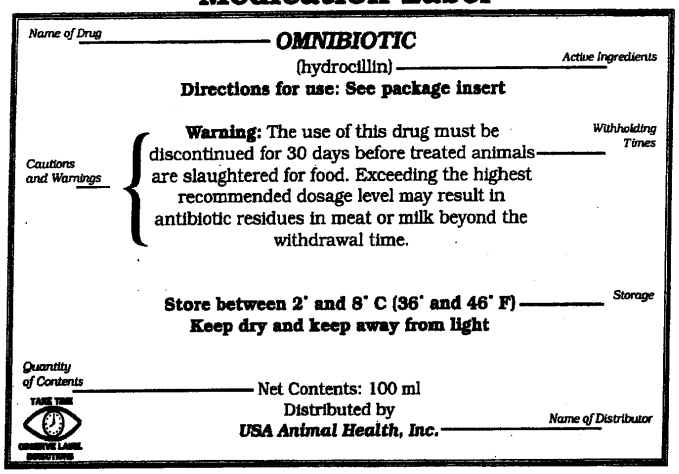
HEALTH

An ounce of prevention is worth a pound of cure. This also holds true for pigs. It is often much less expensive to prevent a pig from contracting a disease than it is to treat the sick animal. Some of the common ailments that affect pigs are: worms, mange, Erysipelas, and Atrophic Rhinitis. To treat or prevent worms commercial dewormer can be used. Most require repeat treatment. If you use a product such as Ivomec, you will not have to repeat treatment. To treat for mange, it is best to use a spray or dip such as Prolate or an injectable like Ivomec. Ivomec can also be added to the feed. Erysipelas and Atrophic Rhinitis should be vaccinated for when the pigs are young. Most of the time this will have already been done by the time you purchase your pig. If possible you should have the owner vaccinate the pig before you buy it. Another option is to have your veterinarian do the vaccinating for you. When treating or vaccinating your pig, you should not use a medicated feed. For one reason, if the pig is sick it may not eat and in order to get the proper dosage, you should use another method. Parasite control in the feed is ok and is the preferred method. Wormers and medication can be added to the water and are usually successful if the pig is willing to drink. It is very important that you do not use sulfa drugs on your pig because they leave a residue in the meat and are prohibited from use in market hogs.

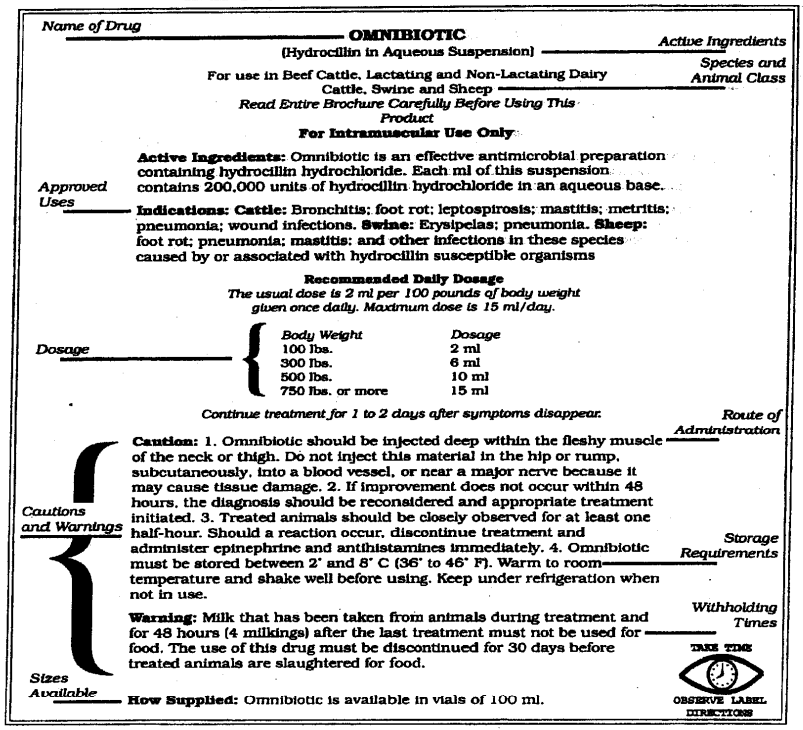
If it is necessary to treat or vaccinate your pig, there are several things that you need to consider. Pay close attention to the labels and inserts. On the label or insert you should look for dosage, how often to retreat, route of administration, warnings, withdrawal time, storage, and expiration date. Injectables are always given in the neck. Always use clean needles. It is important to keep an accurate record of any treatment given to your pig. If you are not comfortable administering treatment, consult your veterinarian.

Below is an example of a label and insert.

Medication Label



Medication Insert



Now that you have seen a sample of a label and an insert, let's look at the importance of each of the critical areas. Dosage and when to retreat are critical because if you give too much, you can overdose the pig and if you don't give enough, it may not be effective. Route of administration is important since there are a variety of ways to do this. For injectables the two most common routes of administration are intramuscular (IM) and subcutaneous (SUB Q). If the injection is given wrong, it can cause an abscess and possibly be ineffective. The warning usually contains the withdrawal time. It is necessary to know this information if you are planning on slaughtering the animal soon. If the animal is slaughtered before the withdrawal time, there will be a residue in the meat. This means that the meat cannot be consumed. Storage and expiration date are a concern because if the drug is bad, it will not be effective.

NUTRITION

When it comes to feeding your pig, there is no cheap way out there; there are no cheap feeds. When you try to feed your pig cheap feeds such as straight grains, the pig's potential productivity is compromised. Thus, it not only takes longer to finish the pig out but uses more feed to do so. Pigs do not need roughage such as hay and they certainly do not need to eat table scraps. This will cause a nutritional imbalance. In order to optimize a pig's productivity, it is essential that all nutritional requirements are met. If these requirements are not being met, it becomes an animal care issue. The pig may show signs of poor health as well.

When you are buying feed for your pig, you should try to buy a well balanced diet. It doesn't have to be the most expensive to be the best. Land O' Lakes and Purina are good brands to look for when buying the feed. Make sure to read the label on the feed to make sure that you are feeding the appropriate feed for the size of pig that you have. A pig's requirements change as the pig gets older. You should change to feed to accommodate these changes. Many of you may start with a starter diet. After the starter diet you should feed a grower diet and then a finisher diet. When you choose a grower diet it should contain 16% protein, 8.5% Lysine, and less than 5% fiber. The finisher diet should contain 14% protein, 7% Lysine, and less than 6% fiber.

Your pig should be full at all times and should have fresh water at all times. There are many different feeders that you can buy or build to feed you pig. There are also many types of waterers that you could use. The nipple water system is the best, only if the pipe leading to the waterer is buried or in the shade at all times to ensure that the water coming out is always cool. If the water is hot, the pig will not drink. If the pig doesn't drink, it will not eat. If it doesn't eat, it will not grow. Water buckets are not recommended because pigs will tip them over or lay in them.

It is a good idea to get a weight on you pig a few times during the growth process. This is important so that you can monitor the growth rate. If it is getting close to the

show and your pig looks like it is going to be too big or too small, you will need to adjust feed. It is better to reduce feed for a heavy hog for 2-3 weeks in order to slow down the growth than to withhold feed for any period of time. If the pig appears to too light, you can keep it on the grower diet longer. The best way to measure your weight is by using a scale. Most of you may not have access to a scale, and you want to avoid taking you pig to a "community" scale. Community weigh ins or scales pose a large risk factor in the spread of disease. It is best to keep your pigs away from other pigs as much as you can, since you do not know the health of other's pigs. Another method that is safe, simple and cheap is to measure the pig with a weight tape. This is not the most accurate method but will be very close to the weight and give you an idea how your pig is growing. The weight tape can be purchased at many feed stored or out of any livestock catalog. Some tapes will give you the weight on the tape. Another tape measure that works well is a fabric tape measure.

After measuring, in inches, the pig's circumference (heart girth) at the armpits and the length of the pig from the top of the head between the ears to the tail head, use the following equation:

$$\frac{\text{heart girth} \times \text{heart girth} \times \text{length}}{400} = \text{Estimated weight in pounds}$$

If you use this book as a reference, you are well on your way to being a good showman. Good Luck in your ventures and may you prosper in the show ring. Remember to keep a positive attitude and have fun.

THANK YOU