

SHOW PIG PROJECT FACILITIES

LSU
AgCenter
Research & Extension

Show Pig Project Facilities

The facilities you need to raise show pigs do not have to be elaborate or expensive. Many different types and sizes of facilities are satisfactory for growing show pigs. The resources you have available will determine the type and size of your facilities.

The basic facilities needed for show pigs are:

- ***a pen***
- ***shelter***
- ***a supply of clean water***
- ***feeding equipment***
- ***cooling facilities***

Several options for each of these needs are discussed. Select the option(s) that will work best in your situation.

Pen Location

The ideal pen location is far enough from your house so you don't smell the odor, but close enough to be convenient. About 300 feet away is ideal. Be considerate of neighbors when deciding on the pen location, however, and keep it as far as possible away from their houses. The soil should be sandy and sloping so it will drain well. There should be trees to provide shade.

You may not have an opportunity to select an area that meets all of these criteria, but there are things you can do to help the location come close to being ideal. If you do not have enough property to get 300 feet away from your house, select an area as far away from your house as possible. There are times when a little odor may be produced, and it's best if the pen is far enough away so you won't smell it when sitting outside. Pens too far away from your house have two major disadvantages. It may be inconvenient for you to walk to the pen and interact with the pigs several times a day. You cannot hear unusual activities at the pen in an emergency. Dogs and other animals may try to attack your pigs, and the pen needs to be close enough for you to hear the noise.

If you do not have a sloping tract of land or sandy soil for your pen, you may want to consider hauling in some sand. If the ground is level, 4 to 6 inches of added sand will increase water penetration and runoff. This is especially beneficial in winter.

If you do not have an area with trees to provide shade, you can either put up shade cloth or build a roof with insulation. Read the shelter and cooling sections for more information.

The Pen

Pens can be many different shapes and sizes. These ideas are some that have been successful in many places and situations. The way you plan your pen will depend on the amount of land available and the amount of money you want to invest.

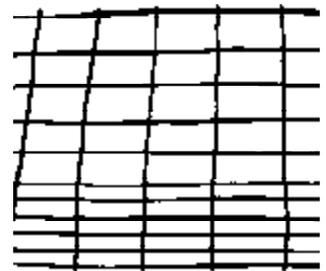
The ideal pen is large. A large pen will allow your pigs to exercise themselves, which will help build muscle and burn fat. A pen 50 feet wide and 64 feet long will allow pigs to run and play. If you want to add to this pen, add to the length. If resources are not available, take away from the width first. A long pen with the feed at one end and water at the other will force the pigs to exercise themselves. Pens can be as small as 8 feet by 16 feet, but the pigs should to be taken out of these pens and walked each day.

A small pen with a dirt floor can get wet, muddy and nasty during wet weather. In some situations, where only a small area is available or if the land is flat, heavy clay and poorly drained, a small pen with a concrete floor works well. The concrete floor will need to have a slight slope (1/5 inch per foot) and have a semi-smooth finish. A finish that is too smooth will cause poor footing, and the pigs can slip and injure themselves. A finish that is too rough can cause irritation and soreness to the pigs' feet and cause lameness. If you have a pen with a floor that is all concrete, you may want to consider putting sand or shavings on a portion of the floor. This will provide more secure footing and less irritation. Pigs that lie on bare concrete all of the time usually do not have as nice a hair coat and skin as pigs that lie on sand, shavings or dirt.

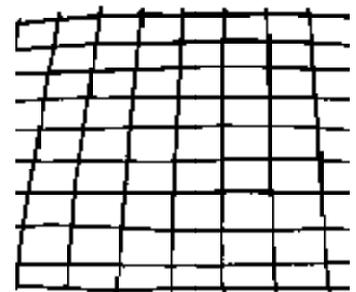
A partially concrete pen works well. This will provide a solid area for shelter and watering and still have natural soil on which the pigs can play. In some cases, you may want to design the pen so you can keep the pigs on the concrete on wet days then move them to the dirt when it's dry.

Control all plant growth in your pen. You should use a non-selective herbicide to kill all vegetation about three weeks before you put your pigs in the pen. Select a herbicide labeled for use around animals, and follow all restrictions and precautions. If you prefer grass growing in your pen, keep it cut very short. You don't want your pigs to eat anything other than the feed you give to them.

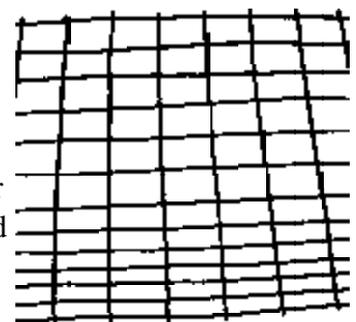
Build your pen so air can move freely. It should be secure so there is no chance of your pigs getting out. It should be tall enough to prevent dogs and other wild animals from jumping into the pen. Wire panels make excellent pens. Most are 16 feet long and can be moved easily. Most companies make three types of wire panels: hog panels 32 inches tall, corral panels either 48 or 52 inches tall, and combination panels either 48 or 52 inches tall. The hog and combination panels have close spacing on the bottom, making it much more difficult for small animals to enter or leave the pen. The taller corral and combination panels will provide more security from wild animals jumping into your pig pen. The additional height and close lower spacing of the combination panels make them the most ideal. These panels can be easily installed with steel posts.



hog panel



corral panel



combination panel

Wire fencing is flexible and must be stretched tightly to keep pigs from going under the bottom and escaping. Wooden boards can be used, but they block some of the air movement and cause the pen to be hotter during the summer.

The gate for your pig pen should be sturdy and on hinges. Pigs are curious and always want to do something. They will play with the gate and test its strength. It seems they always want to get out, except when it's time to load them for a show. Mount the gate on hinges so it will be easy to open. Use a strong latch that's easy for you, not the pig, to open. A gate that is on hinges and easy to open will make it easier for you to enter, even if it's just to play with your pigs. Hang the gate so it opens to the inside of the pen. This makes it easier for you to enter the pen without the pigs getting out. It also allows you to shut the gate while you are in the pen without latching it and the pigs won't get out. Gates that are nailed or tied with rope or wire are hard to open, and you will have a tendency not to go into the pen as often to work with your pigs.

Constantly check your pen for unsafe objects and conditions. If you have a smaller pen inside of a larger pen that has no water and cooling equipment in it, be sure there is no way a pig can lock itself in the smaller pen and not be able to get to the water and cooling area. Pigs have been known to die during a hot day because they could not get to the water and cooling area.

Shelter

Pigs need shelter from the sun and from cold weather. Some pens have trees that provide natural shade for the pigs. You may need to protect the trees so they will not be damaged and die. If you do not have natural shade in your pen, you can either put up shade cloth or build a roof with insulation. The shaded area should be more than 100 square feet and should provide shade for the cooling area. Pigs also like to lie in the shade when they are not in the cooling area.

Another purpose for shade is to protect white pigs from blistering. White pigs will blister easily if they are moved out of a building into the direct sun. With time, they can stay in the sun longer without blistering. When you clip their hair in preparation for show, the pigs will become very susceptible to blistering again. This is a critical time to protect the pig.

Pigs must be protected from the cold. In Louisiana, supplemental heat is usually not needed as long as the pigs have a dry, closed in area with lots of straw or hay. There are several ways of providing shelter from the cold. The type you choose will depend on your type of pen.

If you have a well-drained, sandy pen, a small shed may be all that is needed. A shed 4 feet wide and 6 feet long will be large enough for three pigs. Extending the shed to 8 feet long will be large enough for four pigs. The shed should be about 3 feet high on the back and about 4 feet high in the front. It should be walled up on all four sides with an opening cut in the front just large

enough for the pigs to pass through. Plywood 1/2-inch thick or thicker will work well for the walls.

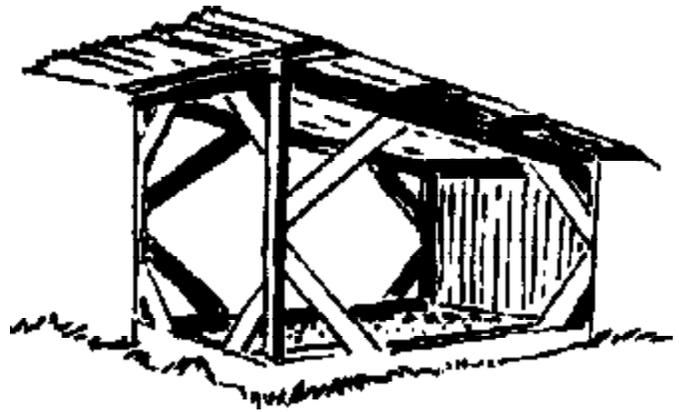
You should put a floor in the shed to prevent water from entering and dust from forming. A treated sheet of plywood will work well for the bottom. An inch of dry sand on the floor will give traction and prevent injuries caused by slipping. Add straw or hay as the temperature falls. You should add some extra bedding each time the temperature drops. The newest idea in bedding is shredded paper, which seems to work well. It makes a big mess, however, when the pig knocks it out of the shed.

You can build a shed as described above with removable sides and front that will provide shade during the summer. Remove the walls and bedding, and put 2 or 3 inches of sand in the bottom of the shed.

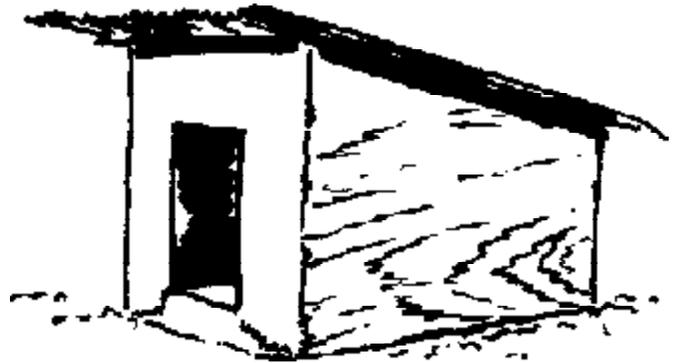
If you are in an area of flat, poorly drained soils, you may need to fix a shelter with a concrete floor and an apron of concrete outside of the shelter. The size of this shed should be about the same as above or about 8 square feet per pig. If it becomes necessary to build a shed with a concrete floor, place the shed on the lowest side of the pen so the rainwater will drain from the pen. These sheds will require bedding to keep the pigs warm in cooler weather.

Existing buildings may be used for your pigs. Barns and other buildings can be used by making only a few changes or additions. These structures can often be used for shelter and all that is needed is a pen.

As long as the pigs have a dry, draft-free area with lots of bedding, supplemental heat is normally unnecessary. As you move north, temperatures are lower and the need for supplemental heat may become necessary. Also, if you clip your pig for showing, you remove its natural insulation coat and supplemental heat may become necessary. The easiest and safest way to provide the supplemental heat is by using infrared heat lamps. Do not place them too close to the pigs because they can blister their skin. Be sure to fasten the lamps securely so there is no chance of their falling on the pigs. Infrared propane gas heaters can be used if electricity isn't available, but the danger of starting a fire is much greater with the gas heaters.



Shed in summer



Shed in winter

Water

The pigs must have cool, clean water at all times. The lack of cool, clean water happens more often than one would think. Placing a pan of water in the pen on a summer morning will not provide water for very long. Given the opportunity, pigs will turn over their water and lie in it to keep cool. Then they have no water to drink. Watering pigs in a trough can give the same results. Pans and troughs are good watering devices when the weather is cool, as long as they are kept clean. During freezing weather, pans and troughs will work well with water of normal temperature added two or three times daily.



nipple waterer

Nipple waterers are the best watering method for all times except during freezing weather. They will freeze and break when the temperature drops below 29 or 30 degrees F. While they are frozen, the pigs cannot get any water and water will have to be supplied in a pan or trough. Heated waterers are available, but the number of hours below freezing in Louisiana probably won't justify the added cost and trouble of installing them. Most nipple waterers have adjustable flow settings. Set the adjustment to supply water at a high rate. Some pigs will not take the time to stand at the waterer long enough to get all the water they need if the flow is too slow. The height of the waterer should be level with the back of the pig. Adjust the height of the waterer as the pig grows.

Cup waterers can be used except when it is freezing, but they accumulate dirt and feed and will need to be cleaned daily. This isn't a problem with the nipple waterers.

When installing automatic waterers, bury the water supply line in the ground all the way from the water source to the waterer. This will keep the water cooler in the summer and warmer in the winter than waterers hooked to a garden hose that is placed on top of the ground. If the hose is exposed to direct sunlight, the water in the hose may reach 120 degrees and be too hot for the pigs to drink. If the hose is in the shade, the water will get warm, but not as hot as in the direct sun.

Clean water is important. Pigs will drink dirty water to stay alive, but not enough for them to grow and develop to their full potential. Do not depend on a hole in the ground to supply clean water for your pigs. If a nipple waterer is not an option, fix a trough that the pigs cannot lie in or turn over. Plan to clean the trough twice a day and fill with fresh water.

Nipple waterers are available that can be mounted at the bottom of a barrel or large pipe. These waterers will have larger holes in their adjustment so enough water, when not under high pressure, can flow to meet the needs of the pigs. Some nipple waterers are designed so they can be used with either high or low pressure. The low pressure system will work well as long as the barrel or large pipe is in the shade during the summer.

Cooling

Cooling is much like watering. A pig may stay cool enough to live, but not cool enough to grow and develop to its potential. A pig that is breathing

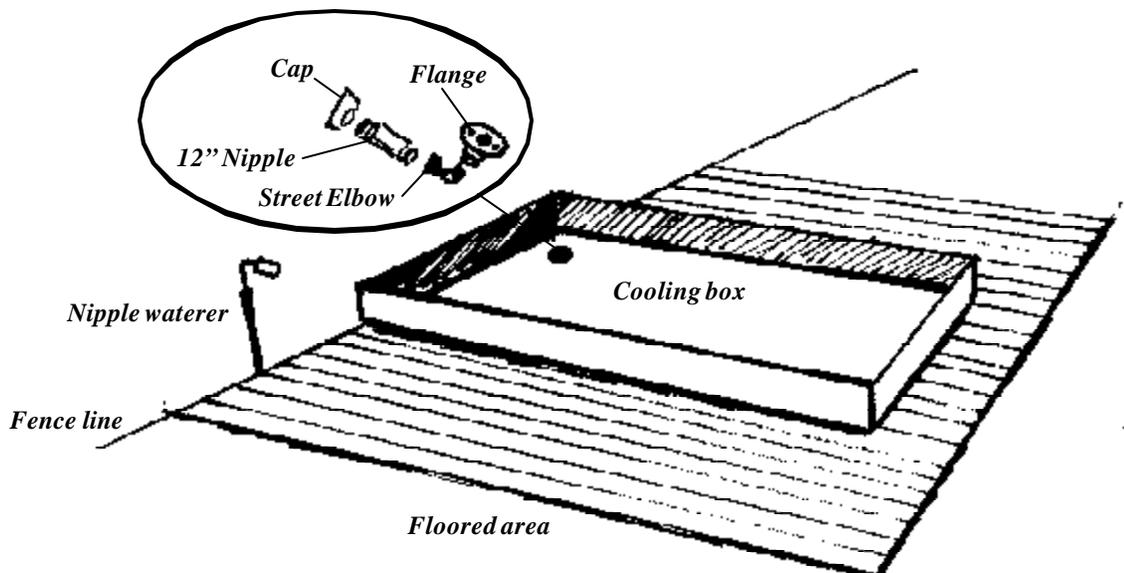
fast or hard is definitely not cool enough to be developing muscle and frame. If you feed pigs from May to September, you will need to have some type of cooling system.

The use of water is the best way to keep your pigs cool. You can use water in several ways. Pick the way that will best fit your facilities and situation.

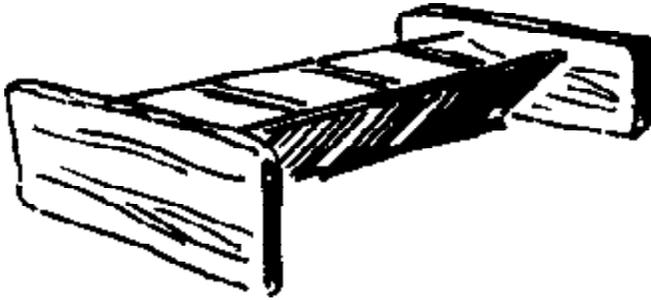
If you have a floored area, either concrete or wood, that slopes and drains to the outside of the pen, you can use a fogger, mister or drip for cooling. This area must be in the shade, preferably under an insulated roof, and the water must drain to the outside and away from the pen to minimize flies and odor. This system can be put on a timer and operated periodically. The timer can be set to alternate on and off about every 15 minutes. Most people prefer not to use the timer unless there is a need to conserve water and/or a problem with disposing of the runoff water. These systems can be used with or without a fan to move the air. A fan blowing only air (without water) will not provide sufficient cooling for pigs during the hottest months.

Another excellent way to keep your pigs cool is by using a cooling box. A cooling box works best if you do not have a floored area. The box must be in the shade, either natural or under an insulated roof. A cooling box can be made using a piece of plywood 1/2-inch thick or thicker and some 2 x 8 lumber. Treated plywood and lumber will last longer and are more economical in the long term. A cooling box 4 feet by 4 feet will work best for two pigs and can provide for three pigs, or a box 4 feet by 6 feet will work best for three to four pigs. To conserve water, don't make one larger than is necessary.

To build a cooling box, cut the plywood to the desired size. Next, cut the 2 x 8 lumber to the exact lengths so it can be nailed to the edges of the plywood to make a box. Use a waterproof caulk between the plywood and lumber and at all corners. To prevent leaks, place the nails close together (4 to 5 inches apart) when nailing the plywood to the lumber.



To complete the cooling box, attach a drain so the box can be cleaned. In one corner of the box, cut a round hole about 1 1/2 inches in diameter. On the underside of the plywood, mount a 1-inch to 1 1/2 -inch flange under the hole, using caulk. Screw in a street elbow, then a 12-inch-long nipple and a cap. Place the box in the lowest side of the pen. The box needs to be placed against the edge of the pen with the 12-inch nipple extending to the outside of the pen. Put about 3 inches of water in the box. The pigs can lie in the water in the box and stay cool. You can drain and wash the box each day by removing the cap on the nipple and allowing the water to run outside the pen. If you drain, wash and refill the box each day, you will have minimum or no odor.



V-trough

You may want to floor an area 18 to 24 inches wide around the box to keep the pigs from making a mudhole. The pigs will often splash water out of the box and if the area is not floored, they will root and lie next to the cool box and make a mess. Rough lumber makes an excellent flooring material. You can mount a nipple waterer over the floored area next to the box to prevent a mudhole from forming under the waterer. One important advantage that the cooling box offers over all of the other methods is that the pigs will have water to drink in case of an emergency. Even though the box is not to be the primary drinking water source, if the water supply is shut off or if the nipple waterer breaks or stops up, the pigs can drink the water in the box until the usual drinking water supply is restored.

If you cannot use one of the cooling methods discussed above, two other methods are available. Each has more disadvantages than the ones above. An air conditioned room can be built for the pigs. The room can be large enough to keep the pigs in at all times, or it can be smaller with a two-way door that allows pigs to come and go as desired. This method is expensive to build and operate, and it requires a lot of cleaning to control odor and inside air quality. It is not a popular choice in Louisiana.

As a last resort, use the mudhole method. Dig a small hole in the ground, fill with water and the pigs will do the rest. You just have to add water each day. The mudhole needs to be in the shade. You may have to remove some of the mud from time to time if it gets too thick and sticks to the pig's body.

There are several disadvantages to the mudhole system. The mudhole produces more odor than the other methods. You may have a problem trying to keep the hole from getting too big. Often the pigs keep rooting and making the hole bigger until too much of the pen is part of the hole. It increases the chance of pig injury, especially in the back and ham area. The pigs can get their rear legs stuck in the mud and injure themselves when they twist and pull trying to get out. It also attracts flies and other insects. It increases the chances of disease and internal parasites.

Feeding Equipment

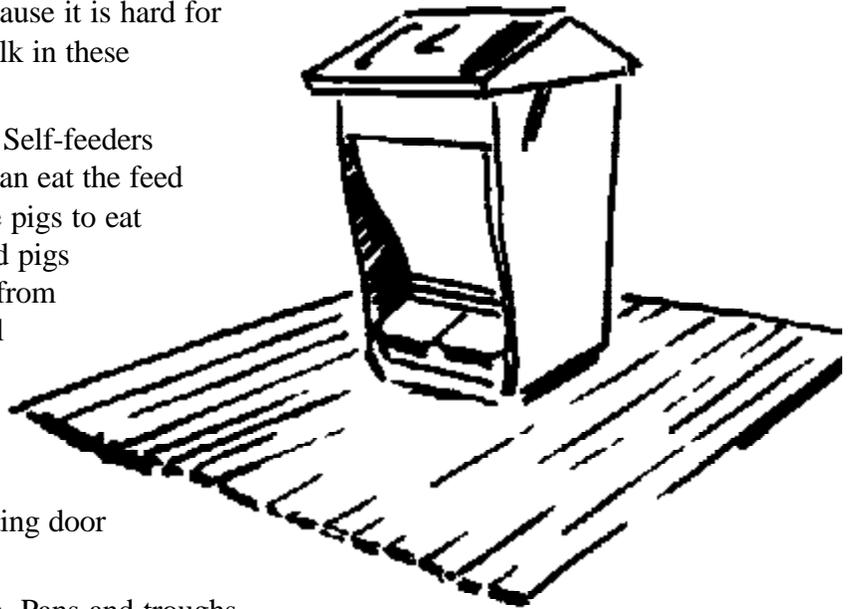
You should provide feed for your pigs regularly. You can hand feed your pigs two or three times each day or use a self-feeder.

The two most commonly used items for hand feeding are pans and troughs. Pans are usually made of rubber or metal. Most pans are 15 to 17 inches in diameter, 3 1/2 to 4 inches deep and hold two to three gallons. The rubber pans are a little heavier than metal and are less likely to turn over. Rubber pans will usually last longer and will not remain bent if the pigs bend them. Pans are inexpensive, and you should use one pan for each pig. The pans you use at home can be used at the shows. Pigs will walk in the pans and may turn them over, spilling the feed.

Troughs also can be used when hand feeding. Troughs are easily built using either 1 x 8 or 1 x 10 lumber. The length of trough will vary from 2 to 4 feet. A 2-foot trough will work well for one or two pigs. A trough 3 or 4 feet long will work well for three or four pigs. To build a “V” trough, cut two pieces of lumber the length you want for your trough. Be sure the two pieces are exactly the same length and that each end is square. Place the two pieces at right angles to each other, forming a “V.” Nail or screw the two pieces together, making sure the ends are even. Cut two more pieces that are 24 to 30 inches long to use for the ends. Turn the original two boards over on a level floor to make an inverted “V,” and place a 1-inch board under them. Now attach the ends by placing them on the floor and securing them to the trough. Screws will hold much better than nails. Turn the trough back over and place a 1-inch by 2-inch strip every 12 inches across the top to keep the pigs from lying in the trough.

Flat bottom troughs do not work well because it is hard for the pigs to eat all of the feed. The pigs will walk in these troughs and get the feed dirty.

Self-feeders can be used with some pigs. Self-feeders allow you to put feed in the top, and the pigs can eat the feed out of the bottom. There is feed present for the pigs to eat all the time. This works well for small pigs and pigs that don't get fat. Self-feeders cannot be used from start to finish on most pigs. They do work well for feeding if you are going away for a few days. They also work well when limiting feed because they do not waste feed. You can put a limited quantity in the feeder each time you feed. You must have at least one feeding door in the feeder for each pig if you limit the feed.



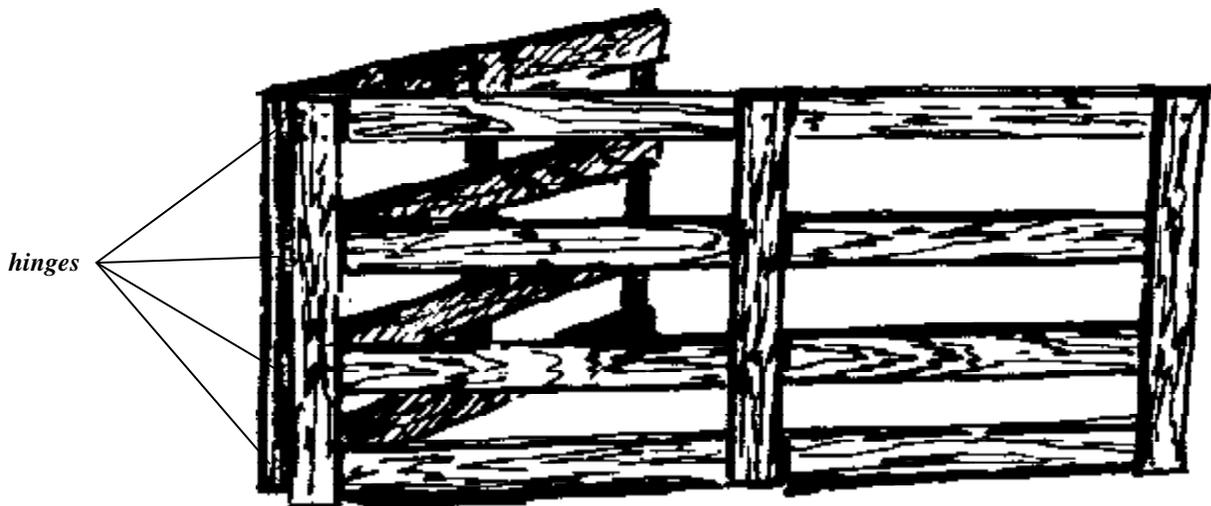
Automatic feeder

All feeding equipment must be kept clean. Pans and troughs should be washed regularly. If you use a mudhole for cooling, you probably need to wash the equipment twice a day. A self-feeder will need to be cleaned every two or three days. A putty knife works well to loosen the dirt and wet feed that stick to the bottom and sides of the eating area in the self-feeder.

Miscellaneous Equipment

Other pieces of equipment that make your pig project more convenient are a winged hurdle and a loading ramp. To make a winged hurdle, make two sections that are 6 feet long and 28 inches high. Nail together horizontally four pieces of 1-inch by 4-inch lumber 6 feet long and use three pieces vertically of 1-inch by 4-inch lumber, 28 inches long. Put one vertical piece at each end and one in the middle to make each section. The space between the bottom two horizontal pieces should be 4 inches. The space between the middle two horizontal pieces should be 4 1/2 inches. The space between the top two horizontal pieces should be 5 1/2 inches. Hinge the two sections together with 6-inch strap hinges.

The hurdle can be used to restrain your pigs in a corner when you need to give them injections, wash them or get them ready to load. A loading ramp, about 2 feet wide, will make your loading job much more pleasant. Use the ramp and the winged hurdle when loading the pigs. You may want to build another hurdle because of its convenience.



Winged hurdle

Summary

Many different types of facilities have been discussed. Some require more investment than others, and you may choose the less expensive. Some require more land, and you may have limited space available. Some require sandy, well-drained land, and you may have flat, poorly drained, wet soil. You may have a building available that needs only a little modification or addition. No one facility will fit all situations. Visit other families in your area who are successful in the swine project, and check out their facilities. Ask questions and take notes so you can compare. Visit with your 4-H club agent, and ask for a home visit so he or she can assist you in making your final plans.



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