



A Guide for 4-H, FFA, or...Anyone interested in producing winning pens

An Article by Charlcie (Gill) Fowler

Bigger isn't always better...

The 4-H (and FFA for that matter) Rabbit Project has, in my opinion, not received the respect it is due. Now, I'm not here to knock any 4-H or FFA Livestock Program, but in my 22 years of serving as a 4-H volunteer in BOTH

large and small livestock areas, I have noted a certain bias when it comes to large livestock versus small animal projects. **BIGGER ISN'T ALWAYS BETTER**.

First we have an issue of space or zoning requirements. Not every 4-H member has the room or the permission from the "powers that be" to have a steer, pig, or even a lamb. Rabbits may be able to fit the bill. A few cages can be kept in a garage or shed where they won't antagonize the neighbors. Rabbits don't bleat, squeal, or moo. Their droppings, if cleaned up regularly, are pretty inoffensive and can be applied directly to flower beds or vegetable gardens with no danger of burning the plants.

It has been my observation that young people enrolled in the small animal projects tend to immerse themselves more into the *details* of their project. In other words, they seem to take very seriously the task of gaining knowledge. Just because their rabbit project doesn't carry the bulk that the large livestock projects do in terms of animal size, does not mean these kids have a lesser project.

Raising a Rabbit Meat Pen requires careful planning, superior management, and excellent evaluation skills. In many ways, a Rabbit Meat Pen Project has more "meat" to it than the average market animal project. So let's get started...

Choosing the Breed

The <u>American Rabbit Breeders Association</u> now officially recognizes 47 different breeds. These breeds are grouped into five (5) distinct body types: Full-Arch, Semi-Arch,

All Commercial Breeds are NOT created Equal

Compact, Cylindrical (the only member of this group are Himalayans), and Commercial. It is the *Commercial* group of breeds that we are interested in.

All commercial breeds are <u>not</u> created equal. The *Commercial Type Group* contains 18 breeds, but all are not suited for Meat Pen Competition. Right off the bat, you can eliminate *French*, *Giant*, and *Satin Angoras*. These are *wool* breeds. Silver Fox, though gorgeous, have a unique *standing fur* which, while beautiful, does not conform to the normal fur standard. You might find a judge that would disregard this, but why take the risk? The idea here is to maneuver you into a position of producing a *winning* meat pen. Next, you can eliminate *Rex*, *American Sable*, and *Silver Martens*. These breeds are beautiful in their own right, but they just don't have what it takes to produce a uniform, *consistent* meat pen. The clue here is that the ideal weight on senior bucks is **8 lbs**. They just don't have what it takes to produce a 4 to 4 ½ lb fryer ay 8 to 10 weeks of age.

I'm going to eliminate *Blanc d'Hotots* next. I used to raise these when they first became accepted in this country. They are a striking rabbit in appearance, but they can't cut it as far as producing meat pens. They don't have either the growth rate or the substance of flesh to produce a winning pen. *French Lops* have TOO MUCH substance. They are a

little too massive. At a young age, they have heavy bone which lowers the dressout percentage.

So where does that leave us? We have left to choose from:

- Champagne d'Argent
- Crème d'Argent
- Californian
- American Chinchilla
- Cinnamon
- New Zealand
- Palominos
- Satin



Palomino Rabbit

You could produce a respectable meat pen out of any of these breeds, but I'm going to narrow it down a bit more. I would advise disregarding *Champagnes*, *Crème d'Argents*, *Cinnamons*, and *American Chinchillas*. Here is my rationale: These are GREAT breeds, but are relatively rare in many parts of the country. The genetic pool may be a bit saturated. In other words, the lines may be SO inbred as to reduce your chances of producing *consistently*, what the commercial market is looking for. So my advice is to eliminate these breeds.

The final contenders therefore are:

- Californians
- New Zealands
- Palominos
- Satins



New Zealand White

Cals and *New Zealands* (Whites) are the leading favorites and by far produce the greatest number of winning pens. For those who like something a little different, *Pals* and *Satins* come in a close second. They have an advantage in eye appeal, but they do tend to grow a *tad* slower, so if you choose these breeds, you will definitely want to shoot for 10 week-old fryers on weigh-in day.

Obtaining Stock

OK. You've decided on the breed you're going to use. Now, you've got to get the rabbits. Here's where some of that *advance planning* comes in...I recommend you

start with a minimum of TWO PAIR. If you can afford it, 6 *does* and 2 bucks. I know, I know...the prevailing wisdom is to start with a trio (1 buck and 2 does). I discourage that and following is my rationale: If you want to continue to develop a breeding herd, you need *some* genetic diversity. If you start with a trio, you will be limited in this area. I am certainly NOT opposed to line-breeding, but if you start with a trio, your line-breeding becomes in-breeding real fast. Also, if you want to offer breeding stock to other rabbit raisers, it's nice to have some genetic diversity to offer your customers.

Start with a minimum of TWO PAIR.

Ask QUESTIONS!

Again, continuing with the careful planning, do some research. Find out who raises the breed(s) you're interested in. Go visit

them. Talk to them, but don't buy any rabbits just yet. Attend some rabbit shows where the breeder(s) you are considering are showing animals. Talk to other rabbit breeders. Ask Questions! What do you need to know?

- What is the breeding history of the herd?
- Is the herd generally healthy?
- Do the animals exhibit good, basic commercial type?
- Does the breeder concentrate on show animals only or is he or she breeding yearround and producing fryers for the commercial market?

You want to purchase animals from a breeder that KEEPS RECORDS and is willing to show them to you. Does the breeder target a minimum of four litters per year with an average of 7 to 8 kits per litter from his or her producing does? Folks who intensively show their animals often don't concentrate on production as much as a breeder who's sole focus is the commercial market and that's OK, but you don't want to buy animals from someone who is content with one or two litters per year either. The animals may be good type-wise, but you don't have any *evidence* that they are capable of producing good candidates for Meat Pens. Buying animals from a breeder who ONLY produces commercial fryers may be doable, but you must be able to ascertain that the offspring produced conforms to the commercial meat type the judge is looking for. Very often a breeder produces good numbers of rabbits, but the type is so-so. You want to strike a happy medium and purchase animals that are good examples of commercial type AND are productive. You don't want does that are *too* productive either. Huge litters of 12 and more kits result in a smaller sized kit. Better to have a smaller, more uniform litter as far as the kits are concerned.

As part of your research, find out if the breeder(s) you are considering maintain a couple of lines within their herd. If they do, you can consider buying both pairs from them – one pair from one line and the second pair from the other. If they really only maintain one distinct line, you might want to purchase one pair from them and your second pair from a different breeder. If you decide on the latter, keep this in mind...find out if the two lines are compatible or "click". Some lines just DO NOT mix. Others blend quite well. Ask around. Ask the breeders. Ask other rabbit breeders.

Purchase your stock well in advance of when you actually want to produce your meat pen. You need to be able to know in advance how the rabbits will perform in YOUR rabbitry. If you start with young maiden does, you need to know if they will produce, PERIOD. Same goes with purchasing an older doe. If you buy a senior doe be sure she isn't a cull on her way out. To be safe, a senior doe should be *under one year of age*. Be watchful of BARGAINS. KNOW YOUR BREEDER. Some breeders are very ethical and provide 4-H discounts and offer quality animals. Some breeders are looking to unload worn out stock and are only interested in making a quick buck. That is why it is important to DO YOUR RESEARCH.

Breeding

Before you can produce a meat pen, you need to breed the doe(s) to the buck. Make sure your does are experienced. That is why I told you to obtain your stock well in advance of when you need to produce your meat pen. Your does should have at least one good litter under their belt. You don't want any surprises.

Breed two or more does to kindle on the same day. This way, you can foster kits between does to even up litter size.

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The Basics...

When breeding a buck and doe, ALWAYS put the doe in the buck's cage. Rabbits are very territorial. If you put the buck in the doe's cage, she is very likely to attack him. WATCH the breeding process. Seeing is believing. See that the buck mounts the doe (from the rear, not her head), that the doe raises her hindquarters, and that the buck either falls backwards or over on his side. Sometimes the buck has extremely good balance, so it may *appear* that he didn't actually fall over, but you'll see him jerk backwards. (That's why I say WATCH.) Let the buck breed the doe a couple of times. It really only takes once, but sometimes the first ejaculate has fewer sperm in it. REMOVE the doe from the buck's cage after she has been serviced. DON'T LEAVE THE DOE IN THE BUCK'S CAGE. Bucks have been castrated. Bucks (or does) have been killed.

Return the doe to the buck's cage ONE HOUR after the original breeding.

It's a good idea to return the doe to the buck's cage ONE HOUR after the original breeding. Why? Studies have shown that conception rates are slightly

higher using this breed-back method. The second breeding, only let the buck service the doe once. (No need to wear him out.) *Note: After breeding, it's a good idea to turn the doe over and see that the buck has deposited his semen in her vulva and not just her tail.*

Write down the day you bred your rabbits. Keep a record of what doe you bred to what buck. This will aid you in evaluating their breeding performance later.

Learn to palpate.

This is an industry skill that every good 4-H or FFA rabbit project member should master. It is surprising to me how many "seasoned" rabbit breeders don't. I have an article I

Learn to palpate.

wrote on <u>palpation</u> that you can access. Visit breeders who know how and have them show you. Practice. Once you learn, it is really quite easy. Start out palpating your does at 14 days. I routinely palpate my does at 10 - 11 days and have no problem determining whether or not the doe is pregnant.

DON'T USE THE BREED-BACK METHOD. Many breeders return the doe to the buck's cage 2 weeks following breeding. The theory is the doe will growl, whine, flatten herself to the cage floor, and generally resist the buck's advances. Some does do. Some does don't. This is an UNRELIABLE method of determining pregnancy.

Preparing for the Litter

Feeding the Pregnant Doe

Do not consider the doe pregnant until palpated. After that, when the doe is about 3 weeks along, you can *slightly* increase her feed, but only by an ounce or two. I recommend beginning to add a TBSP of Animax® or Calf Maker®, etc. to the doe's daily ration. Give this supplement in the evening. A pinch of old-fashioned oatmeal can be given in the morning if desired. 16% protein is adequate for a doe and subsequent litter, however, I prefer to feed an 18% feed. The brand I feed is *Purina Professional*® (gray bag). I do not recommend *full-feeding* (keeping the feeder full). I practice limit feeding (feeding a set amount each day). A commercial-type doe should be eating between 5 and 6 oz of feed daily.

You've bred your rabbits. You've palpated the does and know that litters are on the way. 28 days following breeding, provide a nest box for the doe. The box can be homemade out of wood, metal, or even made with wire with a cardboard liner. They all work fine. Here are some recommendations: Use an open box design rather than an

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enclosed box. A small shelf on top is fine, but if so, there should be ventilation holes in the back towards the top to allow excess

heat and moisture to escape. If you use a metal box, use one with a removable wooden bottom. Metal floors are cold and slippery. Metal floors contribute to chilling of the litter and spraddle legs. Don't use them.

Commercial Nest Box

Make sure the box is not too big. Too large a box encourages the doe to rest in the box which can lead to suffocation/mashing of the litter. A good-size nest box for a commercial breed is: 20" long x 11" wide x 10" high.

Make sure the box is cleaned thoroughly between litters. They can be hosed out and left in direct sun to dry, or you can flame them out carefully with a small handheld propane torch. Make sure the bedding is adequate for the time of year. If it is colder, put a thick (3") layer of shavings (NOT sawdust) in the bottom of the box, and stuff the box with soft grass hay. If it is warm, add less hay. Use your good judgment.

Management of the Doe and Litter

The big day is here...the kits have arrived! You need to check over the litter thoroughly and remove any dead, deformed, or under-sized kits. This is the hardest part for many

4-H and FFA project members. This is often the time when the decision you make means the difference between a winning pen or not.

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If you want to increase your chances for a winning meat pen, DON'T KEEP THE RUNTS. If you want to increase your chances for a winning pen, try to keep the litter size down to 8 OR FEWER KITS. If you're just too soft-hearted, that's fine. Just know the consequences of your decision. The goals of meat pen production are different than

that of producing fryers for the meat market. If you are raising fryers for meat pen competition, you are looking for 3 fryers, 8 - 10 weeks of age, between 3 and 5 lbs that are uniform, full and meaty. 'Nuff said.

This is the time when you can foster kits between litters to even out the size. That's one reason why it's important to breed a number of does to kindle on or about the same day at least within 3 days of each other. To keep track of kits you foster, you can tattoo, with a hand tattoo pen, a tiny dot or series of dots in the right ear so you can keep litter identification for individuals straight.

As a routine, I give the doe a slice of apple whenever I

check the kits.



Don't worry about disguising your scent or sprinkling vanilla on the doe's nose. If the doe is going to cannibalize her kits, she will do so whether you touch them or not. It happens, but not all that often. (By the way, this tendency seems to run in families so make that part of your research before you purchase your stock.) If the doe is nervous or seems aggressive, remove her from the cage and place her in a carrier before you examine the litter. As a routine, I give the doe a slice of apple whenever I check the kits. It encourages a good appetite, provides fiber, and the doe soon associates your daily visits with a pleasant experience. Try it.

The Litter is made in the Nest Box.

The above is a true statement. For the first 3 weeks of a kits life, they rely almost exclusively on the doe's milk supply for their growth and development. One thing I cannot stress enough is to provide a constant supply of clean water to ALL your rabbits. Water is the least expensive, yet most important part of feeding your rabbits. NEVER LET THEM RUN OUT.

I recommend gradually increasing the doe's feed – taking a week to make the increase. I recommend allowing 5 - 6 oz. for the doe and $\frac{1}{2}$ oz for each kit. (A doe with a litter of 8 should be getting 9 to 10 oz of feed per day.) Continue the protein supplement in the evening and the pinch of oats and apple slice in the morning.

At 3 Weeks...

The kits should be fat little balls of fur by now. At 3 weeks, remove the nest box. (If it is

I do not believe in the use of crocks.

very warm, you can remove it a bit sooner; if it is very cold, you can leave it in a bit longer.) The kits will also need access to water. I DO NOT BELIEVE IN THE USE OF CROCKS. Crocks are dirty. Water crocks are a hazard to

curious bunnies. Use J-feeders (hoppers) for feed and automatic/semiautomatic water systems or water bottles for water. If you are using bottles, hang them low enough initially for the kits to get to the dropper easily. You can gradually raise the height as the kits grow. I stop feeding apple to the doe when the kits are 3 weeks old. I don't want them nibbling on it. Gradually, at about $3\frac{1}{2}$ weeks, begin to increase the feed, but only by about an ounce per kit until the kits are about 4 weeks old.

At 4 weeks...

Continue to gradually increase the feed. I allow the doe her high protein supplement, but I don't give any to the kits. I put it on top of the feed in the trough. The doe will scarf it, so you don't really have to worry about the kits getting it. Some folks feed the supplement to the kits as well, but there is the danger of the kits getting loose stools. This inhibits growth, so you want to avoid loose stools at any cost.

At 5 weeks...

Continue to gradually increase the feed. Watch the feed consumption carefully. I don't want to see the feeder totally empty in the morning.

Weaning...

By the time the kits are 6 weeks old, you should prepare to wean them. It is good practice to sort the kits by size so that you have groups of four kits to a cage. (You

...you *lessen* the chance of mastitis in the doe if you wean the kits all at once.

are going to need several growing pens if you want to raise winning pens.) In my experience, it is best to just wean the kits all at once. It is better for the doe as well. Contrary to popular belief, you *lessen* the chance of mastitis in the doe if you wean all the kits at one time. Make weaning time occur in the morning. When you move the kits to their new cage, give them some grass hay to nibble on. This won't be a regular practice, as hay does nothing for weight gain, but it does help transition them to their new home. To help prevent digestive disturbances, I recommend mixing 20% of old-fashioned oat meal to the kits' pellet ration for the first week. After the first week, they can be on straight pellets. 20% of added oats will not inhibit growth, but does add extra fiber which keeps the droppings firm.

My advice is NOT to supplement.

Supplements...

You can supplement the diet of the weanlings, but with caution. An imbalance can quickly cause diarrhea. A fryer with diarrhea is done as far as competing in a meat pen

competition. My advice is NOT to supplement. If you are feeding a good 18% pellet as outlined earlier, this is more than sufficient for flesh development of the meat pen prospects.

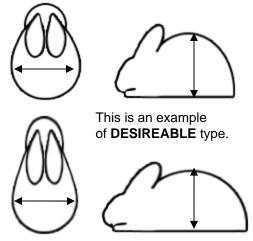
Selecting the Meat Pen

Well...now we're down to it – selection of your Meat Pen. Let's look at the ARBA Guidelines for Meat Pens...

There are four criteria pertinent to evaluating meat pens. They are (in order of importance): (1) Meat type (2) Condition (3) Uniformity and (4) Fur.

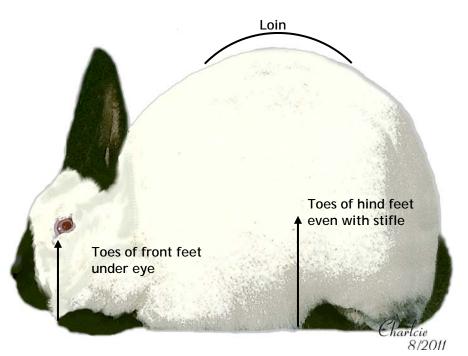
Meat Type... (40 points)

What is meat type? In a fryer destined for meat pen competition it is compact and short. You are looking for a blocky appearance. Look at the illustrations below...



This is **NOT** desirable.

The fryer should be smooth, with no protruding hip bones. *The fryer should be as deep as it is wide.* The shoulders should start at the nape of the neck and rise to a high point over the hips. To get an accurate picture of each fryer, it should be posed properly: Place the fryer so that the toes of the hind feet are even with the stifle joint of the hindquarters. (The stifle joint is equivalent to the knee in humans). The toes of the front feet should be placed below the eye. See illustration...



Hindquarters are most important, followed by the loin, and lastly forequarters.

Condition...(30 points)

Condition speaks to your management of your project. If you have fed and cared for your stock properly, they should have good condition. The fryers should feel firm to the touch. They shouldn't show pot bellies or have loose, flabby skin over the shoulders. They should be clean and show no sign of disease.

Uniformity...(20 points)

The animals you select for your meat pen should look like "peas in a pod". They should look identical in appearance *and feel* as possible. Weigh each candidate for your meat pen. You are striving to have each member of the pen as close in weight as possible. *Note:* Uniformity means just that, so if you are entering rabbits other than white, they ALL need to be the same variety. Keep that in mind.

Fur...(10 points)

Fur is only worth 10 points because fur on fryers is generally not their crowning glory. That comes with maturity when the coat reaches its prime. Suffice it to say you are striving for the best coat possible, but it needs to be the SAME for each fryer in the pen.

So...here is my method for selecting a winning meat pen...

Take all your candidates and weigh them one by one. Mark down each weight. Write it on a piece of masking tape and stick it right on the rabbit. Try to group your fryers so that fryers in each group don't vary more than a couple of ounces from each other. Hopefully you will have more than one group of four or more rabbits that are in the same weight group.

You are *feeling* for the proper meat type.

Now take each rabbit in a group and run your hands over them. Try doing it with your eyes closed. You are *feeling* for the proper meat type. You are feeling for

smoothness. Set up each rabbit and pose it properly. Is it as deep as it is wide? Do the shoulders begin *directly* behind the shoulders?

When you are satisfied that you have selected your winning meat pen, then and only then, tattoo them according to your entry you filled out on your entry form. When should this selection process occur? Not until the day before the show, if possible. What about the tattoo?

I highly recommend you invest in a battery operated tattoo pen. Get the pen WAY before you will need it. It takes practice to be able to

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write a neat, legible tattoo. The day before the show is NOT the time to break out your new tattoo pen. There are several tattoo pens on the market. Most are easy to use and not too expensive. The nice thing about tattoo pens is that you don't end up with a smudged mess. Yes...there ARE ways of tattooing with clamps that provide a readable tattoo right away, but after using both, I vote for tattoo pens.



Show Day

Get everything ready the day before, but don't load your rabbits until you're ready to leave - the less stress, the better. At the show, groom your rabbits with your hands by moistening you hands with water and rubbing your hands over the fur until dry. Groom your rabbits when you arrive and at least once more before you take them before the judge.

I sincerely hope you have a *Winning Meat Pen*, but remember, it's important to come away having *learned* something. It's important to have fun. It is especially important to have a *Winning Attitude*. If you win, remember to

shake the judge's hand. If you don't win, remember to shake the judge's hand. Remember to shake the hands of your fellow competitors. Remember...it's the judge's job to select the winner. It's *your* job to make his choice easy.

GOOD LUCK!

Important Note: The information contained in the preceding article is specifically aimed at those whose show rules require that they **breed and produce** meat pen entries from their own breeding stock. It is recognized that some junior livestock shows, fairs, and expositions allow members to purchase early weaned meat pen prospects from outside sources. In these cases, **it is important to follow the feeding program utilized by the original breeder**.

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Because of the typically short time for feeding and developing meat pens, it is not recommended the 4-H or FFA member implement any feeding changes, to lessen the incidence of digestive disturbances in the developing fryers.

Keep in mind, the following ALWAYS applies:

- Begin with animals of superior GENETICS.
- Maintain a CONSISTENT feeding schedule.
- Provide clean, fresh WATER at all times.
- Select for UNIFORMITY

Charlese Fowler





ABOUT THE AUTHOR

Charlcie (Gill) Fowler raised, bred, and exhibited rabbits for over 44 years. Originally hailing from Southern California, Charlcie recently moved from Astoria, Oregon in the quiet country community of Knappa to Iowa Park, Texas. She has raised several breeds – most recently, Mini Satins. Though never a 4-H member herself, Charlcie has been a volunteer with the 4-H Youth Development Program for 23 years and served as Program Coordinator in Yavapai County, Arizona. She currently works out of her home as a Web Designer and serves as Webmaster for *ARBA District One*, *ARBA District Four*, *Oregon League of Rabbit & Cavy Breeders*, *Washington State Rabbit Breeders*, and the *American Polish Rabbit Club*.

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