

## **Red Wattle Hog Association Spring 2017 Newsletter.**

**Updates and news. Breeding Terms and Programs. Farrowing 101. Pork. Stress Free Processing. Coccidiosis.**

**Membership:** Annual membership to the Red Wattle Hog Association runs from April 1<sup>st</sup> thru March 31<sup>st</sup> the following year. To avoid a lapse in your membership and the benefits of that membership, your renewal must be received before the end of day March 31<sup>st</sup>. There are currently no “lifetime” memberships and all members must renew annually if they wish to remain a part of the association.

The membership forms can be found on the website ([www.redwattleproject.org](http://www.redwattleproject.org)) by going to the RWHA tab on the home page. Payment may also be made by using the PayPal tab on the website (please include your phone number in the note section of PayPal if you wish to have it included in your contact information).

**Registered Red Wattle census for 2016** The Livestock Conservancy uses our registered hog annual census to determine the strength of the breed population over all.

Red Wattles have gone from Critically Endangered to Threatened due to the numbers registered. In 2016- 59 males and 109 females were registered compared to 87 males and 212 females in 2015. This is 131 fewer animals registered in 2016. While this difference might not seem large, for a breed that is recovering from a critical status it is something we all need to note.

The reduction in registrations can be attributed to a number of things, among these might be breeders being far more selective in the animals they choose to register. Evaluation of hogs for registration should always improve your herd. The breed standards can be found on the association website. This is no such thing as a “perfect breed standard” hog, however when you breed you should always keep in mind your goal for your herd. If you need to improve the feet, choose the best feet of your best hogs for registration. The same principle applies for better wattles, snouts, hams, etc. This selection should not overshadow the good qualities of a not so perfect hog. Don’t make the mistake of failing to register good looking hogs that have flaws- if they possess the majority of the traits that you would like to see, as long as the hog still falls within the breed standards.

Always keep quality in mind. Remember the term “registered” is intended to be the best representation of the breed. Breeders who fail to register or breed only for pork can’t claim that!

Keeping these things in mind and using your best judgement in keeping with the breed standards will earn you a reputation as a quality breeder.

**Litter Count on Registration Form** On the registration form is a box for Total Litter Information. The first lines “ # \_\_\_ Males \_\_\_ Females” are to record the total amount of piglets in the litter. The next line “Weaned \_\_\_ Males \_\_\_ Females” are to record the total amount weaned. We know not all piglets always survive to be weaned and it’s no reflection on the breeder. The total number of the litter farrowed helps the RWHA know if the Red Wattle litter size is increasing or decreasing on average. Please strive to keep those areas and numbers correct for all of us.

**Reporting of registered hogs out of production** Please report any registered hog you have that’s been taken out of production or will not be producing registered offspring for any reason. You can contact any board member with the hog name and registration number. This allows the RWHA and The Livestock Conservancy to keep correct population records and is beneficial to you, to Red Wattles and to the RWHA. It only takes a few minutes so please do your part.

**Artificial Insemination, A-I** Jim Myers is the only approved A-I technician for Red Wattle semen. He's always willing to share his knowledge and help. Contact him at: 419-852-1291 or [jmyers@watchtv.net](mailto:jmyers@watchtv.net) or [www.heritageswine-ai.com](http://www.heritageswine-ai.com)

**RWHA website-redwattleproject.org** We're working hard to make and keep our website user-friendly and the go-to place for any information about Red Wattles. You'll find breed standards, the by-laws for the association, copies of the past and current newsletters, hog information including pedigrees, COI's, breeders and owners. You can find the minutes of meetings, Livestock Conservancy records and news, historical documents and other helpful information in the forum section of the website. We welcome any suggestions on making the website better!

**Tutorial** This area of our website is fairly new and we hope it continues to grow and evolve. We're trying to keep it informative, helpful and educational. When possible we're including pictures to go with a narrative to better help the reader understand. Our goal is to take the breeder thru situations he or she may experience, from judging good breed standards, farrowing, illness or injuries, and anything in between. We can't do it alone. Please contact us with any questions or concerns and think of learning/teaching experiences for all of us by also sending in information, questions and pictures. All information is kept confidential. The tutorial is not designed to be a professional veterinary service. It's meant to be a tool and guide and to grow and change over time. You should always work with your veterinary for any illness or injury that you feel is serious.

**Identification** For registration purposes all hogs must be identified in their left and right ears. The RWHA approves ear notching, tags and tattoos. Tattooing has proven difficult due to the ink disappearing over time and needing to be repeated. Notching can be confusing but with practice it's proven very successful. Some breeders are moving toward tagging. A suggestion for tags is to color code by assigning each sow a color for their right ear. Each tagged piglet would receive that same color in their right and left ears, with their number permanently written on the left side tag. The small button tags applied in the center of the ear seem to work best. It's unnecessary to identify piglets or hogs that are designated as feeder/meat hogs. If you're monitoring unregistered hogs as part of your pork producing program you may want to identify them to better monitor the quality of growth and pork produced.

**RW Buy & Sell site** We've begun a new face book site for buying and selling Red Wattles. The site is only for buying and selling. You can list your hogs for sale, or search thru hogs others have listed. You can find it by googling **Red Wattles: Buy and Sell**, or type into the face book search engine. Please review the rules pinned at the top before posting. By making a common public area it's hoped this will make it easier for all of us to make improvements to our herds or to market our hogs. The site is open to the public but you must become a member of the site in order to post. This helps to keep spammers off.

**DNA** The RWHA is offering free DNA testing for all members thru March 31, 2017. Members will be entitled to test one boar and one gilt or sow. Testing is done thru UC Davis and usually costs \$40.00 each. Directions have been provided in several newsletters that can be found on our website. If you need assistance please contact any board member. DNA proves beyond doubt that your hogs are what you say they are. This is becoming more and more necessary as the popularity of our breed grows and will confirm your true RW genetics and reputation as a breeder.

## Breeding Terms and Programs

It's helpful to know various breeding terms and practices that can make you successful. There is no right or wrong way as long as the breeder has armed themselves with knowledge and works diligently toward their end goal. Whether inbreeding, linebreeding, linecrossing, or a wide genetic diversity- every breeder must educate themselves in order to succeed.

COI's or co-efficiency is a great tool to utilize but it's not the golden ring. Breeders must shape their herd by their own desire and what they want to see or improve upon. Education, having a plan, setting goals and working toward them are how you as a breeder will succeed. It's never wise to simply breed. It's detrimental to you as a breeder and your reputation but most importantly it's detrimental to the breed. There's always room for improvement so the goal is never finished but the personal satisfaction is priceless. D. P. Sponenberg states that every hog or herd bears the stamp of the individual breeder. Each breeder is going to emphasize slightly different characteristics, with the result that the final product is ever so slightly different.

The Red Wattle population is smaller than most other breeds and the RWHA is a newer association making great strides in the propagation and protection of the breed thru the education of our members. Due to the lower recorded population you will see inbreeding, linebreeding, and linecrossing in our registry. It's important to understand what those terms and those breeding patterns mean and how they can affect you and your program. Wide genetic diversity (lower COI's) within a breed is healthy and a necessity and it's improving within our breed, however closely bred genetics are not something that breeders should always try to avoid. Closely bred genetics contribute greatly to our breed as they have with countless other breeds. Breeders can be and are very successful when these programs are utilized correctly and the breed is strengthened.

It is also important to note that reviews of our pedigrees by The Livestock Conservancy indicate that Red Wattles are more genetically diverse than was originally thought and more so than a few other heritage breeds. Their reviews also show there are no bloodlines within our recorded bred. Just because there's a breeder name attached to the hog never means they have a bloodline. Breeding to a rigorous documented program makes a bloodline. According to experts, to achieve a bloodline, a herd needs to have been kept in isolation for at least 3 or 4 generations without introductions of outside breeding stock.

These term definitions are taken from the book "A Conservation Breeding Handbook", written by D. Phillip Sponenberg and Carolyn J. Christman and offered by The Livestock Conservancy. The quotes and definitions are here with the permission of D. Phillip Sponenberg. All information from this book will be in italics.

*\*\*\*\*\*The terms inbreeding, linebreeding, linecrossing, and crossbreeding can be emotionally charged for many breeders but each system can be useful in animal production programs. \*\*\*\*\**

***Inbreeding*** is the mating together of animals which are related so that the resulting offspring have one or more ancestors that occur on both the sire's and dam's side of the pedigree. Inbreeding itself is neither bad or good and depends on what goes into the mating. Good animals in will result in good animals. However, if good animals are hiding a genetic weakness these weaknesses will be exposed. A breeder should manage their program of selection for excellence in breed characteristics, viability, and fertility with strict culling of any animals that show weakness. Inbreeding has negative connotations but can be a powerful tool to increase the consistency and uniformity of a population. Inbreeding requires close attention to detail to avoid "inbreeding depression which is a decline in reproductive fitness and vigor of the young produced. It is always advisable to keep available an outcross within the same breed to use in case of inbreeding depression.

***Linebreeding*** seeks to concentrate the genetic impact of a single excellent individual throughout a population with the goal to create a group of animals as much like the excellent individual as possible. An example may be half-brother to half-sister, or cousin to cousin. Linebreeding is less extreme than inbreeding and the benefits can be gained with a lower risk. Linebreeding has been used in the development of bloodlines or strains within breeds. (The RWHA has not known bloodlines at this time). Rigorous culling in both inbreeding and linebreeding should always be a part of the program to avoid loss of vigor and reproductive performance.

***Linecrossing-*** Bloodlines (or strains) are sub-breed groups that are more closely related to one another than they are to the breed as a whole. The existence of distinct bloodlines within a breed has significant benefits for all breeders. Linecrossing is breeding together of individuals from different bloodlines. It's somewhat like crossbreeding, in that the genetic distance between two distinct lines will create a performance boost in the first generation. Linecrossing is often used to produce outstanding individuals. Linecrossed animals tend to have a lot of bloom and presence. Linecrossing can also be used periodically to increase vigor in a linebred population.

*If the goal is an excellent herd with high predictability and decreased variability, the choice should include some linebreeding or inbreeding.*

*If the goal is the production of excellent individuals, then linecrossing may be the approach to take, although these individuals will not in their own turn always produce a uniform population of offspring.*

***Which Is Best?*** The choice of using inbreeding, linebreeding or linecrossing in a herd is an individual choice for the breeder to make.

Another successful breeding program can be cross breeding however the purpose of the RWHA is to protect, promote and propagate Red Wattle hogs and to record and track pure bred hogs. I've purposefully left out terms for crossbreeding.

#### **Swine Historical Trivia**

In 1891 there were 50,625,106 known hogs in the country.

In 1891 market weight hogs averaged 239.75 lbs. and produced 33.45 lbs. of lard

In 1891 it cost an average of \$3.74 to raise a hog to market weight.

In 1891 the average price per head was \$4.15.

This means each hog brought in a profit of .41 cents. That was good easy money back then, but even considering the difference in the economy, is it any wonder that farmers let them roam the woods to care, fatten up and farrow for themselves? Hogs were called Mortgage Lifters because the income from them was considered almost free or a bonus. They were easy care until market time, and some also became free food to feed the family thru the year.

It's also not surprising there weren't many breed associations and registries then. How can you monitor or control the breeding of different hogs roaming the wilds? They were considered food and income. Most people with hogs didn't keep records. In some cases the farmers would notch ears to indicate their farm. Hogs of various farms were released into the woodlands and when they were gathered near butcher time they were separated to individual farmers by the notch identification.

## Farrowing 101

Most of our members choose to be as natural as possible when it comes to farrowing. The words “farrowing crates” make us lose our breath and shoot steam out our ears so we’re not discussing them. Red Wattles typically farrow with no problems or issues even though each farrowing or each birth of a piglet may be different. No method a breeder chooses may be right or wrong and should be based on the breeder’s needs and goals. No matter what method you choose, thought should be put on how to monitor, protect, feed and water your sow and piglets.

Farrowing in pasture or woods may present problems of protection from predators, feeding, watering and shelter in inclement weather. It may be more difficult to notch, tag, castrate, separate for weaning and monitor for injuries or illness. Providing a safe environment away from ravines, ditches, bogs and streams for piglets is a necessity. The breeder must consider these obstacles and work toward eliminating them or make those tasks easier prior to farrowing time.

Farrowing close to the home base eliminates some of those problems but also presents others. If using huts or shelters, bumper pads around the interior provides the piglets a safe place to go when your sow is in motion. The hut or shelter should be large enough that the sow can freely turn around, lay down, enter and exit. Clean dry bedding should be provided. Food and water should be easily accessible. If possible the breeder should assure the sow has room to walk and exercise as well as the piglets room to explore.

No matter where she farrows, the breeder should consider her and her litter care plus their own ability to provide food, water, a safe environment from natural hazards and protection from predators.

Your gilt or sow operates by instinct. She’s going to farrow and her body naturally does what it needs. All farrowing’s may be slightly different. Your best tools are your eyes, a calendar and your education. Hogs are normally very predictable on farrowing dates. If you know the breeding date you can easily figure the farrowing date.

Hogs usually don’t need assistance or encouragement when farrowing. The choice to be there or to monitor from afar is yours. It’s recommended that you move slowly and stay quiet. Your sow is concentrating, hard at work, hormonal, under stress and in pain. Even a farrowing hog can move quickly if needed so don’t place yourself in danger. Jumping or growling is her only defense and she will use it if she feels it’s needed.

It’s never necessary to dry and place the piglets on a teat. They’re normally dry by the time they reach a teat and the maneuvering to get there helps to expand their lungs and move their muscles more freely. By instinct they want to go to a teat. You may see one wonder or get lost. Your desire may be to help but watch and be patient before you step in unless you feel the piglet may be in danger.

Farrowing can be an exciting time for breeders but it’s important to stay calm around your gilt or sow. She knows what to do and if you’ve done your job she will manage much easier. She normally doesn’t need help and would prefer no company or audience. Your job begins with your education, with a safe and secure environment and proper nutrition prior to breeding, during pregnancy and nursing.

In the rare instance you feel assistance is needed remember the birth canal is a sterile environment. Anything you do or handle should also be sterile or you risk introducing serious and possibly deadly infection to your sow or causing permanent internal damage.

Along with breed standards, you should always choose your breeding hogs for mothing abilities. This includes farrowing.

Occasionally you may hear of or experience savaging or ravaging of piglets or litters. Sometimes there are just bad hogs. However most hogs do this by natural instinct. There may be birth defects that we're not aware of that will cause the piglet to die soon if not already dead, even though it may look normal. This is nature's way of cleaning up and protecting survivors. Nothing brings predators quicker than the scent of decay. Decay also invites infection and disease. Each breeder should also assure that she has a proper diet while pregnant. Some hogs may savage because they're lacking or have too much of something in their diet. Although we think of savaging as cannibalism and it is, she's thinking of survival, either for the remainder of the litter, or for getting and keeping herself healthy so she can breed again. If you experience savaging you should examine your program to assure you've done your part for a successful healthy litter, or modify your program if necessary and try again. You shouldn't cull your sow without knowing why if possible. She may be a bad hog or she may be responding to her natural instincts and her actions are valid for a hog. Bad hogs should be culled because this is also part of mothering abilities.

If you have more than one boar with your gilt or sow, they may be the **sires** of the litter. If you're breeding toward particular genetics or registration it's wise and recommended to only allow one boar with your gilt or sow during the breeding cycle.

There's other helpful material on breeding and farrowing in the RWA tutorial. Consider reviewing: Breeding Boars. Cycling, Breeding, Pregnancy & Farrowing. and Breeding 101. We also have great pictures of farrowing donated by a member.

## Pork

Each breed varies or differs greatly in growth, fat and muscle content, flavor, texture and even color. The hog's diet and how the husbandry is managed also controls the final outcome, meaning the quality of the pork.

Husbandry is how the breeder manages his/her herd and encompasses their breeding program, environment or living conditions, food source types and amounts.

Hogs are farm animals and used mainly as a food source. Pork production and sales are where the breeder will recoup the majority of his/her financial outlay so the goal should be great pork. It begins with selective breeding to control or capture the genetics of great pork producing hogs. Within the same breed and even within the same litter some hogs grow faster, are more marbled and have the great pork qualities every breeder should look for and breed toward. .

Environment is an important factor. Do the hogs have free access to roam and graze and exercise? Do they have protection from poor weather and predators to help avoid stress, injuries or illnesses? Are they provided a nutritious diet?

Pastures should be maintained and sown with nutritious grasses for grazing. Rotation is always good to allow pastures to regrow and to break the cycles of parasites but for some breeders it's not always possible. Extra care should be given to the areas in any case. This is your hogs' natural diet and where their quality develops.

Due to varied conditions across the country it's impossible to narrow down complete and nutritious diets. Environments including climate, growing seasons and soil types or conditions control our choices and dictate what we feed and how we manage our herds. In some areas predators are also a concern making full pasturing difficult or impossible. Each breeder should work with their county extension agent to determine how best to manage their feeding program. Have soil tests done to manage pastures efficiently. Know what nutritious grasses grow best in your area.

There's not a lot of recorded information or data on pork quality and goals for heritage, pastured hogs, and what can be found varies greatly from location to location, study to study and even breeder to breeder. We do know that the desired back fat is 1 ½ to 2 inches thick at the 10<sup>th</sup> rib. With that as a starting point, it seems that the hog develops the desired marbling thru out. Work with your processor to know if you're hitting your desired mark. Most are willing to help and share their knowledge. We also know that feed costs and efficiency begin to decrease once the hog reaches more than an average of 260 lbs. For marketing purposes the breeder should know their audience and customers and construct their program toward it. There are successful breeders with market customers that prefer 300 lbs. or more. There are piece markets such as Farmers Markets, CSA's (Community Supported Agriculture) and sales on the farm for whole or half hogs to be processed the way the buyer specifies.

To be successful, to have the reputation that buyers seek out, the breeder must educate themselves and put in the time and work to develop the quality product their communities and buyers want. It begins with proper selection and breeding, monitoring efficient growth patterns of each hog. Some hogs even within the same litter will be fatter or leaner than the others. You're looking for consistency so you should choose your breeders that way. The breeder must provide their hogs with proper nutrition as well as a safe and secure living environment. Know the legalities of producing and selling in your area, county and state. Get to know your county extension agent and your processor. Talk with other breeders in your region and work together with them.

Registration of breed standard Red Wattles is important, but in the end every breeder is going to have many more feeder/meat hogs than registered if selection is done properly. Meat hogs and pork is where the breeder will reap the most financial reward for their hard work. Registered hogs are the ones that bear the great genetics to bring forward, that will in turn produce some hogs suitable for registration and others that carry the sought after pork qualities. It all must work together.

### **Stress Free for Processing**

It's helpful to provide your hogs with a stress free environment near traveling day. If possible bring the trailer in with them or nearby so they're used to seeing it. Open the doors so they can be curious and not fearful. You might want to put in feed or treats so they're used to coming and going. Keep them comfortable in the trailer with fresh bedding and water. Be patient when unloading at the processor. They're going into a new environment with strangers so they're naturally cautious. Stress produces unwanted hormones that affect the taste and quality of the pork. Work with and know your processor. Avoid hot shots or paddles. Try to schedule a time to arrive when the processor is not booked and in a hurry. If you're calm and patient and don't give them options they'll usually do exactly what you want them to.

**Recognizing two of our members whose hard work and dedication pays off.  
Congratulations Walt Wickham and Cam Pauli.**

\*\*\*\*\*

We all know how great Red Wattle bacon is. Apparently, the Iowa Meat Processors Association agrees!



**Wickham Farm Pork**

Congratulations Big Boy Meats for winning **Grand Champion** bacon using **Wickham Farm Red Wattle pork!**

---

Tractor Supply featured this photo of myself and one of our Red Wattles on their Instagram page! Had a few people message us and asking about the breed/nubs on the neck!



## Coccidiosis (Coccidia)

At some point every hog breeder could encounter Coccidiosis. It can come to your herd by bringing in a hog that's contaminated. Hogs over about 4 months old usually don't show symptoms but they can be carriers. Or you or visitors can bring it home by your shoes and tires just by walking or driving across a contaminated area. Truck carriers loaded with hogs may stop for gas and you could park or walk where they were. These "germs" can survive in an area for months.

Your hogs can become sick by rooting or eating in an area where this "germ" has landed from your shoes or tires. Because adult hogs can be carriers but don't show symptoms, the "germ" can be hiding in their feces and can be spread throughout the herd easily.

Coccidiosis is caused by a microscopic parasite that lives inside the cells of the intestine. In newborn litters and up to about 4 months of age it multiplies and destroys the intestine. The piglet is not able to digest properly and develops loose and watery diarrhea that's yellowish to greenish in color and maybe tinged or dark with blood. Dehydration is also a symptom. The belly may be swollen and the piglet will look wasted and not healthy, losing weight no matter how much it eats.

It's fast moving and by the time you notice there's a problem, the internal damage has been done. Many newborn piglets do not survive however the older they are, the more able they are to recover. Recovered hogs are usually not healthy for the rest of their lives. Adult hogs seem to have a resistance to developing it but they can be carriers and not show any sign.

Fecal exams don't always determine the diagnosis. Positive diagnosis is by necropsy to examine the intestines.

It's often spread from a nursing sow to her piglets. Her colostrum does not provide immunity to coccidiosis. The piglets are not able to digest because of the intestine damage

and will often die of malnutrition and dehydration. The breeder may notice problems within 3 to 5 days of infection. The disease usually lasts 7 to 10 days. Grounds, soil and bedding can be contaminated for months afterwards.

Coccidiosis is difficult to treat and highly contagious. It does not respond to parasite medications even though it's a parasite. (medications for worming, lice, ticks or mites does not work.) It also does not respond to antibiotics. There is no sure-fire treatment but there's been limited success using sulphonamides or Baycox. Working with your vet is very important. You should also clean the area of manure and bedding and burn it. Spraying the area frequently with a mixture of 50% bleach and 50% water is highly recommended.

Very young or newborn piglets will often die. Weaned growers may recover from coccidiosis but die from other infections like pneumonia that's brought on by a weakened immune system.

Adult hogs usually don't show symptoms but it can happen. There are always exceptions. Know the symptoms and be prepared.

This is a disease that moves quickly and easily. It's very serious to your herd and its future and is being seen more and more with the small breeder. Working with your vet and using good bio-security practices are important.

Coccidiosis is a disease that helped bring more hogs into confinement facilities because the concrete was easier to clean, disinfect and maintain. But the use of confinement buildings and farrowing crates has also caused the disease to become more prevalent due to concentration. Hogs traveling across the country to and from these facilities have increased Coccidiosis infection to smaller breeders because of contamination of shoes and vehicles and so forth.



This is a grower size hog that was professionally diagnosed with Coccidiosis.

The hog seemed to recover initially probably due to being older when infected, however died a couple of weeks later. Note the swollen distended belly and general appearance of not being thrifty. It was unable to overcome the damage done to the intestines so that even with a strong nutritious diet it was not able to digest well for overall good health, and may have also developed a secondary infection it was unable to fight off.



The breeder initially thought the hog had worms and treated accordingly with medications. When it did not respond to the treatments veterinary help was sought and proper diagnosis was made by laboratory exams.

Fecal exams are not always able to diagnose this. The “parasite and eggs” must be at a certain stage for a confirmed or positive diagnosis.

Positive diagnosis should be made for the sake of your herd.

Example: You can stop for gas, walking across the lot where a hog trailer was parked last month that had adult hogs infected with coccidiosis and no symptoms. Adults don't show symptoms. You come home and feed your hogs, walking where they eat, sleep and root. A month later your pregnant sow farrows and a week later all the litter is dead from severe diarrhea.

During that month before farrowing the pregnant sow eats, sleeps and poops where the rest of the herd is. Now it's possible they're all infected as carriers. Once a diagnosis is made it's very important to clean the areas. Remove manure and bedding and burn. You may also want to reschedule breeding or farrowing to allow time for all disinfectants and weather conditions to kill the germs, (parasites). You should also monitor your adults as possible carriers and be prepared when they farrow.

