

Red Wattle Hog Association Newsletter

Spring/Summer 2014

The RWHA membership overwhelmingly voted to amend our annual membership renewal date from Jan. 01 to Mar. 31 and with no grace period. Our by-laws have been amended to reflect the change. Due to the expense and time necessary, no individual renewal reminders will be mailed so please mark your calendars. All members will be reminded in the RWHA winter newsletter too.

It's always been suggested that breeder identifiers be added when the breeder registers a hog. For example: OTT Petunia for One Two Three Farm, or ABC Petunia for Albert and Bonnie Crawford, (insert your name). This identifier clues everyone in quickly as to who bred that particular hog and is helpful when anyone is doing research for purchasing. If you're not using identifiers it's strongly recommended that you begin. When seen, people will quickly and easily remember who you are and that's also a great marketing tool. Duplicate initials or numbers will be confusing to future breeders. Please check the RWHA website to assure yours is not a duplicate. The RWHA will need your personal identification to be unique only to you.

Don't forget about our RWHA badges. They're great for caps, jackets, pockets and just about any type of clothing. The funds from the badges also go to help support the RWHA scholarship fund that every member is entitled to receive for further education. The order forms are on the website, redwattleproject.org, and can be found where all the RWHA forms are, or you can contact any board member. Our first scholarship winner will be announced shortly.

When registering a hog mail your application to the address at the top of the form. Also make your payment to Mountain Niche Registry, not RWHA. The registry office can-not deposit or cash checks made to RWHA.

Your reputation will either make or break you. Be a good steward of your name and your business. Follow thru on phone calls and emails and stand by what you say. If you don't have stock available at least let them know so they can continue their search and they'll remember that you were thoughtful enough to get back to them. Follow up with your buyers. Many are new to hogs and would appreciate the extra effort you make. Remember that many people read and study our website and they're watching to see if you follow the rules and guidelines too. Reputations do get noticed, good and bad, and the country may be big but the Red Wattle world is small. If you plan to be successful it's also important to continue to work on maintaining a good reputation as well as providing a great product.

In order for the RWHA to keep updated on the population of our registered hogs we need to know when a hog is taken out of production. Please notify any board member when a registered hog is no longer producing offspring for any reason, deceased, injured, sold without papers, or taken out of production and retired. The population is growing by leaps and bounds however it is still on a watch list. Having correct numbers will help keep track and let all of us know if we're making progress. No registered hog is ever removed from the registry. Their information is needed for offspring and for research. They are only removed from the current in production list which operates behind the scenes.

If you completed your membership thru Pay Pal, please check our website for your phone number. Pay Pal does not list your phone number and if it wasn't previously provided then it won't be listed on your contact information. Buyers use this information to contact breeders so your phone number could be very important. If your phone number needs to be added please contact any board member.

Regions

Several months ago the RWHA Board of Directors developed regions for our membership. This was done to encourage members in particular regions to contact each other and work together based on the commonality of the region. Regulations, rules, state laws, prices, feed availability and so forth are different all over the country and working with those who have more in common makes it easier to raise and promote your product. We encourage you to find your state and use the RWHA website to contact members near you.

WA, OR, ID.

MT. WY. ND.

CA. NV. AZ.

UT. CO. NM.

TX. (which is a small country on its own 😊)

KS. NE. MO.

MN. IA. WI. SD.

IL. IN. MI. OH.

AR. LA. MS. OK.

FL. GA. AL. SC.

TN. KY. WV. NC. VA.

ME. MA. NH. VT. NY. RI. CT. NJ. DE. PA. MD.

Wattles!

The Institute of Genetics, Vet Suisse-University Bern Switzerland, is currently studying wattles! We know they are dominant, but what's their purpose? They're studying wattled hogs as well as other wattled animals. As information becomes available we'll be sure to pass it along.

Safety

One of the most important qualities of Red Wattles is their docile nature. They're gentle, friendly, smart and lazy. They're also very big farm animals who weigh hundreds of pounds and can move quickly without notice. Do you know the difference in a glad to see you wagging tail and an I'm in a bad mood wagging tail? They can also hurt you unintentionally merely by their size and what they do naturally. We should always remember they are not a domesticated small house pet. When feeding or interacting with your hogs always be aware of your surroundings and know the best escape route if necessary. When moving or handling your hogs especially in a smaller or confined area you may want to consider using a hog/moving board. It protects you should one back up or move unexpectedly. You can buy them or they're easy to make. You're asking your hog to do something different so that puts them under stress and doing whatever is necessary to get out of their situation.

If it's possible on your property, make a narrow run or alley when loading your hogs. It can be temporary or permanent. When not given a choice hogs will usually move forward and loading them will be much easier for you. If you have your hog/moving board with you and the hog backs up it will back into the board and not your legs and will be encouraged to continue moving forward. These boards can be made cheaply by cutting a piece of plywood to size and cutting out a handle.

Our RW's are unique in that they usually don't appear to mind company when farrowing. They know what they're doing and don't need help. Too much help, too many people and too much distraction can make your sow nervous and then she is dangerous, possibly to you and possibly to the piglets. She has a job to do and it's a beautiful part of nature to see, but at a safe distance, quietly. By "assisting" you are interrupting the natural process. Each delivery can be different and by watching at a safe distance you will learn if there's trouble and when or if you may need to step in. Breeders should remember if there

is trouble while farrowing, it could be an inherited factor to consider. If farrowing is assisted by breeders it may be difficult to judge if the sow is only nervous or there are actual problems.

Hog safety and health.

Our hogs are much like us in the way they digest food and what their bodies do with it. A high carb diet, (breads, doughnuts, bagels) will make a hog fat quickly. They may love it, and you may love it too because you get a good deal at the day old bakery, however it's not good for their health. Fat hogs don't breed well, or they don't breed at all. Fat boars can break your gilt or sow down. Fat gilts or sows can also have problems farrowing. A good indicator is to look for wrinkles along the legs particularly the rear legs, and fatty loose jowls. Red Wattles get big, it's natural to think they need more food to grow and sometimes it's hard to know if they're overweight. If possible, good access to pasture and exercise is important. Walking around and grazing is natural to them. If hogs must be confined to smaller areas it should be large enough that the hog can still walk around and feed should be monitored closely. Many specialists and experts have determined that a 14 to 16% protein diet is ideal for swine. More than that is overkill and a waste of time, energy and money. Constant diets of more protein or other vitamins, minerals, or supplements can also cause heart, liver and brain damage. Their bodies are not designed for it. If your feed is the proper mixture, no additional supplements are needed unless it's something like fruits, vegetables and nuts and what they would find naturally if they were foraging for themselves. The most important thing to remember is to let your hogs be hogs with as little interference as possible. When breeders of any animal begin to alter what is natural to that animal, they change the animal from what it is. Your hogs will be happy and healthy with a proper mixture of feed and there is no need to micro-manage. We all enjoy our Red Wattles because they ARE easy keepers.

Registrations

Every aspect of our hog is important whether its feeder or meat hogs, or registered hogs. Good record keeping will help you in your future by allowing you to track the good and bad and to better determine if you're meeting your goals or if you need to make adjustments. Develop a binder with each registered hog listed separate, but still have an area for your meat hogs. Keep track of breeding dates, farrowing, number and condition of piglets, illnesses, injuries, and so forth. Then at a glance you can see anything about that hog and know which direction you need to work toward. .

The seller of a Red Wattle hog that is to be registered must be a RWHA member. No registrations will be honored for non-member sellers. This rule working in conjunction with others helps to protect the integrity of the breed as well as RWHA members and their hard work and investment. RWHA members must complete the registration application for the buyer, provide a copy to the buyer, and mail the completed application to Mountain Niche Registry along with the proper fee. Membership to the RWHA also assures that news, updates, alerts and so forth are being passed to responsible Red Wattle breeders and they are kept informed concerning any information relevant to their hogs, their investment and the RWHA.

No Red Wattle hog will be registered after 18 months of age. This allows the RWHA to track our hogs better. At 18 months the hog has grown enough to judge if it meets the breed standards and to have also had a litter to determine if it is a good breeder as well as the maternal qualities. 18 months also stops the breeder from breeding and selling multiple litters before requesting registrations. This creates major harm to the breed and their population because many quality hogs get lost this way.

Red Wattle pork has become popular and sought after. All breeders must realize that not every piglet that hits the ground can or should be registered. Knowing the breed standards and learning as you go along is important to you as a breeder. Register only the quality hog and use the others for pork. Your long term goals should encompass all three venues. Registration, providing feeder/meat hogs to the public, and providing pork to the public. If possible in your situation, growing out meat hogs for selling pork is more lucrative and beneficial financially than selling registered piglets. This practice also assures that only the best quality is in the breeding pool allowing Red Wattles to keep the title of being the best.

Current Knowledge of Porcine Epidemic Diarrhea Virus (PEDV)

Dr. Richard Coffey

Extension Swine Specialist

University of Kentucky

Department of Animal and Food Sciences

By now I am sure most of you are aware that a new swine disease to the U.S., is having a big impact on the swine industry. The high mortality rates in young pigs experienced on swine farms that have broken with PEDV has caused concern about its spread for other pork producers. Being new to the U.S., there is still much to learn about PEDV. This article is an attempt to provide you with the current knowledge of PEDV.

What is PEDV?

PEDV is caused by a Coronavirus and was first diagnosed in 1971 in Great Britain. Since that time there have been sporadic outbreaks in Europe and it has become an endemic pig disease in Asia since 1982. It wasn't until May, 2013, that PEDV was first confirmed in the United States. PEDV is related to Transmissible Gastroenteritis Virus (TGE) which is also caused by a Coronavirus. PEDV only infects pigs (i.e., it will NOT infect humans or other livestock).

NOTE: There is also a second newly discovered virus that is distinct from PEDV. This virus is a deltacoronavirus, and has been designated as Swine Delta Coronavirus (SDCV). This new virus was first detected and reported by the Ohio Department of Agriculture in February, 2014. Like PEDV, SDCV cannot spread to humans or other species and poses no risk to food safety. The clinical signs appear to be similar to PEDV.

What types of swine farms are susceptible to PEDV?

PEDV is a nondiscriminatory virus that can affect any pig farm, regardless of size or type of facilities. To date, positive testing results for PEDV has been reported in 30 states on over 6,000 pig farms. The types of farms affected have included small and large farms, as well as farms where pigs are raised in total confinement, semi-confinement, and outdoors.

What are the clinical signs associated with PEDV?

When swine herds first break with PEDV, the clinical signs will include severe, watery diarrhea in pigs of all ages with possibly vomiting and almost 100% mortality in preweaned pigs (especially those 14-18 days of age or younger). Sows nursing litters will usually experience severe MMA (Mastitis, Metritis, Agalactia). Pigs that are weaning age or older that become infected with PEDV will typically scour, possibly vomit, and go off feed for a few days, but unless they already had a compromised immune system they will usually fully recover.

How can PEDV be diagnosed?

PEDV looks identical to TGE and can only be differentiated from TGE by diagnostic testing. Definitive diagnosis of PEDV can only be accomplished by diagnostic laboratories using PCR (polymerase chain reaction) testing on manure or intestines from infected pigs or by immunohistochemistry on formalin-fixed intestines from infected pigs.

How is PEDV spread?

PEDV is spread by pigs coming in oral contact with contaminated manure. PEDV survives in manure for extended periods of time, and any object that is contaminated with pig manure can be source of infection for pigs. The most common ways that uninfected pigs can come into contact with infected manure include direct pig-to-pig contact, trucks and trailers used to transport pigs, and boots or clothing that have been soiled with infected manure. There have been some concerns that this disease may be spread via certain feed ingredients (such as blood meal, porcine plasma, etc.), but it has yet to be definitively proven that this has or can occur.

How long after pigs are exposed to PEDV until clinical signs will be seen?

PEDV is a fast moving virus, and the time period from exposure to PEDV until clinical signs will typically be seen is only 12-24 hours.

How long will pigs shed the disease?

Once a pig becomes infected with PEDV, it appears that they can shed the disease (infect other pigs) for up to 3 to 4 weeks.

What treatments are available for PEDV?

There are currently no vaccines available for the prevention of PEDV. Unfortunately, though there are vaccines available for TGE, these vaccines are ineffective against PEDV even though both disease are Coronaviruses. Also, other than supportive therapy to minimize the effects of dehydration, there are not treatments available to lessen the effects of PEDV.

In the absence of vaccines to prevent or treat PEDV, it is a fairly common practice for farms that break with PEDV to try and expose all animals to the disease as quickly as possible to shorten the time period for the disease to run its course. This is typically accomplished in one of two

ways: (1) a process referred to as feedback where the intestines from piglets that have died from PEDV are ground up and fed to sows, or (2) spraying a small amount of diluted feces from an infected piglet onto the snout of sows. This oral exposure of the PEDV virus to sows lets them build up immunity to the disease that can then be passed along to their newborn pigs through immunoglobulins in the colostrum. While maternal protection to piglets through colostrum can be very effective as a treatment for PEDV, it is unclear how long sows retain this ability to pass on protection from PEDV to additional litters. It is likely that as time goes by the ability of sows to provide maternal protection through antibodies in colostrum will decline and herds may re-break with PEDV.

What can be done to lessen the effects of PEDV?

The best thing that can be done once a pig has contracted PEDV to lessen its effects is to provide supportive care through hydration. Depending on age, a pig's body is comprised of approximately 55-70% water. This makes it vitally important for pigs to have unlimited access to clean, fresh drinking water when they are infected with PEDV are scouring and (or) vomiting. Also, the addition of electrolytes (sodium, Na; chloride, Cl; potassium, K; hydrogen ions; bicarbonate; calcium, Ca; and magnesium, Mg) to the drinking water to replace the electrolytes lost from diarrhea and vomiting may also be beneficial.

What biosecurity practices can be adopted to reduce the risk of getting PEDV?

The best biosecurity practices to consider are those that limit the cross contamination with an infected animal's manure. Examples of practices that will help with this include:

- (1) Any replacement boars or gilts that will be brought onto the farm should originate from a PEDV negative herd.
- (2) Have a clearly defined and communicated "line of separation" which clearly identifies the separation between your facilities/production site and transport vehicles.
- (3) Restrict visitor access to your facilities/production site, especially those visitors that have likely come into contact with other pigs.
- (4) Utilize strict biosecurity measures for transportation vehicles that includes cleaning, disinfecting, and drying.

Are there disinfectants available that can inactivate PEDV?

There are commercially-available disinfectants that have been demonstrated to be effective in inactivating PEDV. Examples include Clorox®, Virkon S®, Tek-Trol®, 1 Stroke Environ®, and Synergize®. Thorough cleaning of pens, trailers, and equipment followed by disinfection and drying is necessary.

Update on the Saving Endangered Hog Breeds Research Project.

By Alison Martin, The Livestock Conservancy

In 2008 representatives of eight heritage pig breed associations met with The Livestock Conservancy to discuss a novel research project. The group identified priority objectives for a research project to improve conservation and marketing of rare breeds. These included documenting more about the genetic, growout, and carcass characteristics of the eight breeds, developing new ways to support bloodline conservation, and educational materials for new farmers to help them succeed.

It took three years to get funding for the project, and during that time the trend for heritage pork really began to take off. With funding in hand, the three year project really got rolling in early 2012, with partners University of Kentucky, Berea College, and University of Missouri. Here are the results from the growout and carcass evaluations conducted by Berea, UK, and The Livestock Conservancy.

Growth and Carcass Characteristics. Seven piglets from each of eight breeds were transported to Berea College and grown out on pasture to market weight. This may be the first time so many breeds were grown on identical circumstances on pasture. 1.5-acre pasture consisted primarily of fescue with some other grasses and broadleaf weeds. Free-choice feed consisting of ground corn, soybean, and Fertrell swine premix, and water were available at all times.

Average Daily Gain of Red Wattle Hogs

N	Body weight at Harvest (lbs)	Age at Harvest (mos)	ADG Mean \pm Standard Deviation	Coefficient of Variation
6	300	7.5	1.420 \pm .086	.06

All pigs were grown to market weight. We had to juggle process dates for multiple breeds, so the Red Wattles actually got a little bigger than target market weight. One of the Red Wattles died during the study, so these numbers reflect the average of six pigs. Average Average Daily Gain (ADG) was the best measure of growth rate for this small group because of the differing growth rates between the sexes. The Standard Deviation measures variability, as does the Coefficient of Variation (CV). CV is calculated by as Standard Deviation/Mean. The low CV of this group of pigs (less than 0.10) shows that they were nicely uniform. This consistency can be a valuable trait for predicting processing dates and market weights.

Each carcass was processed by American style cuts on one side and European style cuts on the other side. The European style break-out is favored by chefs in some high-end restaurants, and this can be a lucrative market for heritage pork.

Overall Carcass Characteristics of Red Wattle Hogs

Live Weight	Hot Carcass Weight (HCW)	Hot Carcass Yield (%)	10th rib Back Fat (in.)	Loin Eye Area (sq. in.)
300 ± 20	224 ± 18	74	2.8 ± 0.2	4.5 ± 0.9

Carcass Cut Up for Red Wattle Hogs by Two Methods

% Yield, American Cuts:	Red Wattle Hogs		Production pig, for comparison (250 lb live wt, 184 lb cold carcass weight)	% Yield, European Cuts:	Red Wattle Hogs	
	Lbs / % of HCW				Lbs / % of HCW	
Butt	14.0	6.3%	8%	Shoulder	36.4	16.2%
Picnic	15.8	7.0%	9%	Boneless Loin	20.7	6.3%
Loin	27.8	12.4%	18%	Tenderloin	2.28	1.0%
Sparerib	7.5	3.3%	3%	Belly	32.1	14.3%
Belly	38.4	17.2%	16%	Ham	46.0	20.5%
Ham	42.9	19.2%	24%	Jowls	4.7	2.1%
				Coppa	7.6	3.4%
				Presia	0.4	0.2%
				Pluma	3.6	1.6%
American Cut Yield (% HCW) (Ham, Loin, Butt, Picnic, Sparerib, Belly)	65%		78%	European Cut Yield (% HCW) (Ham, Belly, Boneless Loin, Tenderloin, Shoulder, Jowls, Coppa, Presia, Pluma)	66%	
Lean Cut Yield (% HCW) (Ham, Loin, Butt, Picnic)	45%		59%			

The Red Wattle hog has a balanced conformation that lends itself to processing by either the American or European style. Yield of processed cuts was on the low side, so further selection for production conformation, without sacrificing maternal and foraging traits, will make this breed shine.

Heritage breeds are more marbled than today's production pigs, so the pasture raised, free-fed heritage pigs in this study had more back fat than pork industry averages. The conformation of Red Wattle hogs and other heritage breeds comes from the days when lard was important for many cooking and industrial uses. This changed in the early 20th century as hydrogenated vegetable oil and petroleum products replaced historical uses.

Fortunately, consumers have rediscovered the flavor and health advantages of healthy fats from pastured livestock. There are strong suggestions in the scientific literature that the fat from pigs raised on pasture has higher levels of fat-soluble vitamins and a heart-healthy profile of fatty acids as is the case for grass-fed beef.

Interest has grown in the European cuts for breaking down the carcass. This method follows the musculature more closely, and is of interest for charcuterie (cured meats). The European method also utilizes more parts, including cuts such as necks and cheeks that go into sausage when the carcass is broken down by the American style. The yield was slightly greater for the Red Wattle hogs when broken down in the European style, but not greatly so, so the style of butchery can be done according to the customer.

Carcass data sheets for individual breeds are being constructed by a professional graphic artist through the University of Kentucky. A diagram for each breed will show the different carcass cuts, and High resolution photographs of each cut will accompany the data. The data sheets for each breed will enable producers to plan for success when seeking to diversify their farm products.



Photos by

Genetic information to come. Members of RWHA were also generous in donating hair and blood samples for DNA analysis. Forty animals representing seven bloodlines were submitted! After completing the collection from the other eight participating breeds, all the samples were submitted this winter to the lab of Dr. Yves Plante at University of Saskatchewan. There the DNA will be extracted, analyzed, on comparisons within and between breeds made. While we don't have an update on this work, we are excited to learn what it will tell us about the breed history and breeding practices. Breeding recommendations from Dr. Phil Sponenberg for conservation of bloodlines were printed in the *(spring?)* RWHA newsletter.

For the complete report on this project, check it out here:

<http://mysare.sare.org/mySARE/ProjectReport.aspx?do=viewProj&pn=LS11-246>

Red Wattle



Provided by Cecil Edgar

Also known by: *Red Waddle*

The hogs came from New Caledonia, which is a French Island in the South Pacific by Australia. They were to New Orleans in the late 1700's by the French.

The breed was a lean meat type and the flavor excellent. The Red Wattle has never been very popular, years ago people wanted pigs for their lard, of which the Red Wattle had very little. The breed got some interest in the 1980's for its reputation for a lean carcass. They sold for a high price and many people were breeding them. This unfortunately didn't last too long. The meat is still good, and it is a gentle

natured hog. They are easy to work and farrow.

The Red Wattle is one of the so called tasselled pig and looks something like a [Duroc](#) or perhaps a [Tamworth/Duroc](#) cross, but with a pair of wattles (influenced by a single gene) hanging from the neck. The Red Wattle was quite a stable breed but has at least three different registries in the United States and is also recorded in the Canadian Swine Registry - it is not clear which of these record the original breed, or whether populations with nothing in common except the wattling gene are included regardless of other characteristics.

Reference:

Cecil Edgar, Prairie City, SD

Mason, I.L. World Dictionary of Livestock Breeds. Third Edition. C.A.B International. 1988

Pigs, A Handbook to the Breeds of the World, Valerie Porter. Cornell University Press, Ithaca, New York. 1993

Photographs: Cecil Edgar, Prairie City, SD

Raising pigs on pasture reduces the risk of fostering antibiotic-resistant bacteria

A herd of pigs that had not been exposed to antibiotics for 126 months was divided into two groups and either housed on pasture or in standard indoor units. Over a 20-month period, fecal coliforms from both groups of pigs were tested for resistance to standard antibiotics. Samples taken from the pastured pigs were far less likely to be antibiotic resistant.

"The data from this study suggest that exposure to antibiotics is not the only factor that influences the prevalence of bacteria that are resistant to single and multiple antibiotics in the feces of domestic animals and that considerable research is needed to define the factors influencing antibiotic resistance in fecal bacteria."

Pastured pigs are vitamin enriched — naturally

Pigs raised on pasture have 300 percent more vitamin E and 74 percent more selenium (a vital antioxidant) in their milk than pigs raised in confinement, according to Don C. Mahan Professor of Animal Sciences at Ohio State University. This bounty of nutrients promotes healthier litters, shorter farrowing times, and good milk let down. The pigs' meat is enriched with vitamins as well. Fortifying the pigs' diet with synthetic vitamins, the standard practice in confinement operations, does not achieve the same results because the artificial vitamins are more poorly absorbed.

The Pig War

In the mid 1800's there was a border dispute between America and British Columbia over San Juan Island that lasted for several years and almost turned into an international incident. The only casualty was a pig.