As the Thanksgiving holiday approaches, profiling a turkey producer made sense. For the previous ten years, Tom Delehanty and his wife Tracey from Pollo Real Farm in Socorro, New Mexico, have raised Black Spanish and Standard Bronze turkeys, both heritage breeds. And prior to moving to New Mexico, Tom farmed in Wisconsin, where he also raised heritage turkeys. In 2012, he hatched over 1500 turkeys for the Thanksgiving market.

Long time APPPA members will know the name Tom Delehanty and recognize him as the innovator of the churt. APPPA profiled his general poultry operation in issue 53 and more recently, Tom contributed an article outlining how he uses his rebar churts as his pasture shelters for his broiler and turkey flocks.

In describing the personalities of turkeys, Tom depicts them as peaceful and friendly, noting that the Puebloan Ancestors of the American southwest domesticated the turkey soon after the dog. “Turkeys won’t eat each other, and there’s a spirit I really enjoy in them,” says Tom.

Tom’s spiritual connection seems in tune with his family history. He retells a story from his 85-year-old mother’s youth about hatching turkeys by the fire. The turkeys would always want to nest on the south side of the woods, but unfortunately, the young chicks would succumb to predators long before they’d make it back to the barnyard.

To fight the predators, Tom’s mother and aunts would watch the turkeys carefully, and when they started to sit on the eggs, they’d start marking time. At 26 days, the girls would gather the eggs and take them to the house and place them by the warm fire and cover them with a moist towel. At approximately 28 days, the chicks would hatch.

Breeding
Tom doesn’t hatch his turkeys by the cook stove, like his mother, opting instead to incubate using four incubators capable of holding 180 eggs each.

A heritage turkey requires approximately six or seven months to reach market weight. The hens will begin laying in March with the older hens starting a little earlier.
Renew APPPA Membership

Check your subscription expiration on the mailing label above your name. If it’s 71 or less, it’s time to renew.

And don’t forget to recommend APPPA to a friend.
Greetings from the beautiful "Lukes Pond Valley" in Bermuda.

Wow! All of a sudden, it is mid September. While most our Northern members are bringing in the harvest and getting ready for winter, we, as always, are "full on" with preparations and actual winter planting. Winter and spring are our busiest times.

Basically at this point, our cool weather planting schedule is ramping up. All the Cole crop seedlings are ready to go, as well as tomatoes, Chards and herbs.

We did pick a bumper crop of watermelons again this year, and retailed most of them. We certainly paid off the year's favors with some. The guy with truck loads of watermelons always seems rich, as he can barter for just about anything with them! It’s High gear time.

We were very lucky to escape hurricane Leslie. It had been moving very slowly right at us for days before veering off to the east. It cleared us by some 150 miles. Had it stayed on course and continued to move slowly, we would have been peppered for days.

That was really lucky. We dodged another bullet, receiving minimal crop damage and 2 inches of greatly needed rain. Now we are only 2 months behind for this year’s rainfall. It appears that the passage of this storm has finally changed the season to full on "first rain in September" planting mode.

We have about a hundred Bourbon Red & Holland White turkeys coming on for the holidays, along with about 160 Broad Breasted Whites. Thank you, Leon Moyer, for facilitating the BBW's.

When it comes to Standard or as they are now called, “Heritage turkeys,” we all know how long they take and how much more feed is required to get them to market.

Is that really the case?

It seems that 30 big turkeys don’t eat half of what 80 broilers do in a day, so maybe the feed numbers are not as bad after all, especially when they are on good pasture.

Yet another record keeping exercise needs to be done.

No matter how you slice it, they are THE BEST tasting turkeys ever. But just like a divorce, they seem so expensive. Why?

Very simply because they are totally worth the cost.

As we prepare to start up our CSA again in November, we are full on, head down, going like the infamous clappers!

Happy & bountiful harvests to all.

Tom Wadson.
APPPA vice president.
Tom doesn’t separate the two breeds of this 1,000 turkey breeding flock, opting instead to let them mingle and mate at will. When it comes time to retain breeding stock, he notes that it is simple to tell the crosses from the non-crosses. All crosses are processed.

The primarily selection criteria for both the Standard Bronze and the Black Spanish turkeys is weight. Hens typically reach the eight to ten pound range with an occasional twelve pounder. Males push twenty pounds with a fifteen pound average.

According to the American Breeds Livestock Conversancy (ALBC), the Standard Bronze resulted from European colonists crossing their variety with the Eastern wild turkey. It’s named for the copper-bronze sheen.

The Black Spanish, according to the ALBC, was exported to Europe from Mexico by explorers in the 1500s. A couple hundred years later, they returned with colonists to America where they were crossed with the Eastern wild turkey.

The Black Spanish are historically smaller than the Standard Bronze. However, both breeds have long since been forgotten by the modern, commercial turkey industry. Breeders, such as Tom, are working to get these turkeys in demand and are actively breeding them to be viable production options.

Production Efficiency
A few years back, Tom discovered a trick that would give him a two to three pound increase in carcass yield for each turkey. Tom used to stick the 250 young turkeys in an electronet, but there are a lot of predators that want to eat a young turkey. And as the turkeys matured, “the four-month-old males are knuckleheads. They’re always yanking on each other’s noodles and strutting,” says Tom.

All that activity was costing carcass yield.

Tom moved the turkeys into a churt, and he immediately noticed that the juveniles focused on grazing. There was no jostling or noodle yanking. Every time they try to strut, the side of the churt thwarts them. The breeding flock is allowed to fully express themselves.
On pasture, each churt houses up to 25 turkeys, and they’re moved daily. The 10’ x 10.5’ churts uses rebar rods to form the structure and are oval in design. The sides are enclosed with chicken wire and the tops are covered with 24-poly woven material, and more recently, Tom uses billboard tarps for the top. Tom’s churt design and pasture routine are detailed in *APPPA Grit* Issue 68.

While on pasture, the turkeys eat non-GMO grain, but according to Tom, the pasture production model is more important. “The more greens they [the turkeys] can shovel down their gullets, the better,” says Tom. The birds are cleaner, more flavorful, and healthier.

At processing time, the turkeys were two to three pounds heavier than before the churt. I’m sure you see the significance of that improvement, but let’s run the math anyway. Let’s split the difference and say Tom realized a two-and-a-half pound improvement.

He sells for $6.50 per pound, so each turkey grosses an additional $16.25. Spread that over the entire flock of 1500 turkeys, and that simple housing change is worth an additional $24,375 each season.

Tom didn’t share financials with me, so this isn’t a report on his actual gains. However, I’m extrapolating the figures based on his numbers because the magnitude of small changes should not be lost on us. Is there a small change in your production system that could have that kind of exponential impact?

There’s another significant improvement Tom shared about his production. He didn’t always breed turkeys. For many years, he purchased day old poults and raised them market weight. Unfortunately, the supply was not consistent, and some years he wasn’t able to get the number turkeys he needed. In addition to the unknown supply, buying day olds added $15,000 to $20,000 each year.

Cont’d page 21
Building Cold Storage
By Ron Khosla, CoolBot Inventor

A "down" economy might be waking the rest of the country up to the importance of savings and DIY, but for farmers working on low margins and high risk it's business as usual. Although we still live off the income from our 200 family CSA, I developed and now sell the CoolBot, a device that makes a standard window air-conditioner run down to 33 degrees, turning it into a walk-in cooler compressor. We built the CoolBot because we couldn't afford a real walk-in cooler compressor. We couldn't afford a real walk-in cooler box either, so we built our own there, too - and we've since helped many other people build their own walk-in boxes as well as getting tips and information back from hundreds more folks that have shared what to do (and sometimes what NOT to do) when building a room for cold storage.

If you're reading this article, you probably fit into one of two groups. The first group has basic building skills and won't think twice about putting up a new shed or barn. Those folks just want to know how much and with what to insulate the walls, what to do about the doors and floors, and how to deal with the high humidity levels found in the cool fall night that will be your walk-in-cooler's perpetual reality. The second group has very little building experience, but can't afford a "real" walk-in box. They need a primer on everything from how to put down a concrete slab to basic framing and roofing questions – and then they get to all the same questions the first group has.

There are plenty of great construction resources already out there at the library, Internet, or hardware store on how to build small shed-type structures, so this article won't cover basic building techniques. Instead we'll focus on what's specific to making an inexpensive but energy-efficient walk-in cooler box. Once you understand the basic concepts, you can apply them to whatever size and type of building appeals to you most. If you don't have a lot of building experience (or even if you do!) you might find that starting out with a pre-built shed, box trailer, shipping container, or even just the inside corner of your barn or garage might be a huge time and money saver. These structures are already structurally sound and weather-tight and just need to be cooler-customized.

Cooler Placement and the Roof
You know how in the middle of summer it's so much more comfortable in the shade rather than out in the hot sun in the middle of your field? It's the same with your cooler, except instead of dripping sweat, a cooler sitting out in the sun drips dollars – lots of them each month of the summer you keep it in operation! Site your cooler inside an existing building, under a tree, on the north-side of a barn, or build a shading overhang onto an existing structure. If none of those are possible, then at least make sure you have a ventilated shading roof on the cooler box. Because coolers are so small, it's not difficult to build a flat roof that is still structurally sound in wind, rain and snow loads. Because insulation is so expensive, people tend to build flat tops to save money, which makes sense, but they would save even more money if they added a ventilated shading roof overhanging the structure to shield it from the sun.

People in colder climates tend to put lots of extra insulation in the ceiling of their coolers. In a house, heat rises and that's why we put twice as much insulation in the roof as the walls. But in here we're building a box to keep cold in – and cold just sinks. Keep your cooler roof out of direct sunlight and you can put the same insulation in the roof as you did in the walls and you'll save money both in construction and long-term operating costs.

The Floor
Two fundamental concepts to remember when building your cooler are that cold sinks and water falls. It sounds obvious, but again and again I get calls from folks with converted box trailers or structures built up on decks that did such a great job insulating the walls and roof but then put nothing or half as much in their floor! Perched floors need at least as much and preferably more insulation in the floor as in the walls.

If you're building on a concrete slab (or dirt floor) and plan to stay above 45 degrees then insulating the floor
underneath, however, still looks fine since no water sits on it.

Which leads to... “Water Falls”! Cold air, like a cold heart, leaves no space for love. When you open the door of your cooler and the warmer, more water-vapor-laden air comes whooshing in, within moments it sadly suffers the pangs of rejection and condenses in tears on the cold heartless walls of your cooler. To make matters worse (or better if you think misery loves company) most farmers spray off their veggies, so they are already dripping wet as they’re coming into the cooler. Kate and I actually bring the garden hose into our cooler and regularly “spritz” the veggies inside during the week—and give it a full spray to clean it out after each distribution. So... water falls, and it needs to go somewhere. If your floor is tilted towards the door even just the littlest bit it will drain out right quick in a lovely waterfall! Don't forget to site your structure so the water has someplace to go once it leaves the front door. If

Whether you’re building up on an existing trailer deck (or above a basement) or on a slab you do NOT need to frame out a floor. Save yourself time and money by just putting pink or blue rigid polyurethane insulation down flat on the floor and covering it with plywood. The plywood spreads the load out enough over the rigid foam that even after 10 years our polyurethane foam still looks fine. Studding out a floor is not only slow, but fitting insulation between the studs generally leaves leaks and allows for thermal bridging through the framing studs.

When we built our first cooler we put a vinyl floor product on plywood thinking it would protect it. The vinyl has long since disappeared – it just couldn’t hold up to the mud and gravel abuse we exposed it to. The plywood underneath, however, still looks fine since no water sits on it.

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your building on a trailer or a deck-type floor, this is obviously easy to do. If you’re pouring a new slab, just build it above grade a bit and put your form-work a barely noticeable “off-level” towards the door.

Because we have an untreated wood floor under our cooler, we put three layers of carpenter plastic between the styrofoam and our top layer of plywood. Some people happily report using single pond liners instead. We stretched the plastic out into a “bathtub floor” that goes up the walls a couple inches where it’s gathered under “Roof Edge” that is screwed about three inches up from the floor all the way around the wall like metal baseboard trim. We caulked the entire top of the Roof Edge so the water dripping off the walls won’t slip between the plastic and the wall and pool up under the floor. Roof Edge is cheap and available in the flashing and roofing sections of all the big box stores.

**Insulation**

*Don’t use Fiberglass insulation!* I know there are people out there who’ve done it and seem happy, but inside they are not happy at all. You might want to tell them that. What’s happened with them is that (even with a very good vapor barrier) moisture laden warm air from outside somehow found it’s way into their walls where it condensed back into drops of liquid on the cool inner wall of their cooler. It saturated the fiberglass batts, reducing the insulation value and ultimately growing a Goth-style black mold which dragged down both the spirit and loft of the fiberglass even further until they have whole areas of their walls with gaps in the insulation. If they have a small enough cooler and big enough compressor then it will still stay cold, fooling them into thinking they are happy, but they could be buying several packs of expensive clove cigarettes and black eyeliner each week with the money they’d be saving if they had sprung for the higher-cost rigid foam insulation to begin with.

The industry standard for walk-in coolers is four inches of rigid foam insulation. R-values vary based on different kinds of foam and the age of the foam, but you should try for at least R20 in your floors, wall and ceiling. Going up to R30 will save even more money—especially if you are keeping your cooler at 40 or below. It’s probably not financially worth it to insulate above that. With rigid foam insulation vapor barriers aren’t necessary.

There are three types of rigid foam insulation, and the cost and availability seems to vary around the country:

Pink or Blue *polyurethane* is rigid and strong, the first choice for floors, but it loses a significant percentage of it’s insulating value over the first five years. After that it stays stable. While it’s the best choice for a floor, unless it’s cheap in your area, it’s probably not the best choice for the walls. Make sure to use at least four inches of this material in walls, floor and ceiling and you’ll be fine. It comes in 4x8 sheets.

Grey or yellow *polyisocyanurate* insulation also comes in 4x8 sheets and it’s a better choice for the walls and ceiling, but a bit soft for the floor. It’s usually foil backed on one side (foil goes to the hot outside) in Lowe’s or Home Depot. This product can be a bit irritating to skin, so wear long sleeves when you install it. Four inches would be ideal here.

White *Expanded Polystyrene (EPS)* is the “older” (it was actually discovered back in 1839!) white beaded insulation that packing peanuts, some plug trays and 1970’s bean-bags are made of. It’s manufactured as a by-product of gasoline refining so it’s often the cheapest insulation you can find on a per-inch basis. It won’t ever off-gas or break down for thousands of years, but it has less of an insulating value per inch so if you decide to go with EPS make it five to six inches thick instead of four and you’ll be in great shape.

A practical and affordable solution in some parts of the country is *spray-in-place foam insulation*. This is usually professionally applied, and it is a polyurethane product; it’s blown against a wall or between the studs of an existing building. Here in NY, grungy male farmers who happen to be suffering from tree-allergies and sneezing into their shirts will find that this stuff is cost-prohibitive at over twice the price of the rigid foam products. But if you happen to be a more attractive neighboring female farmer, the same company might spray-insulate your 12x20 cooler for around $100. Go figure. Folks living in the Midwest seem to be finding prices are neither gender...
Poultry Nutri-Balancer

Offering something better for all types of poultry!

It’s why we are still in raising chickens.
— Daniel Salatin,
Polyface Farms

The Fertrell Company • Bainbridge, PA 17502 • 800-347-1566 • www.fertrell.com
Don't cut your insulation up and fit it between the studs! Not only will you invariably leave a few gaps and holes, no matter how careful you are, polyisocyanurate shrinks a bit over time, making your kids think you were a sloppy builder when they re-build the cooler 15 years down the road because the cooler costs too much to keep cool! EPS doesn’t shrink, but it's still better to use the full 4x8 sheets of whatever insulation product you buy and tack up on the outside of the studs. None of the big box stores sell rigid foam insulation four inches thick, but you can use that to your advantage. Buy two layers of two inch foam and overlap the seams to keep things sealed up.

THE DOOR
I've seen really beautiful home-made doors that do an excellent job, but unless you've got great building skills, I don't recommend it. It's cheaper and faster to buy a standard pre-hung insulated exterior door. This is because the key to the door is that it seals up tight and that's not so easy to get right! If you leave the smallest gap in your door, much of the effort you put into insulating and sealing up the rest of your structure will be wasted. Glue another layer of two inch rigid foam to the inside of the door (it'll break down in the sun on the outside). You also have to remove the bottom metal piece of the pre-hung doors so it doesn't dam up the water inside your cooler (and that means you have to cut the sides of the door down so the bottom stays flush against the floor. Since you are now mounting the door flush against the floor do make sure your door opens to the outside world or it will scrape and stop against your inner floor. Obviously you need to make sure that your cooler is up a bit from the surrounding ground level so the door can swing outwards freely - but you'll have done that anyway so the water drains out!

INNER AND OUTER SHEATHING
Many people just leave the exposed insulation on the inside of their coolers. If you don't have employees and you're careful, that's fine. We have aggressively destructive employees, and our cooler is open to a public I seriously suspect to be drunk most of the time by the way they ransack the place, so our inner walls are sheathed with $7/sheets of "OSB board." We could have used plywood, but it was just more expensive. There are proper, water-proof inner cooler siding materials but they are over $1/square foot and our neighbor built his walk-in cooler in...
1985 with OSB board he painted with white porch paint and it's still completely solid 24 years later!

If your cooler is built inside an existing structure, you don’t need to sheath it, but if it’s outside, it has to be protected from the sun or the insulation will start to break down. On our second cooler, we ripped cheap half-inch 4x8 sheets of “CDX” plywood into 1x8 foot strips to make home-grown overlapped siding! We live in a registered historic district and we are often in trouble with the village elders for not taking their “hysterical” district as seriously as we should, but our cheap plywood siding solution (properly stained a dull green) apparently looks nice enough from the road that it’s one thing no one has ever bugged us about!

Building your own cooler can be much more cost-effective than buying a ready-made cooler box and since you can add extra insulation, the extra time you put in building it can also pay off in long-term energy savings down the road.

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Low Cost Refrigeration: CoolBot Review
By Tom Wadson

To many of us, refrigeration can be somewhat challenging. On any self respecting farm there must be something in place to retard spoilage of the food that we all work so hard to grow.

Cooler climates may allow the use of underground cool caves, root cellars, or even using hydro cooling via naturally cold water streams. This was common forever in chilling fresh milk in cans.

Well, sadly these little blessed bonuses are not available in a lot of places. There could be catastrophic warm spells or simply warm climates that need proper refrigeration systems to ensure the
correct temperatures are attainable. This in itself is a certain amount of insurance that we need to provide so as to reduce the risk of spoilage.

Various systems have been created using all the laws of physics to make this happen. To the average farmer who already has too many systems and tools to maintain, complex specialized refrigeration systems are yet another headache that should probably be avoided. We have had various chill room setups since we started farming in the mid 70’s. They never break down until you try to cool 600 cases of lettuce late on a Saturday afternoon! Nightmare!

So, you build a relationship with the best HVAC person that you know. You make sure that they get a watermelon, chicken, fresh eggs or whatever is the catch of the day. Make sure he likes you and pay the man. He will look after you. We did this at great expense for years.

I think I was at Southern SAWG or somewhere when I happened to pick up a small farmer type of mini-magazine which really related to many of the production systems we commonly employ. I flicked through it and stumbled across an advertisement for this supposedly magic box that could turn a regular household air conditioner into a viable system to operate as a cold supply for substantially sized chill rooms and get them well into the 30 degree Fahrenheit range. The Gismo was called a CoolBot, and the website was storeitcold.com.

So, I checked it out. There was this guy throwing air conditioner filters into the garbage along with the fancy grill facing the inside of the room. Goodbye, kaput, file 13, whatever. My type of guy-function over form.

He then proceeded to rip the thermostat out of the unit, bundle it up with the mini heater from the magic box and wrap them in a piece of tin foil. The next part of the job was to jam another sensor into the cooling fins on the unit, dangle a room temperature sensor in the breeze and turn it on. Basically he had the thing up and running in a heartbeat. WOW. He says it works. I guess it does.

CoolBot provides recommendations for sizing the air conditioner to the space to be cooled is all on there, along with the pros and cons of various units that are available. We were just opening our on-farm retail shop and needed something to cool the shipping container walk-in. We did not want to cool the entire room, as it would not be necessary. The exact way to construct the walls for minimum cold waste was clearly explained by Ron at CoolBot. We did it just like he said. Bingo. We had a chill room running at 38 degrees.

With minimal knowledge, a fairly low investment we were in business.

Of course, like all new things you have to fit the system to your situation, and we had some bugs work out. The fins iced up. The cooling was too aggressive. Crank it up a notch. Just like in the brochure.

All of a sudden it stops working. I called up the help line and Patty talked me through the troubleshooting. I was back in business. She then suggested they should send a spare set of sensors. They were here in a flash.
The next thing I know this guy, Ron Khosla, is calling me up, offering more helpful advise. I am talking to Ron, looking at the YouTube video, and then realize that I have met this guy. He was a certifier for “Naturally Grown.” It was at PASA. He was also farming 80 acres. He then went on to say that was him. He “accidentally” invented the CoolBot. Since then he has sold thousands of them. Why? Because they work and you can have a chill room for a fraction of the cost of purchasing a compressor/evaporator system. The unit runs as well as any chiller unit we have ever had, and the cost of operation is an ongoing savings over the conventional units.

In even plainer English this little magic box tricks the AC unit into running harder, simply by heating the unit’s thermostat. Pretty simple. Pretty smart!

All I can say is that I hope Ron makes a lot of money off this, simply because it is an excellent product.

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**Additional Cooling Notes**

By Mike Badger

As poultry producers, one of our primary concerns is getting our meat and eggs chilled to 40 degrees Fahrenheit or below. Ron Khosla says the CoolBot is running the refrigeration requirements for some very large, conventional, non-pastured egg operations.

Ron is frequently asked whether or not the CoolBot can freeze poultry. It’s not designed to go much below 36 degrees. According to Ron, most producers set the temperature to 37 degrees and have no problems.

With regard to cooler construction, Ron strongly recommends a how-to from the University of Kentucky as a comprehensive guide in addition to his own construction notes. More information is available at storeitcold.com or 888-871-5723.
Guard Geese: an Alternative Guardian

Grace Hernandez, Buxton Farm at Polyface

I decided to get some guard geese this summer, our second season managing a satellite farm for Polyface. Buxton Farm is 1,000 acres. We manage 300 acres in pasture. The rest is forested. We’re extremely rural and the pastures are spread out. We raise 300 Polyface stocker cattle, 4,000 broilers, 275 turkeys, and 450 hens.

The initial request for more guarding came for our hens. Polyface provides one guard dog. Last year he protected the hens during the day and the broilers and turkeys at night. It worked. But this year we ran into daytime and evening predator issues with the broilers and the turkeys, so Polyface requested that we keep the dog in the broiler field at all times. The turkeys and the broilers are in the same 20 acre field at opposite ends. The turkeys range in the far end of the field.

Chicken whisperer and friend Pat Foreman had planned on incubating some goose eggs for us. Initially we wanted to start fresh so that we could train the geese for our purposes. That plan was abruptly eliminated when more protection became urgent after a predator killed 65 turkeys in one night. It took me about six weeks to find adult geese.

I called a hatchery to find out the best kind of guard geese and they told me Chinese Geese. We didn't go the hatchery route because they had a minimum order of nine goslings. We needed only two. When that didn't pan out I placed an ad for guard geese in the farm and garden section on Craigslist but never heard any response.

When no response came, I started considering a second guard dog. After doing a bit of research, I learned that we could “foster” a Great Pyrenees, but I hesitated. I wasn't thrilled about bringing in another dog, and I didn't want to rescue a dog with problems because we don't have time to deal with unwanted issues during the season. Commitment to a dog felt untimely. So I went back to the geese idea and just happened to scan craigslist farm and garden section one last time. There they were! Two adult male guard geese for $40. Quickly, I made the call.

The owners told me that they used the two adult male geese to protect their hens and they could no longer afford to feed them so they decided to sell them. They were very proud of their geese. The wife said one goose she raised was so protective of their hens that he fought and killed a bobcat. The goose died later from unhealed wounds, but he fought to protect to the bitter end. I was sold!

Initially the geese were purchased with the idea that they would protect our hens. But that didn't work out. They had guarded about 20 hens with their previous owner and our flock of 450 ranging hens overwhelmed them.

We tried training them by using feather nets around the geese in front of the egg mobile, but it was more work for us. The geese weren't confident in that environment. We thought they would free range with the hens, but instead they ran away from the hens and from us. The last thing we want to do at the end
of the day when we close up the egg mobile is chase geese. It was evident they needed some managing.

The next logical step was to try them with our 250 turkeys. The turkeys were ready to move out of broiler pens into charged featherets. The timing was perfect. The geese would join their transition.

We move the turkeys to fresh pasture every other day. It took less than 2 weeks for the geese to acclimate to their new job. They give excellent warning calls when aerial predators fly anywhere near the turkeys. The turkeys run under their shade mobile immediately. It's great to watch. They even warn the turkeys when they see us coming. The guard dog is in the same field but during the days he stays on the other side of the field near the boiler pens or he sleeps during the day. At night he scans the entire 20 acres.

The geese work great with the turkeys because the turkeys are in a part of pasture that is not as visible to us as the broilers. The extra protection is crucial. Last year we ranged them much closer to our daily activities in a different pasture. Polyface asked us to range them in a new pasture this year. We hear coyote almost every night passing through the farm. Between the geese and dogs we can rest better.

The geese love to move to fresh pasture. They eat what the turkeys eat and seem satisfied. These two males are deeply attached to one another. They aren't necessarily friendly with us but when we catch them they are terribly sweet. They have tenderness about them. Often I will be working in the garden when I hear them give the turkeys a warning call. Although we are in the beginning phase with the combination of geese and turkeys, we can sense Nelson & Mandella have found their place at Buxton Farm.
2013 Board Nominations

APPPA will be filling three board openings in 2013. President Eli Reiff, Treasurer Don Brubaker, and board member Keith O'Neal will be stepping aside to allow a fresh crop of organizational leadership and ideas.

APPPA would like to thank Eli, Don, and Keith for their time, effort, and leadership.

The APPPA board has nominated David Schafer, Jeff Mattocks, and Will Harris as the new board members to replace Eli, Don, and Keith. At the 2013 annual meeting at the MOSES conference in La Crosse, Wisconsin, February 21—23m the board will nominate new officers from the board.

If you agree with the board’s recommendation, you have nothing to do. If you would like to recommend an additional candidate, please use the form on page 17 to make a nomination. If we get three nominations for the same candidate, APPPA will hold an election and publish mail-in ballots.

**Nominations must be received by November 30, 2012.** If no additional nominations are received, the proposed slate of board-recommended nominations will become board members.

**David Schafer, Featherman, Jamestown, Missouri**

David Schafer reluctantly added poultry to his natural meats operation in 1994. Sales doubled every year for the next four years and he became a believer. He opened the largest farmer's market in Kansas City to meats, and served stores and restaurants and ex-vegetarians in the area.

Equipment frustrations led to publishing plans in Farm Show magazine for home-made pluckers in 1995 (with the closer: somebody should develop these). Somebody became David after seeing mini pickers in use at the Hong Kong farmer's market in 1999 and then seeing a mini unit for sale at a tiny hardware store.

Featherman Equipment was born - and offered a free APPPA membership to every picker purchaser for several years. Schafer witnesses the growth of the pastured poultry industry through his equipment sales and believes pastured poultry will become an icon of social reform. He is dedicated to making it easier.

**Jeff Mattocks, Fertrell, Bainebridge, Pennsylvania**

Jeff has been working with farm livestock and poultry since 1996. He has been actively involved with the feeding and management of Organic and Natural farm animals. This includes formulating diets for all types of farm livestock but mostly for organic producers. He balances feeds with natural inputs for optimum health beliefs. He has been gleaning from successful producers over the years and is sharing these methods of natural health care prevention and management techniques. He primarily focuses on poultry and large ruminants. He is finding that these same principles apply to most forms of livestock and believes that a truly healthy animal with a balance of nutrition, environment and understanding will produce what nature has enabled it to produce.

**Will Harris, White Oak Pastures, Bluffton, Georgia**

The Harris family has raised cattle on the same Georgia farm for five generations [since 1866]. Will Harris now runs the farm, and has returned the operation to the vertically integrated and diversified grass-fed production model that his great-grandfather utilized.

After receiving his Animal Science degree from The University of Georgia, Will returned home to raise calves, in a monoculture, for long distance shipment to the industrial feedlots where commodity beef is produced. Confinement feeding of corn, pesticides, chemical fertilizers, sub-therapeutic usage of antibiotics, and hormone implants were key to this program.

In 1995, Will began transitioning his operation into the vertically integrated pastured livestock farm that it is today. Today cattle, sheep, chickens, and turkeys
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are rotated through the pastures in the Serengeti Plains Rotational Grazing Model.

In 2007, Will built a USDA-inspected, zero-waste, red meat abattoir on the farm.

It is state-of-the-art, one of only two in the country, and is operating at full capacity of 140 head per week. In 2011, Will built a USDA-inspected zero-waste poultry abattoir on the farm. It is now processing 5000 birds per week. No other farm in the U.S.A. has its own both USDA inspected red meat plant and USDA inspected poultry processing plant.

Over 30% of the energy needs of the plants come from solar panels. The beef & lamb are Certified Grass-fed. The farm is USDA Certified Organic. And both processing plants are Animal Welfare Approved. Certified humane pastured eggs and USDA certified organic vegetables are now produced on the farm. Eighty employees are employed, and they all enjoy lunch together on the farm every day.

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**APPPA Board Candidate Nomination Form**

I would like to nominate a candidate for the APPPA Board of Directors.

**Name of Candidate** ________________________________________________

**Address** __________________________________________________________

**City** __________________________ **State** __________ **Zip** __________

**Phone** __________________________ **Email** __________________________

**Website** __________________________________________________________

**Your name** ________________________________________________________

Cutout or photocopy this nomination form, and then return your nomination BEFORE November 30, 2012 to APPPA, PO Box 85, Hughesville, PA 17737

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**Bee Rite Sales, LLC**

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**Jonathan Coulimore**  
**Fertrell Distributor for**

**WA, OR, ID, MT, CA, AK, HI, BC.**

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**Jonathan Coulimore, Vancouver, WA**

503-209-1555 cell, e-mail beerite@msn.com

Other products available on request.
On July 9, 2012, the FDA’s Final Egg Rule for egg producers with more than 3,000 hens on a farm went into effect. The egg rule requires producers to implement a Salmonella Enteritidis (SE) plan. The regulations have been phased in over four years and producers with more than 50,000 hens have already been subject to the egg rule.

The egg rule does not apply to you if you fall into one of the following categories:

- Farms with less than 3,000 layers
- Farms that sell all of their eggs directly to consumers

According to the FDA, over 90% of the farms in the U.S. have less than 3,000 eggs; however, those farms account for less than one percent of the total U.S. egg market. That makes government regulation expensive and non-regulation a small risk for the small flocks.

The following Egg Rule at a Glance is derived from the FDA’s document at www.fda.gov/food/foodsafety/product-specificinformation/eggsafety/eggsafetyactionplan/ucm170615.htm.

**Egg Rule at a Glance**

**Pullets: Must be raised under SE-monitored conditions, to include the following:**

Chicks are procured from SE-monitored breeder flocks that meet NPIP’s standards for “U.S. S. Enteritidis Clean” status (9 CFR 145.23(d)) or equivalent.

Pullet environment is tested for SE when pullets are 14-16 weeks old:

- If environmental test is negative, no additional testing until the environmental test at 40-45 weeks of age.
- If environmental test is positive, begin egg testing (see “Egg Sampling/Testing”) within 2 weeks of start of egg laying AND clean and disinfect the pullet environment following the procedures under “Cleaning and Disinfection” below.

**Biosecurity: Take steps to ensure that there is no introduction or transfer of SE into or among poultry houses, to include (at a minimum):**

- Limit visitors on the farm and in the poultry houses.
- Maintain practices that will protect against cross contamination when equipment is moved among poultry houses.
- Prevent stray poultry, wild birds, cats, and other animals from entering poultry houses; and do not allow employees to keep birds at home.
Cleaning and Disinfection: Required at depopulation ONLY if that house had an SE-positive environmental or egg test during the life of the flock that was housed in the house prior to depopulation.

Remove all visible manure.

Dry clean the house to remove dust, feathers, and old feed.

Following cleaning, disinfect the house with spray, aerosol, fumigation, or another appropriate disinfection method.

Refrigeration: Hold and transport eggs at or below 45ºF ambient temperature beginning 36 hours after time of lay. Environmental Sampling/Testing:

Rodents, Flies, and Other Pest Control:
Monitor for rodents by visual inspection and mechanical traps or glue boards or another appropriate monitoring method and, when monitoring indicates unacceptable rodent activity within a house, use appropriate methods to achieve satisfactory rodent control.

Monitor for flies by spot cards, Scudder grills, or sticky traps or another appropriate monitoring method and, when monitoring indicates unacceptable fly activity within a house, use appropriate methods to achieve satisfactory fly control.

Remove debris within a house and vegetation and debris outside a house that may provide harborage for pests.
Use a sampling plan appropriate to the poultry house layout.

Testing method is “Environmental Sampling and Detection of Salmonella in Poultry Houses,” April 2008, or an equivalent method in accuracy, precision, and sensitivity in detecting SE.

Number of tests/timeframes:
- One test when any group of hens within a house is 40-45 weeks old.
- One test 4-6 weeks after the end of each molt.

Egg Sampling/Testing:
Each test is a minimum of 1,000 intact eggs representative of a day’s production.

Tests are conducted at 2-week intervals.


Number of tests/timeframes: See flowchart below.

Required Records:
A written SE prevention plan.

Documentation that pullets were raised under “SE-monitored” conditions.

Records documenting compliance with the SE prevention measures, as follows:
- Biosecurity measures.
- Rodent and other pest control measures.
- Cleaning and disinfection procedures performed at depopulation.
- Refrigeration requirements.

Environmental and egg sampling procedures;
Results of SE testing;
- Diversion of eggs;
- Eggs at a particular farm being given a treatment; and
- Records of review and of modifications of the SE prevention plan and corrective actions taken.

Additional Information
The FDA has published its “Guidance for Industry: Prevention of Salmonella Enteritidis in Shell Eggs During Production, Storage, and Transportation.”

For pastured egg producers, one of the most troubling parts of the guidance document is the Biosecurity discussion regarding contact with other poultry and wild birds:

*FDA’s egg rule defines biosecurity (see § 118.3) as “a program, including the limiting of visitors on the farm and in poultry houses, maintaining personnel and equipment practices that will protect against cross contamination from one poultry house to another, preventing stray poultry, wild birds, cats, and other animals from entering poultry houses, and not allowing employees to keep birds at home, to ensure that there is no introduction or transfer of [SE] onto a farm or among poultry houses.”*

Currently, producers with less than 3,000 layers on a given farm are exempt from the FDA egg rule, but if you’re planning to raise more than 3,000 hens on a farm, the egg rule and the surrounding guidance documents should be of great concern to you.

Copies of the guidance document are available from:

Office of Food Safety
Division of Plant and Dairy Food Safety, HFS-316
Center for Food Safety and Applied Nutrition
Food and Drug Administration
5100 Paint Branch Parkway
College Park, MD 20740

(Tel) 240-402-2385
http://www.fda.gov/FoodGuidances
Breeding on-farm addressed the supply and the expense problems.

Markets
Like many of the other turkey producers, Tom’s production targets Thanksgiving, but he will also hold some of the smaller turkeys to process in the spring.

To further diversify his farm operation, Pollo Real will open a new USDA exempt butcher shop. Tom will use the butcher shop to add further value to his products and diversify his product offerings.

Through the butcher shop, the farm will be able to make soups, pâté, stocks, and ground products. And even though Pollo Real is a heritage turkey farm, Tom thinks that he may try some of the commercial breeds so that he can turn them into ground turkey.

For Tom, direct marketing is best, and the on-farm butcher shop is a testament to his thinking.

While he supplies a limited number of restaurants and retail outlets, there is more value in building the direct to consumer relationship. At one point he supplied Whole Foods, but has since stopped because that market separates you from your customer and means you’re working to please a supply chain rather than the end eater. And to Tom, that just doesn’t make sense because the relationship is between the consumer and the retail store. The producer is easily replaceable.

Instead, Tom focuses on sales through CSA memberships, on-farm sales, and at the Santa Fe farmers market.

For More Information
Pollo Real will be featured on American Heartland, a Public Broadcasting System (PBS) show featuring American agriculture. You can reach Pollo Real at polloreal.com or polloreal@q.com.
2013 APPPA Annual Meeting

In the last issue of the APPPA Grit, Director Mike Badger, indicated that APPPA was considering holding its annual meeting in conjunction with the Acres U.S.A. conference. APPPA will not be holding its annual meeting at Acres.

APPPA is pleased to announce that we will be sponsoring and exhibiting at the MOSES conference in La Crosse, Wisconsin, on February 21-23, 2013. We will also hold our annual meeting in conjunction with the MOSES conference. In order to attend the annual meeting, you will need to be a conference attendee, but APPPA membership is not required.

For more information about the MOSES Organic Farming Conference, visit mosesorganic.org/conference.html or call 715-778-5775. See you there.

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Gibson Ridge Egg Washer

Sink-top unit scrubs eggs with hot water and brush at a rate of 28 eggs per minute. Suitable for a 1000 layer flock. Made in U.S.A of as much U.S. materials as possible. $1830 plus shipping. Gibsonridgefarms.com or 740-698-3330 (Ohio).

CALENDAR OF EVENTS

Members of APPPA routinely share their knowledge at workshops and conferences across the country.

October 4-6: Small Farm Poultry Conference. Delaware County CCE Hamden, NY. Presenters include Dr. Jara Jagne DVM Cornell Veterinary College, Jeff Mattocks Fertrell Co., and Jim McLaughlin Cornerstone Farm Ventures, Inc. This three day workshop will include classroom instruction as well as visiting local farms. For more information contact Janet Aldrich (607) 865-6531 or jla14@cornell.edu.

December 6-8: Acres U.S.A. Conference in Louisville, Kentucky.


February 21-23, 2013: Midwest Organic and Sustainable Education Services (MOSES) Organic Farming Conference. La Crosse, Wisconsin. APPPA will hold it’s annual meeting at MOSES. See you there.

PROCESSING SURVEY

Kirsten Gibson, Assistant Professor at the University of Arkansas has requested APPPA distribute a survey to help understand the financial inputs and outputs of the different processing options used by pastured poultry producers. According to Kirsten, the project is “assessing the food safety, economic feasibility, and environmental impact of on-farm processing vs. mobile processing units for pastured poultry farmers in Georgia, Louisiana, Oklahoma, and Arkansas.”

You can take the survey online at www.surveymonkey.com/s/pasturepoultryprocessing. You may request a hard copy of the survey by contacting Kirsten Gibson, 2650 North Young Ave., Fayetteville, AR 72704.
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