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& Small Stock Journal

Volume 105 • Number 6
NOVEMBER/DECEMBER 2021



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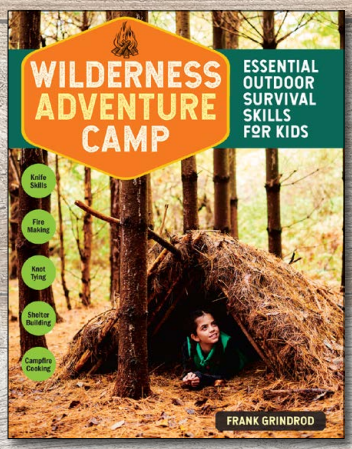

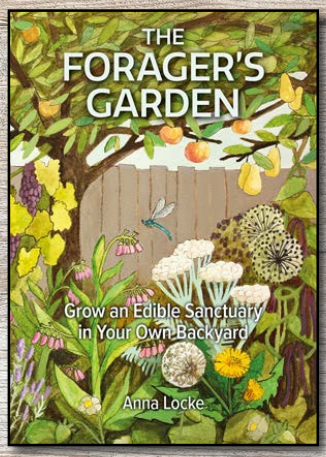

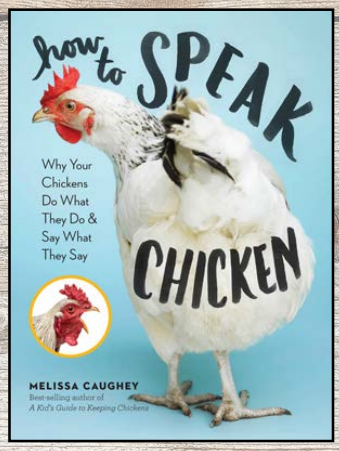



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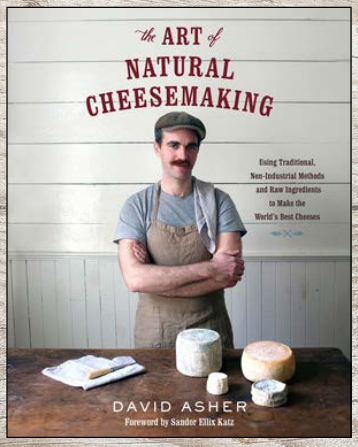



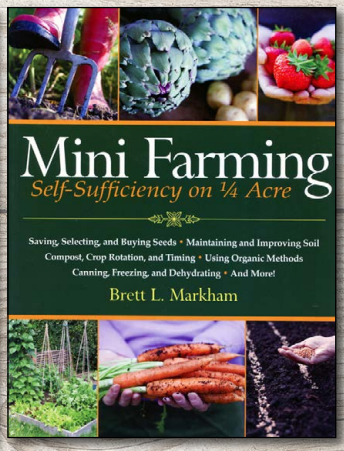

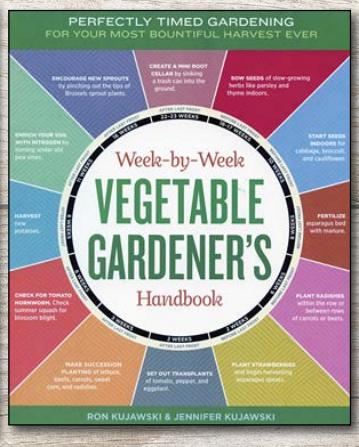

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WHERE HOMESTEADERS COME TO THRIVE



I AM COUNTRYSIDE

TIMBER CREEK FARM — JANET GARMAN





I WAS NOT BORN TO A FARMING FAMILY, but my heart was born to farm. I feel that everything I worked at before running the farm built me into who I would need to be as a farmer. My formal education was in agriculture. After college, I went into other work to pay the bills. My passion for livestock and small farm life never diminished. We began clearing our farm in 1995, as our family grew. Through 26 years, we have raised horses, donkeys, turkeys, ducks, rabbits, various goats, chickens, guinea fowl, and pigs. When the sheep arrived 10 years ago, my vision of what I wanted to do as a farmer started to become clear.

There is a cycle in the wool industry; and as a small flock keeper, our year revolves around the seasons of wool production. Keeping the sheep nourished and healthy results in a good clip at shearing time. The seasons of our yarn flock look like this: shearing season, health assessments, grass growing and eating, parasite control, supplementing grass with good quality hay as the seasons begin to change, keeping things clean through the winter, constantly assessing the health of the flock, and excitement as shearing day approaches!

During the downtime (what's that?) the fleeces need to be sorted, skirted, and prepared for shipping to the fiber mill. If you spin your own yarn, you would add in scouring, washing, carding or combing to create roving, and then spinning by hand, using a wheel or a drop spindle.

In addition to the farm work, my company, Free Range Yarn, is committed to producing high-quality wool yarn. The majority comes from our flock of Finn, Perendale, and Romney sheep. When the wool doesn't come from our flock, it is sourced from other small farmers or yarn producers that share my belief that the care of the sheep is what creates a quality yarn.

To complete the process from sheep to yarn, I use natural plant dyes for color. Wool yarn dyes beautifully from nature. In the future, I plan to continue to educate and teach groups about the beauty of wool from small producers and the gorgeous colors that can be found in nature to add the final touch to the cycle of sheep and yarn.

The passage below is from a *Countryside* article from a couple of years ago when my book, *Keeping Sheep and Other Fiber Animals,* was released.

"You may be a shepherd of a large flock of sheep, or a flock of two. You may be a shearer that harvests the yearly fleece, or a mill owner that processes small orders into roving or yarn. The maker that chooses beautiful wool, and the buyer who purchases quality wool products also contribute to the cycle. No matter where you join the process, shepherd, shearer, mill owner, maker, or buyer, you are part of a tradition handed down through countless generations. Wool, along with other fiber has been part of the civilization of the world. Let's continue to make the wool traditions of the past a strong part of our future, and encourage the future shepherds, teachers, and wool artists of tomorrow."

Some of the photos show our sheep in the barnyard and some of them in the wooded property. We have slowly added silvopasture areas for the flock to graze and forage throughout our wooded property. The regenerative action is working and it is encouraging to see new grasses and low growth returning. Not all sheep will forage enough for food, so we also supplement by feeding hay when grass is not plentiful.

I've also included photos of the natural dyes in process and some of the yarns that I have dyed. I use both purchased natural dyes such as cochineal extract and logwood, along with foraging for dandelions, purple dead nettle, goldenrod, pokeberry, hibiscus petals, black-eyed Susan, and other plants.

https://timbercreekfarmer.com
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Facebook.com/timbercreekfarm



1



2

My e-course on Natural Dyes on Wool is found through my website https://timbercreekfarmer.com/natural-dyes-on-wool-ecourse/

All of my books are available on my website, too.



4



3



5

1. Natural dye kits, sold in the Timber Creek Farm Etsy shop, contain everything needed to try natural dyes.

2. Deep color from natural plant dyes on wool yarn from our flock. We raise sheep for wool. Our flock consists of Perendale, Finn, Romney, Rambouillet, and Babydoll Southdown.

3. Madder root, or madder root extract, creates shades of orange and red on wool.

4. Crocheted shawl in the making. The yarn was dyed using goldenrod.

5. This is the goldenrod dyed yarn used in making the shawl.











6. Dandelions in the dye pot, creating a soft yellow dye for wool yarn.

7. Basil, our Finn wether in full fleece.

8. Flock members after the yearly shearing. Each sheep produces an average of six to seven pounds of wool.

9. Wool fleece being skirted before heading to the fiber mill for scouring and processing into yarn.

10. The original barn built by my husband.

11. Adorable Duroc/Hampshire cross piglets. Cute piglets are definitely a bonus of farm life.

12. Don't forget to stop and smell the flowers! One of our two Nigerian Dwarf goats we keep as farm pets.





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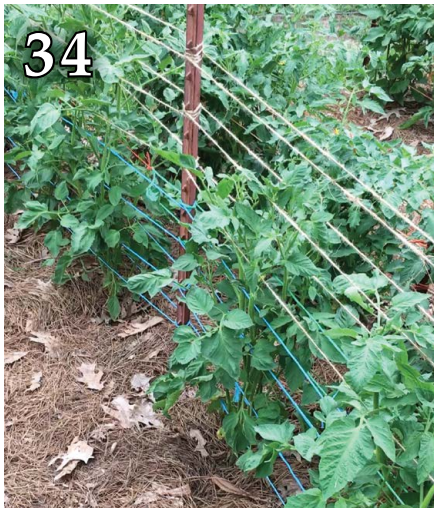

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$399,900 | PATTONVILLE, TX | #42233-13206

OFF-GRID LIVING



Enjoy amazing views everywhere with this off-grid 3-BR, 2-BA home bordering State Trust Land. Includes solar panels, 2,500-gallon water tank and large garage on 17± acres.

$299,000 | SELIGMAN, AZ | #02036-21108

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Our Philosophy

At *Countryside*, our purpose is to inspire self-reliant living on any level.

We acknowledge that the path to self-sufficiency is as unique as the person who accepts the journey.

We strive to strengthen the homesteading movement by sharing the diverse voices and knowledge of today's practioners.

We teach our readers how to grow and raise their own food; build, fix, and craft with their own two hands; and walk as gently on this planet as possible.

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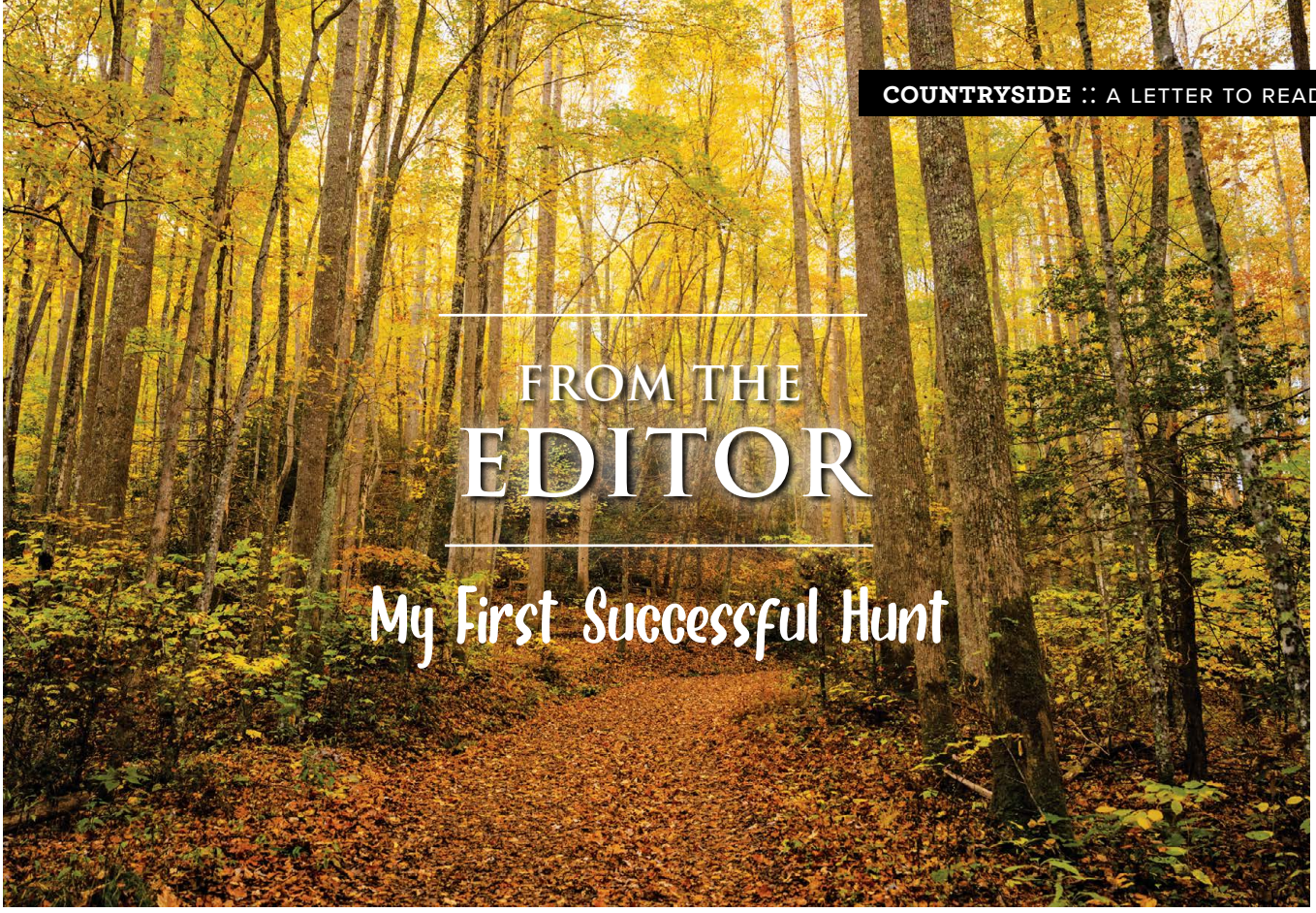

FROM THE EDITOR

My First Successful Hunt

IT WAS AN ABNORMALLY WARM, sunny afternoon when I sat along a logging trail with my mother next to me. We were quiet and still when we suddenly heard something walking up behind us through the leaves. It was making a lot of noise while it walked, so we decided that it couldn't be a deer. My mom whispered to me, "I bet it's your dad coming to check on us." So we relaxed, and as I slowly turned my head to look, it was a deer! I whispered to my mom that it was, in fact, a deer.

As it got up in front of us, I aimed, shot, and down it went on the other side of the logging trail. We were so excited to see it drop. After we high-fived and waited for a few minutes, we walked over to see my trophy.

There he laid. Although not the trophy buck I had hoped for, it was indeed a buck and was going to be wonderful meat. You can't eat the horns, after all.

My mother was a successful hunter and had gutted her share of deer, but not without her handy directions that she carried in her backpack. Seeing this was my first kill, I wanted to do the gutting myself, so she dug out her directions, and I looked them over before diving in. She read through the directions step-by-step as I field-dressed my winter's meat.

After what seemed like hours, I finally got him gutted and drug out of the woods but not before hanging a part of him in the tree for good luck. (This has always been a tradition amongst my family.)

Seeing the weather was warmer than expected, we knew we had to skin the deer and get the meat cooled as soon as possible. With my mom and dad's help, we got the deer quartered and into coolers until we got home from the Northwoods.

That was a delicious, young buck that made so many good meals throughout the winter months and into the next summer. The next thing I knew, it was hunting season again and time to make more wonderful family memories.

For those of you who get out and hunt, I wish you the best of luck! And to everyone, I wish you a very happy and healthy holiday season.





Ann Tom
Editor, *Countryside*

HAVE AN IDEA OR STORY TO SHARE, A QUESTION TO ASK, PERHAPS AN ANSWER TO A QUESTION? WE WANT TO HEAR FROM YOU!

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Country Conversation & Feedback

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In Response to September/October Aritcle "Building Our Debt-Free Home"

Dear Editor:

I want to commend Jenny Underwood and her husband and family for their intelligent and common sense approach in building their home without debt. We need more of that type of self-reliance, self-discipline, and sense of financial realities in this nation.

— M. R. Koenig, Minnesota

In Response to July/August Article "Much Ado About Mulch"

I'm glad you mentioned Ruth Stout. I read one of her books as a teenager in the 60s and was an instant convert, to the point where seeing bare dirt makes me cringe. Those of us who live in dry climates benefit greatly from nice thick mulch, as do the worms. I could see being wary of using too much if you're in a wet climate, not so true in a dry climate.

— Colleen

Chick Magnet

Our son Randy and grandson Lucas, who we call "Chick Magnet." Thank you for the wonderful magazine. We all enjoy it.

Sincerely,

— Jan Matula, Montello, Wisconsin



Countryside has been my go-to magazine for many years. I appreciate your hard work.
— Jesse A., Alabama

Cheap and Easy Plant Labels

I am retired and frugal. Always trying to figure out how to save money on garden items. When I couldn¹t find labels for my seedlings, I found a way to make my own. Simple 24" wide mini blinds will yield 10 labels per slat. They cut easily with scissors to a sharp point. Use a permanent marker to write with, and voila! At least 300 labels for way under $10. I've scrounged old blinds from a home remodel, and they were free for the taking. I use the same concept for U-pins on my strawberry runners: scrounged old electric wire and stripped off 10" lengths. Maybe the bare copper is an added bonus too. And they are reusable for years.



— Martha Keller, Greeneville, Tennessee

Thank you for providing an informative and useful magazine! I enjoy the articles in every edition, and it is enjoyable and informative to read the experiences and advice of other like-minded individuals. Keep up the good work!

— M.R. Koenig

Chicken Nest Box Maintenance Ideas

If you have chickens, and you are gathering eggs for your own family's food needs, or perhaps you sell a few dozen when you have more than you need, keeping eggs clean while they are in the nest box is a great benefit when you need to carton them up.

I've read numerous articles on the benefits of not having to do too much cleaning of eggs and removing the protective "bloom" that's on the shell which, in turn, increases its shelf life.

When you have hens that want to crowd the same nest box, eggs will get broken, and if you don't address the mess quickly, every egg in that nest will be dirty and require extra cleaning.







I've acquired milk crates over the years from farm auctions or yard sales.

They seem to be the perfect size and have good airflow through them.

However, if you get a broken egg, not only will it get that nest box it's in dirty, but perhaps it will drip through to the one under it.

Of course, this all depends on your hen house and egg box design.

I've found that the used poly weave feed bags cut into 12x12-inch squares make perfect box liners.

My boxes are usually filled with straw, and if a egg busts, I can easily lift the liner and straw out, replace, and throw the straw and egg on the compost or fishing worm pile. The liner contains the issue to one box with no drips to another.

It makes use of a bag that might normally just go in the trash.

— Bryan Downs

In Response to September/October Question of the Month

What are your favorite fall recipes that include your harvest?

I have apple trees in my backyard, and my family loves apple pies. Here is my recipe that I would like to share with the readers:

APPLE PIE
1 pie shell or make your own pie crust
8 cups of peeled, sliced apples
1 ½ tablespoon lemon juice
⅔ cup sugar
⅓ cup brown sugar
¼ cup flour
¼ tsp. salt
¾ tsp. cinnamon
½ tsp. nutmeg

TOPPING MIXTURE
1 cup flour
⅓ cup sugar
⅓ cup brown sugar
1 stick butter

Preheat oven to 375 degrees F. Combine apples, lemon juice, sugar, brown sugar, flour, salt, cinnamon, and nutmeg and mix well. Spoon into crust.

In a medium bowl, combine flour, sugar, brown sugar, and butter and mix with a fork until the texture is crumbly and place on top of apples. Bake on top of a cookie sheet. Bake 55 minutes.

I also have lots of zucchini and love frying it in a skillet, but I also love:

CHOCOLATE CHIP ZUCCHINI BREAD
3 cups flour
1 tsp. salt
1 tsp. baking powder
1 tsp. baking soda
2 tsp. cinnamon
½ tsp. nutmeg
3 eggs
1 cup oil
2 cups sugar
1 tbsp. vanilla
2 cups grated zucchini
1 ¼ cups chocolate chips

Preheat oven to 350 degrees F. Grease and flour two loaf pans. Mix flour, salt, baking powder, baking soda, cinnamon, and nutmeg in a bowl. Then add one egg at a time, oil, sugar, and vanilla. Mix well, then add zucchini and chips. Pour into loaf pans and bake 45-50 minutes.

— Diana Johnson, Lima, Ohio

November/December Question of the Month

We all have new things that we want to accomplish in the new year. Whether it's the dreaded diet, being more frugal, expanding the chicken flock or livestock, we want to hear what you're planning to change or add to your lifestyle/homestead.

What goals do you want to accomplish in 2022?

Share with us at:

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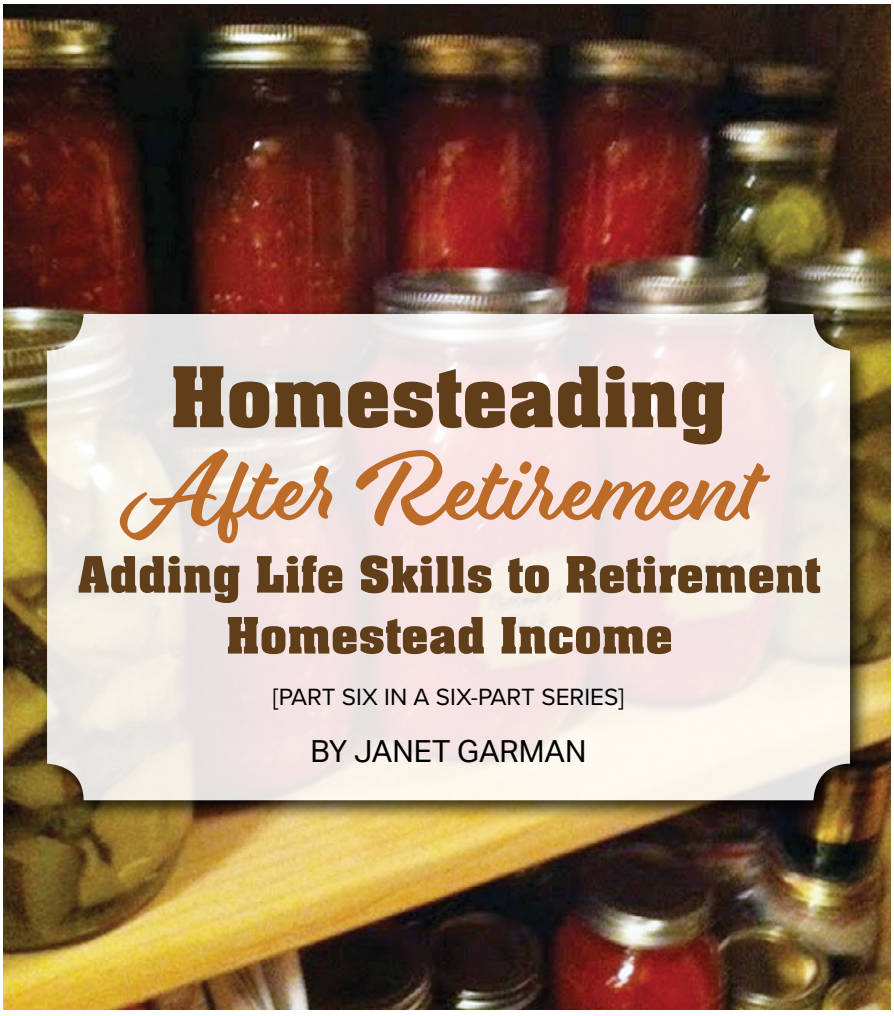

Homesteading After Retirement

Adding Life Skills to Retirement Homestead Income

[PART SIX IN A SIX-PART SERIES]

BY JANET GARMAN

A POPULAR NOTION ABOUT RETIREMENT is that we leave our past lifestyle behind and adopt a new, less stressful existence. In reality, choosing to homestead may trade some stresses for others.Crops fail, the farmers market closes, a weather disaster occurs, livestock can get sick or die. If your homestead lifestyle is reliant on selling your farm products for a profit, you may want to include a plan B.

The cold reality of farming is that things often go badly. The year 2020 is a prime and current example of just how bad things can become in a heartbeat. Massive wildfires consumed much of the western part of our country. Crops were lost, livestock died, and homes were destroyed. In addition to the worldwide pandemic going on, many people were left with no income or means of creating one. Of course, this is an extreme example. Every day, farmers and homesteaders face loss.

How can you prepare your retirement so that you are not fully dependent on crops and livestock returns? It may be time to consider a cottage industry. Diversifying your household income may carry you through a tough financial crisis. But since we are talking retirement, let me focus on activities that don't require us to head back to the nine-to-five workweek.

Create a Product

Soaps, lotions, and other skincare products can be created in your kitchen. Adding these products can bring in additional income and you can make as much as you want. Online selling platforms such as Etsy will take a cut of your profit, but you reap the benefit of increased traffic from the platform's efforts. Other methods of selling your wares can include your own website and online shop, word of mouth, selling in local shops, or using social media to spread the word.

Other products that can be made on the homestead and marketed in the same way include jams and jellies, honey, maple and other tree syrups, and fresh-baked bread.

Create an Online Class

Let your skills help others. If you have particular expertise, consider creating an online course on the subject. Online courses are very popular and can bring in passive income for the future. There are many platforms available for creating a course. I am using Teachable.com, and Craftsy.com is another option.

Classes exist for a wide variety of interests. Handcrafts, beekeeping, woodworking, automotive repair, running a business, and baking bread are just a few ideas.



Selling Alternate Products From Your Livestock

HIDES

Hides are popular products when done well. If you are raising cattle, sheep, or rabbits, learning how to tan hides can add income to the homestead bank account. If you don't want to tan the hides yourself, find a tanner in your area. A well-crafted cowhide can bring in a few hundred dollars each.

WOOL

Many people don't realize that you can sell raw fleece if you aren't interested in processing wool. Unfortunately, the wool does not bring much in the wool pool market. If you have some particularly nice raw fleeces, market to the spinners.

Selling Surplus Livestock and Chickens

When you are raising meat chickens, ducks, or geese, consider raising more than you require. Selling the rest as butcher-ready can be lucrative, short-term income. Poultry takes much less time to bring to market weight than larger livestock. Pasture-raising poultry brings a higher dollar, but you can still supplement free-range chickens with grain if you don't have pasture. Another possibility is raising meat rabbits.

Assist Someone With Their Online Business

VA work or virtual assistant jobs are usually flexible ways to earn income. There are many ways that a virtual assistant helps an online business owner run their business. If you have computer skills, consider this as a good way to add money to the homestead without having to commute or keep regular hours.

Some duties that a VA might do for an online business:

- Create newsletters from templates
- Post to social media accounts
- Proofread publications and documents
- Write blog posts for websites
- Write ad copy or listings for products
- Create graphics

I am sure there are at least 50 more ideas that I am not listing. The position is almost always deadline-driven but the flexible work hours are attractive.





What's the Catch?

You might need a few things to carry out the above ideas. Various cottage industry laws govern what can be produced and sold on the homestead. Check your local or state laws for details.

When raising meat animals, keep in mind that this is a regulated industry if you are selling and not using the products for yourself. A butcher may be required and the processing times fill quickly. Make sure you get on a list early or you may be feeding the livestock a lot longer than you expected.

Tax ID numbers will be required and an account set up. Even if the product you sell is non-taxable, you may still be required to obtain a sales tax ID number.

Internet availability is a must if you are selling online or working as a virtual assistant. As with any type of business or job, do the due diligence beforehand to avoid unpleasant surprises.

I realize that none of these ideas are going to solve a serious loss of income overnight. The best plan is to diversify your income before a downturn or disaster strikes. Having a plan B, even after retirement, doesn't mean you have to give up the freedom and relaxation you earned.

Read the first five installments of this series at:

- iamcountryside.com/homesteading/homesteading-after-retirement-part-1/
- iamcountryside.com/homesteading/homesteading-after-retirement-part-2/
- iamcountryside.com/homesteading/homesteading-after-retirement-part-3/
- iamcountryside.com/homesteading/homesteading-after-retirement-part-4/
- iamcountryside.com/homesteading/homesteading-after-retirement-part-5/

JANET GARMAN is a farmer, writer, instructor, and fiber artist living in central Maryland on the family's farm. She loves all subjects related to small farms and homesteading. Raising chickens, ducks, sheep, and fiber goats led her to write her most recent books, *50 Do-It-Yourself Projects for Keeping Chickens*, (Skyhorse Publishing 2018), *The Good Living Guide to Raising Sheep and Other Fiber Animals*, (Skyhorse Publishing 2019), and *50 Do-It-Yourself Projects for Keeping Goats* (Skyhorse Publishing 2020).

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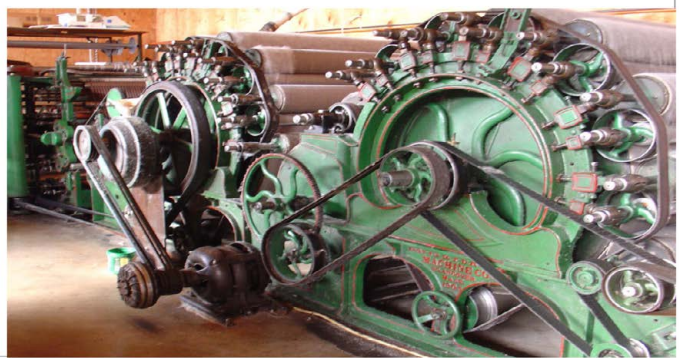


Pomona's Apple Pie Jam



Apple Ingredients

- 3–4 lbs of apples (9–12 medium apples)
- ¼ cup – ½ cup water

Jam Ingredients

- 4 cups of cooked apple sauce
- 2 tsp calcium water
- ¼ cup lemon juice
- ½ tsp cinnamon
- ¼ tsp nutmeg
- ¼ tsp allspice
- ½ cup – 1 cup honey
  or ¾ cup – 2 cups sugar
- 2 tsp Pomona's Pectin powder

Before You Begin

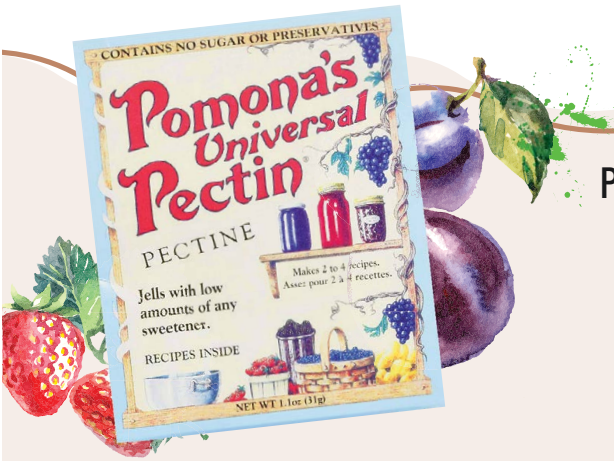
Prepare apples — Peel, core, and chop apples and put in a sauce pan with the water. Bring to a simmer and simmer covered, stirring and mashing occasionally, until you have chunky or smooth apple sauce. Remove from heat and measure out 4 cups of apple sauce.

Prepare calcium water — To do this, combine ½ teaspoon calcium powder (in the small packet in your box of Pomona's pectin) with ½ cup water in a small, clear jar with a lid. Shake well. Calcium water should be stored in the refrigerator for future use.

Directions

1. Wash jars, lids, and bands. Place jars in canner, fill canner 2/3 full with water, bring to a boil.
2. Put measured amount of apple sauce into sauce pan.
3. Add calcium water, lemon juice, and spices, and mix well.
4. Measure sugar or room temperature honey into a bowl. Thoroughly mix pectin powder into sweetener. Set aside.
5. Bring fruit mixture to a full boil. Add pectin-sweetener mixture, stirring vigorously for 1 to 2 minutes to dissolve the pectin while the jam comes back up to a boil. Once the jam returns to a full boil, remove it from the heat.
6. Fill hot jars to ¼" of top. Wipe rims clean. Screw on 2-piece lids. Put filled jars in boiling water to cover. Boil 10 minutes (add 1 minute more for every 1,000 ft. above sea level). Remove from water. Let jars cool. Check seals; lids should be sucked down. Eat within 1 year. Lasts 3 weeks once opened.

   Option: Feel free to use whatever spice mix you would normally use to make apple pie. Spices should not exceed 1 teaspoon. If you leave out all of the spices, you will have plain Apple Jam, delicious in its own right.



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FEED LIKE A "PRO" WITH A SILO

BY DOROTHY RIEKE

DRIVING KANSAS HIGHWAY 36 BRINGS many farmland scenes. My husband and I were intrigued by an abandoned silo with a healthy-appearing tree growing up within the gray stone sides. The tree, when first sighted, seemed to be simply peering over the edge of the silo. Now, years later, it is projecting high about its walls. I wonder what that silo could tell us about past days.

Do you know that some people believe that most dairy cows give more milk when fed silage containing fiber? Do you realize that during past days some gauged a farmer's success by the number of silos he had? Do you know that some farms with silos bring more money when sold? These statements made by those selling silos may have contributed to the successful arrival of silos on the agricultural scene.

Silos were used in ancient Greece in the late eight century BC as well as in Israel and in other countries. Since that time, farmers have recognized the value of these structures which store bulk quantities of chopped green plants and grain providing corn and juicy sorghum stems for cattle consumption. As time passed, increasing herd sizes dictated more labor-efficient feed storage methods. Currently, silos cannot be regarded as fads; they have gained valued roles in the farm economy.

Early Myths About Silage From Silos

Early myths nearly destroyed the popularity of silos. Some imaginative individuals claimed fermented corn silage caused cows' teeth to fall out and that the carbonic acid made cattle drunk. Others insisted that this kind of feed burned holes in their cows' stomachs. These claims were proven false.

Advantages of Farm Silos

Many advantages exist for farm silos. Silage takes up less space in storage than hay. Those raising beef or dairy cattle often report better growth as well as better milk production with high-energy silage for feed. One source indicated that silos improved alfalfa management and breeding. It is said that beef cattle fed silage can be readied for market more economically. Also, the need for legumes in silage means that they will be grown in rotation, improving the soil.

An acre of corn can be processed and put in a silo at a cost below shocking, husking, grinding, or shredding. Feeding silage ensures that cattle are consuming all of the corn. The demand for this popular corn silage may have increased the demand for silos.

What is Silage?

Silage is formed by microbial fermentation of plant material

under anaerobic (oxygen-free) conditions. Whole-plant corn silage is made by chopping the entire plant; haylage is silage of wilted grass or alfalfa, dried and chopped finely and wrapped in plastic to ferment. High-moisture grains such as ear corn and barley move through the fermentation process containing less water.

First Silos in the United States

The first silos in the United States were pits covered with boards. In the fall of 1873, Lewis and Fred Hatch, a farmer and his son living in McHenry County, Illinois, dug an eight-foot deep, 10-by-16-foot rectangular pit and lined it with rocks and mortar. They then built walls made of double-thick, 16-foot-high boards, with tar paper inserted between them.

A horse-powered chopper cut corn, and an elevator dumped it into the silo. The men removed a layer of silage each day to avoid the risk of spoilage. However, spoilage did occur in the corners. Three years later, they built two circular silos. Ten years later, there were over 5,000 silos in the United States.

In 1882, Franklin H. King built a round silo in Wisconsin. This round silo kept the contents fresh because there were no corners filled with air.

One company advertised silos made of spruce wood, double-tongued and grooved to exclude air. These silos were generally treated with creosote to lengthen the life of the structure.

During World War I, Emil Hanson, a farmer in Minnesota, needed an arm silo. Some existing silos were poorly constructed, containing dirt and clay in the sand used to make the silo's concrete. He created a more durable concrete silo using "pure" washed sand from a nearby lake in Minnesota. Once neighbors saw his silo, they all wanted one like it. Later, he patented the first steel-dome silo roof to replace hip-style roofs, which gave an additional 15% capacity.

Silage must be removed at a certain rate per day to prevent spoilage. Farmers needed machines that could dislodge frozen silage as well as handle silage year-round. Hanson and his son patented the first self-propelled frozen-silage chopper.

Silos, down through the years, have been built of stone, brick, clay tile, sheet metal, concrete, or other



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materials. For year-round usage, farmers may prefer the glass-lined steel silos now available.

TRENCH SILOS

Trench silos, used in some areas, require a large trench that is filled with silage and covered with heavy plastic. These are quickly and cheaply built and can be filled with a blower. They are not easily damaged by storm or fire. There is little danger of poisonous gases accumulating. Any desired capacity can be reached by increasing the length of the trench.

Trench silos preserve silage with a small amount of spoilage if corn is cut at the proper time, packed tightly, and covered properly. This represents a cheaper way to store and feed silage.

BUNKER SILOS

Bunker silos, built above the ground, have wood or cement sides with one or two open ends. Forage is dumped within the walled area and compacted by a tractor, covered with polyethylene sheets or tarp, and weighed down with old tires, three-foot-long gravel bags, or other ballast material. Keep in mind that tires may harbor mosquitoes and rodents.

Bunker silos are filled using tractors and loaders. Unloading can be done by front-end loaders or by allowing cattle to feed directly from an exposed end.

> Improved nutrition, weight gains, more milk production, as well as feeding economically are benefits of silo feeding.

Keeping the contents from spoiling in bunker silos is challenging. At one time, a sprayed-on edible black coating preserved the silage but had to be custom applied. This process costs about 10 times more than silo plastic. Later, molasses was spread on the bunker's contents. This proved to be a mistake as it was water-soluble, so precipitation leaked through the silage, leaving spoilage. Other plans included using toppings of ground limestone and sawdust with no success.



Plastic covering has been proven best for these silos. Some studies found that a plastic silo cover returns about $8 for each $1 spent and the labor to install it.

BAG SILOS

Bag silos, constructed with heavy plastic tubes about eight to 12 feet long, are packed using certain machines made for that purpose. A self-propelled bagger can unload and pack up to 13 tons of feed per minute. The feed is then dumped onto a feeder table, run into the bagger, and packed in one operation. The bags are sealed at both ends. A tractor and loader or skid-steer loader empty them. As the silo is emptied, that part of the bag is torn off. These silos require little investment and are mainly used for temporary storage.

TEMPORARY SILOS

Other types of temporary silos, using heavy plastic, are used in some areas. A large piece of plastic is placed on the ground. Then, the silage is dumped on that plastic. It is covered with plastic after a vacuum pump removes the air, then the edges are sealed.

CONCRETE SILOS

Concrete silos were built from 1930 to the 1970s. These poured concrete silos were made of cement poured in circles with each successive layer laid while the previous layer was not quite set. Two sets of forms, two-and-a-half-feet high, allowed workers to do about five levels a day. Reinforcement circular hoops were added as the last step. These silos create a pressurized area in the cylindrical container that keeps the fodder from spoilage.

Tops are closed; bases are sealed. Bases are of organic materials such as dirt, canvas, paper, or plastic. This enclosed bottom prevents air from entering the silo. The feed can

be unloaded from the bottom.

Filling and Unloading Silos

One disadvantage of early silos was the work involved in filling them. Steam engines were first used to lift the chopped corn and sorghum to the top of the silo wall. Unloading was easier. It was done by hand through chutes or openings. Later, mechanical unloaders were introduced.

Today's tower silos have better methods of loading and unloading. Forage is blown into the top with a pipe mounted on the silo's side. The forage consolidates under its own weight. Unloading equipment is mounted inside.

Top-unloading silos have a rotating scraper that sweeps silage through openings in walls into chutes mounted on the sides. Silage then falls into feeding troughs or onto a conveyor belt for distribution to livestock feeders. Bottom unloading silos have screw-type unloaders, which move silage into a central hopper where belts move it out.

Value of Silos

Silos, down through the years, have greatly contributed to the economy of the agricultural scene by storing and processing grains and legumes for cattle consumption. Improved nutrition, weight gains, more milk production, as well as feeding economically are benefits of silo feeding. These structures, indeed, have assumed a valued role in farm economy.

DOROTHY RIEKE, living in southeast Nebraska, is married to Kenneth and has one daughter. She has lived on farms all her life and has raised both chickens and turkeys.

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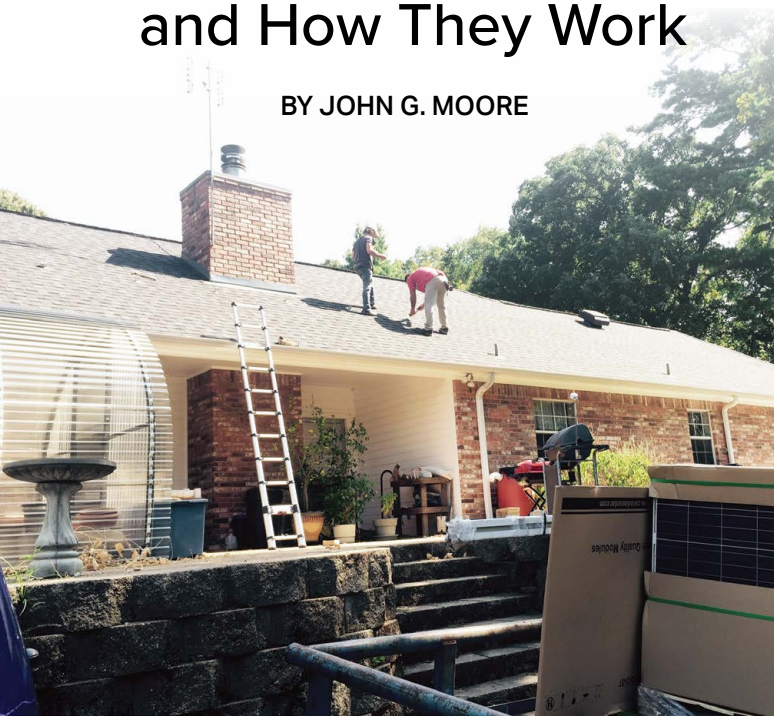
Exploring Solar System Options

and How They Work

BY JOHN G. MOORE



IF YOU'RE CONSIDERING SOLAR, the first question you most likely will want to ask a solar installation professional is, "How much will it cost?"

That is similar to asking an auto mechanic, plumber, or air conditioning service person how much to fix your transmission, sink drain, or AC compressor before they've looked at your problem. They can't provide an accurate number until they do a lot of homework.

They have to check a few things before an accurate number can be reached. Even a "ballpark" number can be difficult.

It's understandable that each of us would like to know a number before venturing into a discussion of adding solar, which for many is uncharted territory.

Once my wife and I accepted that we couldn't have an exact number right away, we were more open to giving our selected solar installer the time to review our existing electrical system, the layout of our land and home, and providing him access to past electric bills.

Before you can move forward with solar, you must have patience.

In a previous issue, I wrote an article about our journey to install solar on our homestead. Many questions came in about how our solar system works. In this article, I hope to answer several of these questions and give you information that we learned over a two-year period that should help you on your journey.

The first thing you should do if solar is on your bucket list is to review your location yourself. With Google Earth and other similar online sites, you can check out your place from above and get a pretty good indication as to whether you are good candidate for a solar panel system.

South is key in the Northern Hemisphere. For solar panels to work at their maximum output, you must have almost clear access to the sun in a southerly direction. If you want to install panels on the roof or ground and you have a lot of trees blocking the sun, you'll have to remove the trees. If you're not willing to remove the trees or if the trees don't belong to you, you can stop there. Solar isn't going to be an option for you.

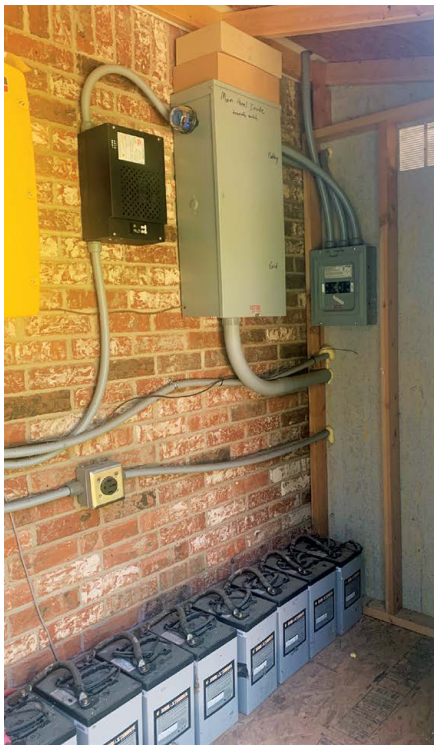
If you aren't sure, call in a reputable solar installer — someone who's been in business for a number of years and has ties to your area. The last thing you want to do is spend a lot of money with someone who isn't going to be there for you later, should you need them.

Once it was determined that we had enough access to the sun, we decided to move forward with a three-part system: solar panels, a battery backup system, and a propane-powered generator. We put in solar panels and batteries in 2014 and added a generator in 2015.

Ours is a double redundant system. We have batteries backing up the solar panels, and a generator backing up the panels and batteries. We did this because we wanted to make sure we always had power. I work from home quite a bit, so power is essential to accessing the web and many other things.

For you to decide what is best for you, I'll explain what each part of our system does and how it works, so





that you can choose one or all three.

Solar panels generate direct current, which goes to the control system and is converted to AC current before going into your home. Panels look similar, but some make more electricity than others. Buy the best panels you can afford.

Each will be rated to make a certain amount of electricity. Once your solar professional crunches the consumption data from your past electric bills, you'll have a number that determines what you'll need to generate and meet the needs you have.

I wanted to go off-grid. Lots of people do. But we found out that off-grid is a pretty lofty goal. It is attainable, but it's very expensive.

For you to be off-grid, you'd need a three-part system like my wife and I have, to have power 24/7. But even with our system, we're still grid-tied. Batteries wear out and if you are off-grid, you'll go through batteries very fast. And batteries, especially good batteries, are costly.

With the off-grid discussion being addressed, let's determine whether you just want to supplement your power to lower your bill, want to try to make the approximate amount of power that you use to reduce your bill to the minimum, or you want to do just panels and have a generator that works in tandem to ensure your bill is lowered and you're covered during grid outages.

With our system, it took 50 panels (26 on our roof and 24 on ground mounts) to generate the power we need to replace what we were buying from the power company. On days that our panels make more electricity than we need, we receive credits for each kilowatt hour, that we use at night.

That gives us close to what's called, Net Zero, which means we make about what we use. We still have a small electric bill. Some months it's the minimum charge, plus a bit more, and other months it's only for the minimum charge of being connected to the grid.

You'll need to work with your power company on any install. Some electric companies are more solar-friendly than others. Don't sign anything on a solar install project until you're sure the power company is on board and will work with you.

Once you determine the size of the solar system, you'll need to decide whether you just want to supplement your power or have battery backup. As I mentioned, panels work during the day, but if you lose the grid at night, you'll need batteries to have electricity.

We designed our system so that the batteries only powered essentials, such as refrigerators and freezers, and specific rooms, such as master bedroom, living room, and office.

Keep in mind that unless you have an extremely large and expensive battery bank, things that draw a lot of power, like air conditioning and electric heat, can't be powered by most battery backup systems. That's where our generator system comes in.

Part of our reason for going with a three-tier power system is being prepared for the worst, but the other reason is comfort. With the grid becoming less reliable, we decided to invest in a 23Kw generator and a 1,000-gallon propane tank. If the grid goes down or the panels aren't receiving enough sun to generate the power we need, the generator turns on automatically if the batteries drop to 50% capacity. This powers our entire house and recharges the batteries.

We can also manually turn on our generator if the grid is down and we want more power than the panels and batteries are generating.

You'll need to decide what meets your needs and works within your budget. Our system was installed in 2014 and 2015 and cost around $60,000. If you are determined to recoup your costs, then your timeline for doing that will determine the amount of your investment.

For us, we were worried less about recouping cost and more about being able to live normally on our homestead, summer or winter.

A solar panel system is right for you if you have clear access to the south and are willing to invest in your homestead and yourself.

You just have to decide what meets your needs and how much you're willing to spend.

JOHN G. MOORE, is a native of Arkansas, but he has called East Texas home for over 30 years. He is the owner of One Moore Production, a recording studio where he voices books for Audible. His weekly column, "Moore Thoughts," appears in a dozen newspapers in Arkansas, Texas, and Louisiana. John is the author of two books - *Write of Passage: A Southerner's View of Then and Now* - Volumes 1 and 2. You can reach him at John@TheCountryWriter.com.

FIRE IT UP!

Woodstove Cooking

BY JENNY UNDERWOOD



LAST WINTER SAW THE COLDEST TEMPERATURES that we've seen in several years. And with that, we were stuck inside because, with ice and snow-covered roads and temperatures barely reaching a high of five degrees F, we honestly weren't thrilled about going outside at all. And let me tell you, we kept that woodstove hopping! That led me to try cooking on our woodstove.

I had always dabbled with cooking something on the woodstove. I think I had cooked a total of four times in the seven years we've had it. Frankly, I was scared of cooking on it because I didn't want to fail. But with the nasty weather, I got bored and decided to take the plunge. And let me tell you, it's now my new favorite thing to do.

First off, I want to be clear: my stove is for heating, not an actual wood cookstove. That being said, it cooks amazingly! My first attempt was with marinated fajita-seasoned steak strips with baked potatoes. We were completely in love with this "new" way of cooking. Not only were the steak strips delightfully tender and full of flavor but the baked potatoes were tender and fluffy with a slightly smoky flavor. The meal was superb! What amazed us, even more, was how easy it was and how little work was required to cook on our stove.

Here's what we've learned so far about woodstove cookery:

1. Cooking on a heating stovetop is easy and imparts a unique flavor to foods and a moistness that isn't present on my electric range. The food doesn't dry out and burn, it cooks slower, and it smells divine while it's cooking.

2. There is a sweet spot for higher-heat cooking and since we use a stovetop thermometer, it's always when the gauge is in optimal operating range. It still cooks if it's lower, but is extremely slow and the food might need to be covered. Also, if the stove reaches the higher end of the operating range, it cooks a bit too fast and pops the grease or oil onto the stovetop. Since we like to keep our stove just a little above the beginning optimal range, it works perfectly for cooking with little extra effort.

3. It's possible to bake on top of a woodstove with just a little tweaking. We used a Dutch oven with legs, covered with a steel box over the top. In this, we successfully made a strawberry jam buckle. It was delicious and disappeared within a very short while. I also made a pizza in the Dutch oven with just the lid on. It cooked great but I did put it in my oven for an additional three to five minutes to brown the cheese. If I had the steel box, I probably could have skipped this step.

4. While it's possible to cook pretty much anything on my wood stovetop, I decided not to fry things like fish or boil pasta because of the excessive splattering and tendency to boil over. I did get some oil that splattered on the stovetop so I took an Envirocloth® to the spots and the majority came off. Still, if you're very picky you may want to use a trivet (an iron tripod or bracket for a cooking pot or kettle to stand on).

5. Plan ahead, because as a general rule, it's a slow cook. For example, my baked potatoes took anywhere from one hour (on very high heat) to three hours (at beginning of



the operating range). I cooked my steak strips for an hour, but longer is better if you like them well-done. Bacon was of course a bit quicker but still took 15 minutes. I honestly didn't mind the time factor because as I said, it was pretty low-maintenance cooking.

6. It may be necessary to rotate foods on top of the stovetop for optimal cooking. A great example of this is baked potatoes. I wrapped mine in aluminum foil and found it worked well to turn them over every 30 minutes to prevent a blackened side on the skin. The blackened skin didn't seem to affect the potato, only the skin.

We were able to greatly explore woodstove cookery over the rest of the winter. Here are some of the dishes we made with great success:

BAKED POTATOES: Scrub potatoes, cut off any bad spots, and cut a few slices into it to let out steam or pierce with a fork. Wrap well in aluminum foil. Cook on the woodstove top for one to three hours. Check for doneness by carefully unwrapping the top and piercing with a fork. Serve with toppings of your choice.



STEAK STRIPS: Marinate steak strips overnight in your choice of marinade. We did fajita seasoning. Place a deep cast-iron skillet on the stovetop and pour in steak. Cook uncovered, stirring occasionally. Add small amounts of water if necessary. I found I needed to add water one time about 30 minutes before they were completely done. Check for doneness by cutting with a fork, as it should be fork-tender when done. Serve on fajita wraps, over rice, or over baked potatoes.

BACON: This one is super easy and tastes fantastic! We use thickly sliced, naturally cured turkey bacon, so it didn't get as crisp as pork bacon. Simply add your bacon to a heavy cast iron skillet and cook until it reaches the crispness you desire. I turned mine with a fork and cooked it uncovered.

FRIED POTATOES: These turned out great. I put olive oil in a deep iron skillet, added chopped potatoes, and turned to coat them. Then I seasoned them and put a cast iron lid on them. I checked the potatoes every 15-20 minutes and stirred two times in the hour that I cooked them. They had an amazing flavor and slight crispness. Everyone loved them!

PIZZA: I first prepared a sourdough crust (thin crust) but you can use any thin crust. I oiled a Dutch oven and laid the pizza crust inside, then covered it with sauce, cheese, and toppings. I then placed the lid on and cooked on the stovetop for an hour at a little above optimal operating temperature. I checked it every 20 minutes. I then removed the lid and finished it in my regular oven at 425 degrees F for five minutes. If I had the steel box I used on my cobbler, I would have simply removed the Dutch oven lid and baked the pizza in my makeshift oven. It was delicious!



A few notes about cooking on the stovetop: I used cast iron exclusively (which I do as a general rule anyway) but if you use a lighter pan, you will probably need to watch more closely and tend to it more frequently. Some pans might be completely unsuitable, such as glass pans. To make the oven on top of the stovetop, place a skillet on a trivet and cover the whole thing with a larger pan (such as a roasting pan turned upside down). It is also possible to use a Dutch oven that has legs in place of the trivet. We had a steel welded box we that used to set our Dutch ovens in for outdoor cooking and we turned this upside down over the Dutch oven on our woodstove.

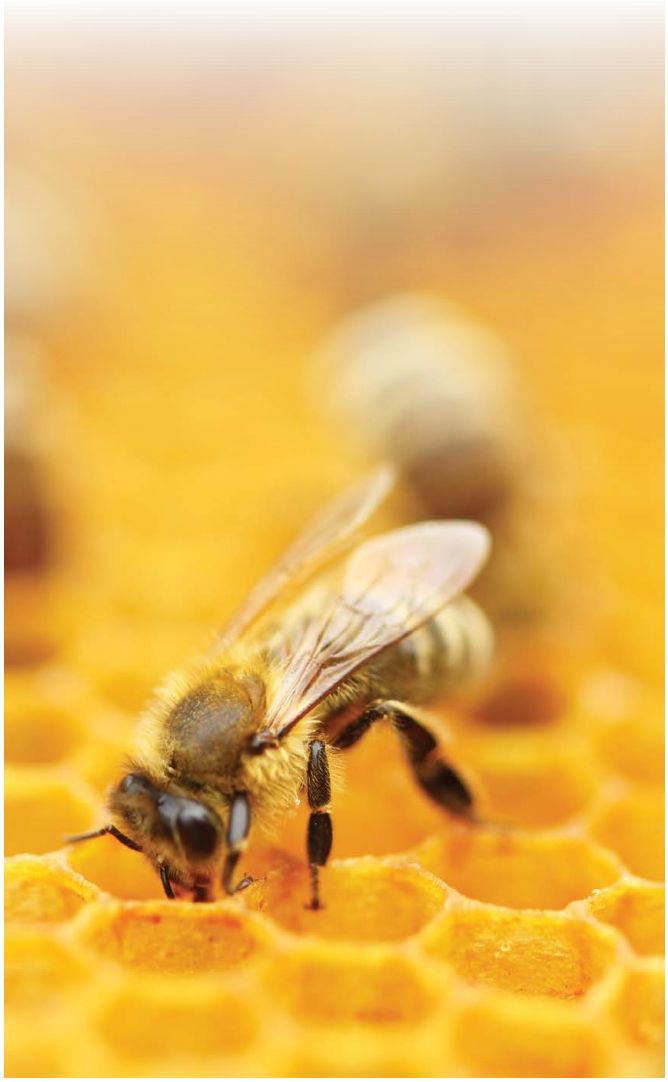
There are so many things left for me to try on my woodstove such as baking breads, using the inside of the stove to bake, and one day getting a pipe oven. It's exciting to try new things and to be successful at it. I encourage you to give woodstove cookery a try!

JENNY UNDERWOOD is a homeschooling mama to four lively blessings. She makes her home in the rural foothills of the Ozark Mountains with her husband of 20 years. You can find her reading a good book, drinking coffee, and gardening on their little 5th generation homestead. She blogs at www.inconvenientfamily.com

Moisture Control in Honey Bee Hives

How Honey Bees Regulate Temperature and Moisture

BY BRIDGET MENDEL



TEMPERATURE AND MOISTURE REGULATION in the honey bee hive is a collaboration between the honey bees and their beekeeper. We work with the seasons and the bees' own incredible ability to self-regulate to keep heat, cold, and moisture in check. While it is useful to look at how bees live "in the wild" to understand their natural preferences, it's good to remember that honey bees are adaptable and live all over the world, in all climates. They live in straw skeps, in clay pots, in stone walls, or in wooden boxes. They live in caves or hollow trees. They thrive in the desert, overwinter in the frigid north, or live on rainy coasts. In the U.S., many bees are moved across the country following blooms: they are able to adjust to multiple climates and locations per year.

Most of us in North America use standard Langstroth hive equipment. For this reason, I'll talk about managing moisture in Langstroth hives. There are countless opinions on moisture control in beehives, and countless equipment modifications to be experimented with by experienced beekeepers. I'm writing from the perspective of a Minnesota beekeeper, which I am. We usually experience warm, humid summers, long cold winters, and wet springs. Your local climate (and your beekeeping equipment) will greatly affect how you manage your bees, but the basics of how bees regulate temperature and moisture should be relevant anywhere. Let's talk about summer first.

Bees use a few techniques to keep the temperature of the brood nest consistent — about 95 degrees F. If things get too hot in there, bees will fan their wings to circulate air and lower the temperature. Foragers will collect water droplets and place them just inside the hive entrance or on the combs; then workers will fan their wings to evaporate the water droplets into cool air that circulates through the colony. On especially hot days, when fanning and evaporating water isn't enough, older bees will leave the colony and "beard" on the outer walls of the hive boxes, decongesting the hive so that the younger bees can more easily regulate temperature and keep the sensitive brood from overheating.

Our job as beekeepers in hot, humid conditions is to make sure bees have proper entrances for their large summer populations — both for foraging and for ventilation. An upper and bottom entrance allows for good airflow. Some people use screened bottom boards or screened inner covers for additional hive ventilation in summer. When fall comes along, populations diminish, and robbing behavior increases, an entrance reducer can be added to diminish the area bees need to guard. Upper entrances can also be plugged or diminished. If the robbing season (August

and September in Minnesota) corresponds with very hot weather, you can use robbing screens instead of entrance reducers to maintain good ventilation.

Now to prepare for winter. When temperatures are at approximately 55 degrees F or lower, the bees will cluster on the honeycombs, shivering their flight muscles to stay warm. They do not heat the hive structures in which they live. The inside temperature of the Langstroth hive boxes is essentially the same as the outside temperature, though the walls provide protection from the elements. The bees only heat their own cluster of selves. The thick, outer layer of bees is tightly compressed; essentially, the bees make themselves into their own insulated coat — each bee, a stitch. The center of the cluster is about 85 degrees F; it reaches approximately 95 degrees F in late winter when the queen starts laying eggs again. While we think the bees rotate from the outer layer to the inner part of the cluster (taking turns being warm and being almost comatose) we know the queen is always near the center; always warm. Once brood is being raised, the bees' ability to regulate the hive temperature is of the utmost importance: chilled brood, just like overheated brood, will die.

While honey bees can withstand frigid temperatures (provided they are healthy, have low mite levels, and have enough food), being cold and wet can kill them.

All winter long, the cluster expands and contracts, adjusting its density and temperature as the air temperature around it shifts. On warm days, the bees break their cluster formation, take cleansing flights, and move to new areas of honeycomb. Clustered again, wet air rises off of the respirating, metabolizing bees and, hitting the cold air, produces condensation.

That condensation gathers on the hive walls and inner cover and can drip down on the bees, and kill them. While honey bees can withstand frigid temperatures (provided they are healthy, have low mite levels, and have enough food), being cold and wet can kill them. Beekeepers in cold climates can add a piece of particle board or other absorbent material over the inner cover to wick condensation out of the colony and avoid death by wetness (some beekeepers use wood chips or newspaper instead of particle board). A small upper entrance — either a notched inner cover or a hole in an upper box — will allow for ventilation and cleansing flights when hives are half-buried in snow.

While it doesn't provide heat, a black, waxed cardboard winter cover, Styrofoam siding, or plastic "bee cozy" can provide some insulation to make the bees' job keeping themselves warm a bit easier. Insulation becomes especially helpful when the bees begin rearing brood in late winter and early spring, as they will ramp up the cluster temperature significantly.

In very early spring, when temperatures begin to inch up, things can get pretty wet for us in Minnesota. That moisture board (or moisture quilt) above the inner cover remains essential for our bees. Early spring nectars are yet another wet element that is introduced by foragers into the colonies. Too much moisture encourages mold and the fungal disease chalkbrood. It's partly a matter of waiting until the weather dries out (bees can handle mold, and chalkbrood often clears up by late spring or summer) but why not help bees wick out the moisture?

It's incredible to witness how honey bees live in climate extremes. How they shiver all winter long in the cold. How they hang lazily outside the hives in the heat of summer, in order to keep the brood from overheating. How in spring some seasonal impulse or slant of light provokes them to begin their brood rearing again. But honey bees do need us. They need us to study their biology, their natural ways of living, in order to help them thrive in our human-designed environments. Once you understand the basics of moisture and climate control in your hive, there's endless equipment, hive set-ups, and insulation choices to experiment with. Will you tinker with your hives equipment this season, and how?

BRIDGET MENDEL is the Program Manager at the University of Minnesota's Bee Squad. She takes care of bees, teaches classes for beekeepers and the public, and manages interdisciplinary, pollinator-focused programs. She also writes grants and communications for Bee Squad's programs and research projects. Outside of Bee Squad, she teaches creative writing to college students. Her own work has appeared in DUSIE, Noo Journal, Beekeeper's Quarterly, and Nous Zot Press. Bridget is the recipient of a Minnesota Emerging Writers Grant, and holds a BA from Northwestern University and an MFA in Creative Nonfiction from the University of Minnesota.

How Do I Keep the Hive Ventilated in Winter?

Tara of Denver asks: *I was just curious as to what you use to prop up the hive roof for the winter. I'm new at this, from what I'm reading, as long as the roof is propped up and the middle of the roof hole is open, that should be enough ventilation.*



Rusty Burlew replies:

How much ventilation you need in a hive depends on many factors, including your local climate, the size of your colony, your wind exposure, and your sun exposure. Although I can't picture the specific configuration you are asking about, as a general rule, I don't think lifting the lid with a shim is a good solution to ventilation.

Usually, when you prop the lid with a shim, you get an opening across the front of the hive plus openings along each side that get smaller as you move toward the back. To visualize, lay a book on your desk, and put an eraser under one end. Although the opening isn't wide, it has a lot of area. Not only can this area admit wind and blowing rain, it can also welcome pests — spiders, slugs, other insects, and even mice and voles.

I much prefer a ventilation hole of about one-inch in diameter drilled into the top corner of the upper brood box. Alternatively, you can use an Imirie shim, which has an upper entrance of about 3/8-by-5/8-inch that works fine for ventilation. These entrances are small enough to let warm air out without letting everything else in. When I use one-inch holes, I cover them on the inside with screen or hardware cloth to keep out the wintertime visitors.

If you see moisture condensing under the roof, you probably need a bit more ventilation, but if you see no condensation, you may already have enough ventilation. Each colony is an individual, so it's impossible to make a recommendation that works for all of them.

RUSTY BURLEW is a master beekeeper in Washington State with an undergraduate degree in agronomic crops and a master's degree in environmental studies with an emphasis on pollination ecology. Rusty owns HoneyBeeSuite.com, and is the director of the Native Bee Conservancy of Washington State.

Ask the Bee Expert!

Visit **backyardbeekeeping.iamcountryside.com** and get answers to your beekeeping challenges through our live interactive chat. You can also email us at **editor@countrysidemag.com** or mail your inquiries to **P.O. Box 1690, Greeley, CO 80632**.

Should My Supers Be Below the Inner Cover for Winter?

Rebecca from New Jersey asks: *I have four hives that did very well this summer, and I harvested over 200 lbs. of honey. The supers are back on the hives since the last harvest in June and are full again with capped and uncapped honey. I live in northern New Jersey where the winters can be very cold (or not). My question is, can I leave partially capped honey on the hives, and whatever the answer, should they be above or below the inner cover? Right now they are above the inner cover. All this assumes there is ample storage in the brood boxes.*



Rusty Burlew replies:

It's common to find many uncapped cells of honey at this time of year. The bees may not be finding enough nectar to completely fill the cells, or humid weather may make it difficult for the bees to dry the honey to the proper moisture level. In this situation, beekeepers often put the inner cover below the honey supers to encourage the bees to move it down to the brood area. Sometimes this works, and sometimes not. The colony may feel they have enough honey in the brood boxes, or perhaps the workforce is busy with something else.

That honey, both capped and uncapped, is excellent winter feed, but if you are using it as winter feed you definitely need to remove the inner cover. During winter, the cluster forms around the brood nest, and the bees rotate, taking turns being on the outside. Retriever bees periodically leave the cluster and go above to get feed and bring it down to the cluster, where it is distributed by trophallaxis. Retrieving is a tough assignment since the bees can quickly become too cold to complete the mission. If they die up there, the bees down below are also in peril.

In light of the difficulty, you don't want to make it any harder than necessary. Having the inner cover in the way can block their pathway and funnel the heat to a small area instead of generally throughout the super. In addition, the retriever bees may have to travel further—first to the opening, then away from it to the food, and then back to the hole, and then back to the cluster.

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HOW TO MAKE HONEY SOAP

BY REBECCA SANDERSON

When adding honey to soap, the typical ratio is one teaspoon of honey per pound of oils in the soap. Measure out the honey beforehand and dissolve it in a small amount of hot distilled water. This will assure even distribution in the soap batter. When your soap batter reaches a very light trace, carefully pour in your dissolved honey and mix.

Preventing Overheating
When sugars react with the lye, soap heats up quickly. If left unchecked, overheating can cause heat tunnels, glycerin rivers, lye pockets, and even a soap volcano. Prevent overheating by mixing dissolved lye and oils at a lower temperature, aiming for 105 degrees F rather than 120-130 degrees F, and cooling lye water to room temperature before adding to oils.

False Trace
When soaping at a low temperature, be sure any butters or solid-at-room-temp oils are still completely liquid when you mix in the lye. You also risk getting a false trace as the butters solidify from the cooler lye water.

Avoiding Gel Phase
If you don't want to risk false trace from soaping at too low of a temperature, simply soap at 120-130 degrees F and avoid gel phase (when it is most likely to overheat) by immediately placing your soap in the fridge or freezer as soon as you pour it in the mold. Gelling soap is a personal preference and doesn't affect quality of the final product, but does tend to produce a smoother bar and brighter colors if you are using colorants.

Additives
While a simple soap recipe with honey as its only additive is not that likely to overheat unless you use too much honey, adding other ingredients can increase chances of overheating. One example is adding honey to milk soap: additional sugars in the milk increases likelihood of overheating. Some fragrance and essential oils are prone to misbehaving in soap, so test them prior to adding them to honey soap recipes. If you have not made cold process soap before, make a few simple batches without tricky additives before attempting honey soap.



HONEY SOAP RECIPE

INGREDIENTS
12.16 oz distilled water
4.46 oz lye
6.4 oz coconut oil
11.20 oz olive oil
11.20 oz palm oil
3.2 oz castor oil
2 teaspoons honey dissolved in a small amount of hot distilled water

DIRECTIONS
This recipe uses two teaspoons of honey added at very light trace and no fragrance or essential oils so it is safe for sensitive skin. Because it has no other additives, it should safely go through gel phase without complications.

I recommend soaping at the 105-110 degrees F range to prevent possible overheating.

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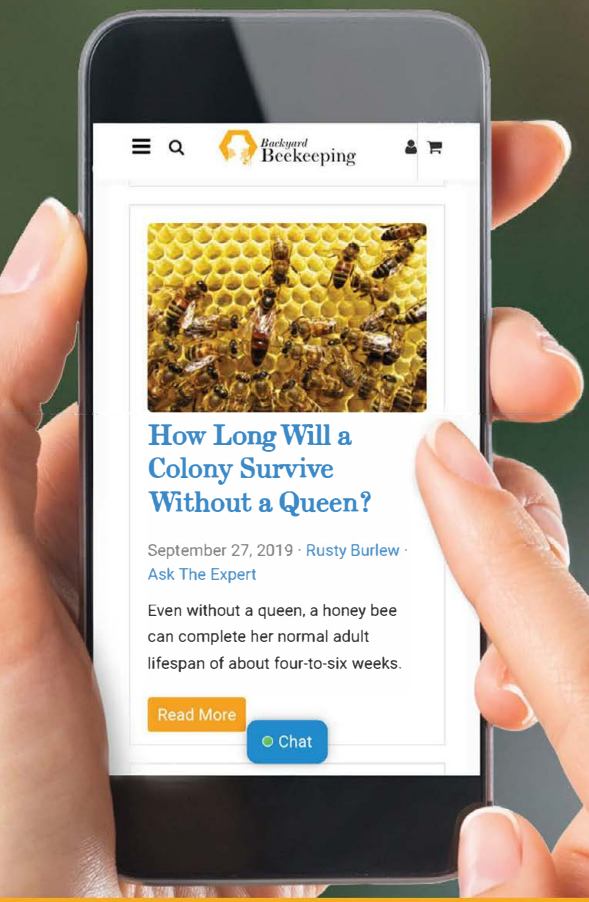

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FLORIDA WEAVE TRELLISING SYSTEM

STORY AND PHOTOGRAPHY
BY KRISTI COOK

I DON'T KNOW ABOUT YOU, but there's one thing about growing tomatoes that I don't care for — caging them. No matter what type of caging system I've tried, be it the classic flimsy tomato cage, the sturdier cattle panel version, or the whole tying the plant to a stake (kind of like a witch burning), no caging method has worked. Before summer is halfway over, tomatoes and plants are on the ground during the first heavy rainstorm or windy day. And forget about trying to get those giant plants back into their homes! However, all these troubles disappeared the summer I discovered the Florida weave trellising system. Also known as the basket weave system, weaving tomato plants between stakes and twine is economical, simple, and a major time saver — something all of us gardeners can use!





LEFT: The Florida weave keeps plants upright and off the ground as they grow. MIDDLE: Secure twine tightly at each end post and in-line post to ensure twine doesn't slip as plants grow heavier and taller. RIGHT: When looking down on top of the plants, you should see a row of twine running down each side of the plants.

To get started, all you need are a few sturdy stakes and some twine. For stakes, nearly anything sturdy and rot-resistant will work provided it is tall enough to set at least eight inches into the ground and reach the top of the tomato plants. Some use thick wooden stakes, others use rebar, and still others use T-posts with each having its own benefits and drawbacks. Wooden stakes, for instance, are inexpensive. However, because it's best to use untreated lumber around food crops, the wood will usually rot enough during the first season that it won't be usable the following year. Another drawback is that it can snap under heavy loads and windy conditions more readily than the other options. Rebar and T-posts are quite durable under heavy loads, won't rot, and are easily set into the ground without breakage. The downside is the higher initial cost. Yet, because rebar and T-posts won't rot and don't break easily, you'll get many years' use out of them, making them much less expensive in the long run.

For twine, choose any strong, non-stretching twine. Many gardeners use jute or sisal, but I have found these options stretch too much after a heavy rain when my plants are full and pushing against it, causing the entire system to fail. Over time, I've switched to synthetic baling twine that I recycle from my horses' hay bales and have had no failures so far. As with all things, though, it's best to use what you have on hand and experiment with your particular setup to see which materials you prefer.

Now for the easy part. To get your trellising system ready, determine where you want your tomato plants

to go and set a post at each end of the row. Next, plant tomatoes as you normally would, every two to three feet. If the rows are on the shorter side, space posts every two to three plants. If rows are on the longer side, place a post between every plant to provide extra support.



I grow my tomatoes in double rows which provides the roots and soil plenty of shade once the plants fill out.



Once plants reach eight inches, start weaving. Tie twine to an end post at six to eight inches off the ground and secure tightly. I like to wrap it a couple of times and hook it under the teeth of the T-post, which I find helps keep slippage to a minimum. Bring twine to the next post, placing twine against each plant. Make sure to keep the twine snug, otherwise growing plants will push the twine out and the system won't work as well. Securely wrap twine at the next post, and continue down the length of the row. Once you reach the row end, wrap again, and repeat down the other side.

When finished, the plants will be sandwiched between the two rows of twine. Check growth at least once a week, adding a new row of twine for every six to eight inches of new growth.

The Florida weave trellising system is an economical, time-saving, and highly effective method for keeping tomatoes off the ground. And while many claim this system is best for determinate varieties, I've found it works just as well for my indeterminate ones despite the fact that I don't prune. So, grab a few stakes, a bit of twine, your tomato plants, and give weaving a try.

KRISTI COOK lives in Arkansas where every year brings something new to her family's journey for a more sustainable lifestyle. She keeps a flock of laying hens, dairy goats, a rapidly growing apiary, a large garden, and more. When she's not busy with the critters and veggies, you can find her sharing sustainable living skills through her workshops and articles.







ZOMBIE SOIL

How the soil went bad in the first place and what it takes to bring it back.

BY JENNIFER MAYNARD

ANYONE WITH A RUDIMENTARY LEVEL OF understanding about how soil works knows that its purpose is to supply nutrients and moisture to the crops growing in it. But what if it didn't? What if, instead, the soil was a shell of itself — the cause of crop death and malnourished yields?

Zombie soil goes against the conventional understanding of how soil works, to do the opposite: sap the health of plants by depriving them of nutrients. No, it's not the plot of an upcoming campy B-list zombie movie — it's a real problem many croppers are dealing with right now.

Modern Farming is Turning Soil into Dirt

Soil depletion is the cause of many modern farming practices, each compounding on the other. No single practice is the true cause of zombified soil — rather, our shift away from heritage farming has caused significant, compounding damage to the earth.

Pesticides, herbicides, and fungicides are the simplest place to start, and the adverse effects of these carcinogens are well documented. Our willingness to spray crops to protect them from fungi, bacteria, insects, and other blight has, over time, affected the ability of our soil to maintain a healthy profile of phytonutrients. As a result, it becomes harder and harder to maintain nutrient-rich soil, even through crop rotation or soil injections.

Tillage is also a significant detractor responsible for stripping the health of the soil. Tilling breaks down the structure of the soil, reducing it from healthy loam into easily eroded dirt, making it more difficult to support plant root structures. On top of these poor soil maintenance practices, the toll of heavy feed crop planting and lack of crop rotation quickly depletes the soil.

What's left isn't soil — it's dirt. There's no density or structure, and the soil can't hold water or nutrients. The earth is a former shell of what was once nutrient-rich, hearty soil. Hence, the "zombie soil" moniker.

Our Current Trajectory

Zombie films are always marked by an epidemic or widespread catastrophe — the "zombie apocalypse." The culmination of our zombie soil epidemic faces a similar endgame: one we've already seen before.

The Dust Bowl blanketed Midwest prairies and stomped agriculture from 1930 to 1936. And while significant drought and economic hardship set the stage, poor farming practices were undoubtedly the catalyst for this terrible time in history. The rise in zombified soil is pushing us back toward a similar phenomenon in the future — a time when depleted soil won't be able to hold vegetation and widespread erosion finds us in another Dust Bowl.

Part of what pulled us out of the Dust Bowl was a push by the United States Department of Agriculture to adopt more conservative farming habits. Unfortunately, these stopgap measures became standard practice. Today, more than 80 years later, we're still farming the soil the same way. The time to adopt more sustainable farming practices is looming.

Thankfully, while the past holds predictions for the future, it also holds the answers for how to change the trajectory we're on.

Regenerative Farming is the Cure

Every zombie movie has a panacea: a cure that protagonists need to find to stop and reverse the effects of the outbreak. In our battle to reduce and reverse the effects of zombie soil, the cure can be found in tried-and-true regenerative farming practices.

The two most effective regenerative farming techniques borrow from heritage farming practices. To rejuvenate the soil and to help it better support future plant growth, we need to stop tilling and start planting diverse crops. Instead of cycling through the same feed or industrial crops, we need to supplement forage and ornamental crops throughout the year — including the offseason. Planting

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hardy winter crops prepares the soil for springtime planting, and leaving soil untilled allows it to recover structure in anticipation of the next crop.

Restoring the soil's biodiverse phytonutrient profile is only the start. To reverse our zombie soil problem, we also need to abandon monocropping practices and instead, create diverse planting beds. Not only will this attract pollinators, but it'll also continue to diversify the soil microbiome.

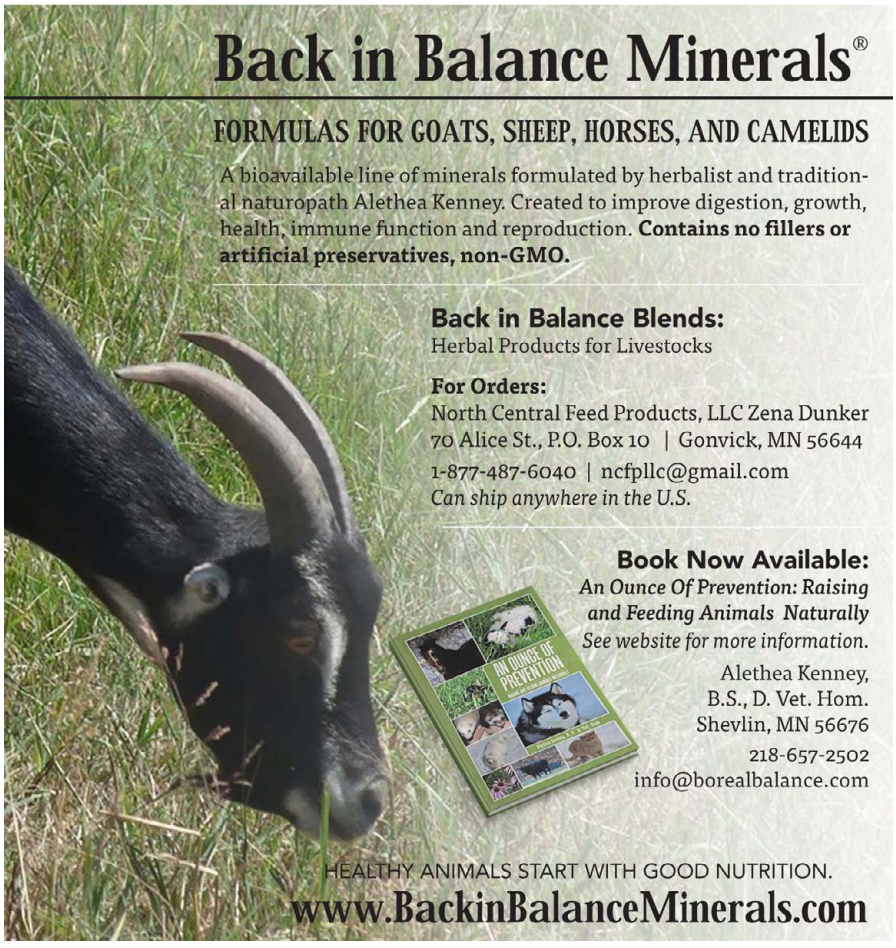
> Tilling breaks down the structure of the soil, reducing it from healthy loam into easily eroded dirt, making it more difficult to support plant root structures.

It Doesn't Take Brains to Farm Better

Part of the reason we're amidst a zombie soil epidemic is that we've complicated the process of farming. Driven by unsustainable practices and "quick fixes," we've left behind heritage farming practices for bigger yields. Unfortunately, our short-term gains are running into long-term setbacks. As we continue to rely on unsustainable farming, zombie soil is beginning to highlight the need for change.

A focus on regenerative farming means a return to heritage farming practices. That means backing off of the industrial practices we rely on and leaving more of the cultivation to the earth itself. Zombie soil can be rejuvenated, but it'll take time and a commitment to abandoning the practices that sapped the nutrients and structure from our soil in the first place.

Most moviegoers chastise the poor decision-making skills of actors in zombie movies. Now, as a zombie soil epidemic plagues our farmlands, we need to have the wherewithal to recognize our own opportunity for choice and make the smart one: to adopt regenerative farming and put a stop to the spread of zombie soil.



JENNIFER MAYNARD has worked in the biotech and pharmaceutical space for more than 20 years. She created Nutrition for Longevity, a farm-to-table meal delivery service that focuses on bringing nutritionally tailored meals to the masses direct from her farm.

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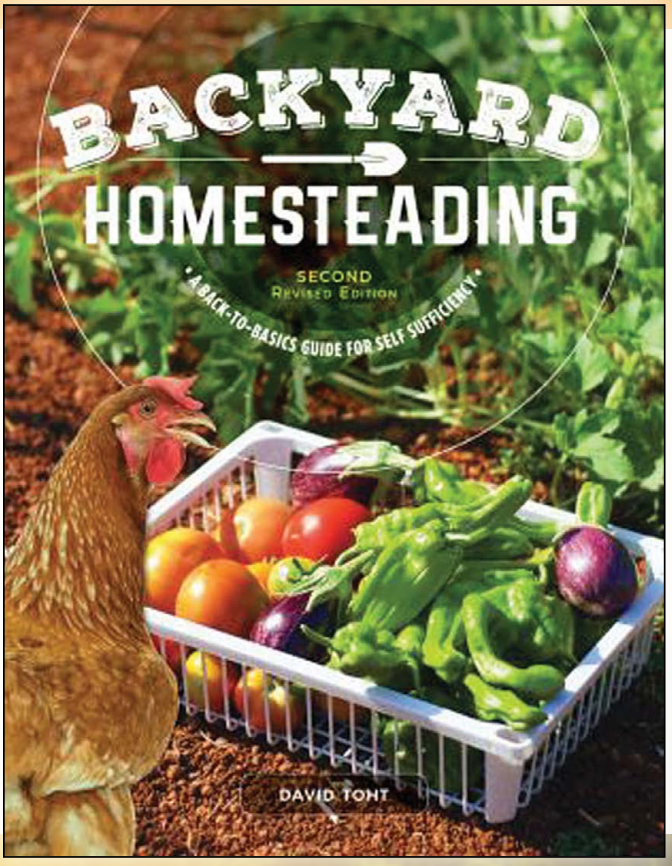

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GROWING CARNIVOROUS PLANTS

BY KENNY COOGAN

IF YOU ARE LOOKING FOR A PLANT that brings a combination of excitement and beauty, look no further than the large and diverse group of carnivorous plants. With over 700 species found on all continents except Antarctica, it's easy to find one that will grow well for you. When I visited Iceland a few years ago, I was surprised to see so many *Pinguicula vulgaris*, a vibrant blue flower with sticky leaves that act like flypaper, peppered around many volcanic roads.



Currently, I am in Florida and have had a small carnivorous plant nursery for the past four years. I have shipped many plants across the U.S. I usually have about 1,000 plants in stock which comprise of the infamous Venus flytrap, but also includes plants commonly known as bladderworts, butterworts, sundews, and three types of pitcher plants. Some people in Minnesota, for example, order tropical pitcher plants (*Nepenthes),* that need to be grown indoors. While others choose temperate species that enjoy the changing of the seasons and a dormancy period.

When I am at a plant show, carnivorous plant (CP) enthusiasts are very excited to see a carnivorous-plant-only vendor. People unfamiliar with carnivorous plants often loudly pass the tent, saying things like "I can't keep those things alive." While the truth is that they do require different growing conditions than many other plants, once you know the three secrets, you'll not only be growing them but propagating them and sharing them with friends.

"I have been captivated by carnivorous plants for 40 years now, growing up in the bush where many of these species thrived," Richard Nunn, the President of the International Carnivorous Plant Society tells me. "There's something prehistoric and macabre about carnivorous plants. They have adapted to turn the tables on the insects that often make plants their meal." Nunn adds that "Despite the exotic nature of these plants, many varieties can be grown at home if some simple steps are taken." The International Carnivorous Plant Society website has a lot of information to help beginners grow these plants.

Three Secrets of Growing Carnivorous Plants

Feeding/Fertilizers — One of the first questions I am often asked is, "What do I feed it?" If plants are kept outside, they will lure, capture, and digest prey on their own, like they have been doing for millions of years. If plants are kept indoors, you can supplementarily add a spider, fly, or other pests to the traps. Arthropods are the preferred diet for most carnivorous plants that people keep. Although some CPs are known to digest protozoa, mosquito larvae, shrew and bat urine, detritus (does that make them a cannibal?), and the occasional small mammal.

Fertilizers are generally not recommended. They grow the healthiest when they have a meal. Some plants do well with diluted foliar fertilizer. I have had success with using the seaweed-based fertilizer MaxSea diluted to ¼ strength for my *Nepenthes*. The rest of the plants fend for themselves in my backyard. If you really want to get technical, check out the International Carnivorous Plant Society's growing guide at www.carnivorousplants.org/grow/guide.

Water — Carnivorous plants are very particular in their water requirements. Many commonly cared-for CPs, including Venus flytraps, *Sarracenia*, *Pinguicula*, and terrestrial *Utricularia*, like to be sitting in a little bit of water most of the year. This is counterintuitive to many other plants — especially houseplants. Many CPs are native to areas that have saturated soil for most — if not all — of the year. You'll want to replicate these conditions if you are going to grow CPs successfully. This can be easily accomplished by placing your potted plant in a recycled deli container or a shallow saucer. The tropical pitcher plants, *Nepenthes*, grow in slightly drier areas and do best not sitting in water. Keep their potting medium moist.

Another aspect of water is quality. Carnivorous plants do not tolerate salts, minerals, or other chemicals. Rainwater, distilled water, or reverse osmosis water is necessary. Typically hose water, tap water, and well water have too many minerals which will build up in your CP soil and are detrimental. Depending on where you live, you may be lucky enough to use your tap water. Check the parts per million (ppm) with a water quality pen ($10-$15) to see if your water falls within the preferred range of 50 ppm or less. My tap water is in the 350 ppm range. Yikes!



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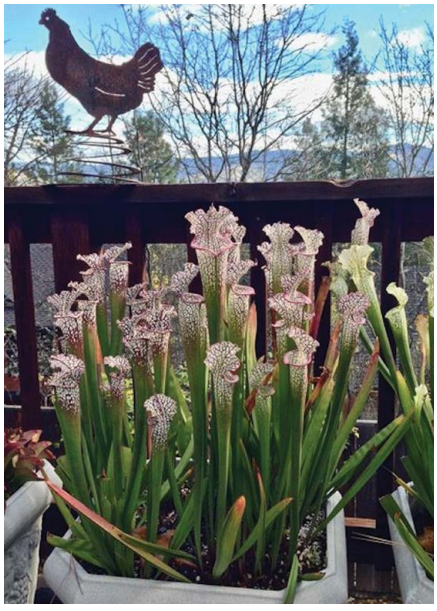
Soil — CPs have evolved to obtain their nutrients from the prey that they eat. They grow well in airy, nutrient-poor soils. Most CPs that are native to North America do well in half perlite and half peat mix. A large bale of peat can be purchased for around $15 at most gardening centers. *Nepenthes* do well in long fiber sphagnum. You can also add in perlite for *Nepenthes*, but I have not found it necessary.

VENUS FLYTRAPS are the most famous, but a little tricky to grow. They do best in tall pots that sit in ⅛ inch of water during the spring and summer. Grow them in full sun. The more sun, the more vibrant they become. One trick is keeping the soil damp. This is where the recycled deli container comes into play. You are trying to replicate a fen (type of wetland), remember? Healthy plants can handle their traps being set off by the occasional backyard tourist. However, is it best to place a meal in their trap, if you want to see them work. Traps will blacken and die after they open and close a few times so you don't want to tire the plant out. Around Thanksgiving to Valentine's Day, they will go dormant. Leaves will die back and you may be left with a rhizome in a pot. This is normal. As a native to the Carolinas, they are perennials that are equipped to handle the seasons.







TOP LEFT: "Who needs flowers with leaves like these?" John Brittnacher, Vice President of the International Carnivorous Plant Society asks. Photo courtesy of John Brittnacher.

BOTTOM LEFT: This *S. flava var. ornata* can grow into an impressive height.

TOP RIGHT: Photo courtesy of John Brittnacher.

NORTH AMERICAN PITCHER PLANTS have similar growing conditions to the Venus flytrap. Some are short and squat like *Sarracenia purpurea* and others like *S. flava* and *S. leucophylla* can reach almost four feet high! These do a great job catching wasps and moths.

"*Sarracenia* make great patio plants if your water is low in dissolved salts and you have a location with lots of sun," John Brittnacher, Vice President of the International Carnivorous Plant Society says. He adds, "For *Sarracenia*, the plants should be bog pots with drain holes in the sides so water is retained in the pot. During warm weather, they must be watered every day."

SUNDEWS, especially the cape sundew (*Drosera capensis*), are a great beginner CP. These grow year-round, do not require a dormancy period, and unlike the Venus flytrap can be grown indoors on a sunny windowsill. The sticky elongated leaves are really good at trapping fungus gnats and fruit flies.

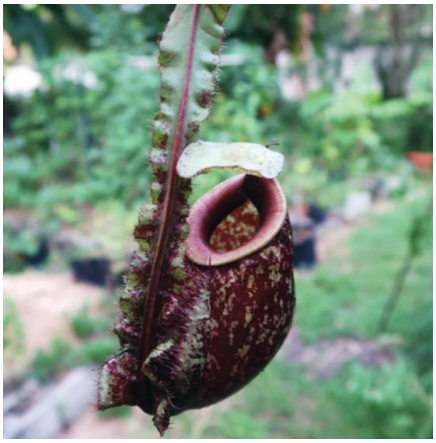
Drosera spatulata also make a great beginner carnivorous plant.

BUTTERWORTS have leaves that are covered in mucilage, which, like Sundews, are great at catching fungus gnats and fruit flies. Brittnacher says, "If you can grow African violets, you can grow Mexican *Pinguicula*. Same light requirements. Same soil. A little more water."

NEPENTHES are one of the most trendy CPs. There are two factions: the highland species and the lowlands. Highland *Nepenthes* grow in cloud forests on the tops of mountains. They like cooler temperatures ranging from 70-80 degrees F during the day and 50-60 degrees F during the night. Many of these beautiful plants do well indoors on sunny windowsills. Lowland *Nepenthes*, which are



Nepenthes ventricosa x dubia is a vigorous hybrid that can grow well in a range of temperatures.



This beautiful winged *Nepenthes* does well in hot and humid conditions.

native to the foothills of tropical mountains, need high humidity and constant temperatures in the 80's. These do great outside in Florida, in greenhouses, or spacious heated terrariums.

Nepenthes ventricosa x dubia is a vigorous hybrid that can grow well in a range of temperatures.

"These amazing plants make an interesting and attractive addition to any home or ranch garden and have the added bonus of catching those annoying mosquitos and other bugs that test our patience during those summer months," Nunn says. "Warning: growing carnivorous plants is very catchy and can become addictive! "

To learn more about the other genera and hundreds of species, check out the International Carnivorous Plant Society at www.carnivorousplants.org.

KENNY COOGAN is a food, farm, and flower national columnist. He has a master's degree in Global Sustainability and leads workshops about owning chickens, vegetable gardening, animal training, and corporate team building. His upcoming book, *Florida's Carnivorous Plants*, will be available in March 2022 and will be available at kennycoogan.com.





Turkey Tails

It's What's for Dinner

BY KENNY COOGAN

This Thanksgiving, after guests spar over which turkey piece is theirs, you may be tempted to discard the leftover turkey tail. This is the triangular part at the end, which, when roasted, turns crispy. However, many chefs argue that the "last part over the fence is the best bite of the bird." I encourage you to try it, eat it, and use it to not only help with food waste but also to send a message to Big Ag and the globalized poultry industry.

After World War II, the U.S. poultry industry was raising turkeys in excess. Producers foresaw Americans not enjoying turkey tail meat and started chopping it off prior to sale. Around the '50s and up until today, the trend of favoring white meat over dark meat prevailed. If turkey tails were offered, they probably would not have been favored. Turkey tail meat is dark and not technically the tail. It is the part that connects the showy feathers and houses the oil-preening gland. The meat industry, who were now amassing turkey tails, saw a way to make a profit on a byproduct — exportation.

Samoans traditionally eat a healthy diet of bananas, coconut, taro, and seafood. Since meat was scarce on the islands, the poultry industry started discarding their turkey tails on the Samoan Islands. By 2007, the typical Samoan was consuming 44 pounds of turkey tails a year! As you can imagine, their once-healthy lifestyle became sickening, with Samoans now

having a 93% rate of being overweight or obese.

"It's not just Samoa where those turkey butts end up; Micronesia is another destination," Liza Lee Barron says. Barron, a good friend and medical reference librarian lived in the Republic of the Marshall Islands in the early 1990s and was surprised to see so many frozen turkey butts in the store. "They would ship them out there, and they would dump them into an open freezer at the store. No packaging whatsoever! Turkey butt stew was popular."

Barron adds, "Micronesians also suffer many health problems as a result of the introduction of the Western diet like type II diabetes, obesity, and all the problems that come from being overweight."

In 2007, Samoa put a ban on the import of turkey tails to start healing their country. The ban on turkey tails influenced the locals to buy healthier food. The powerful U.S. poultry industry, of course, did not like this. Samoa had been trying to join the World Trade Organization (WTO) for years. When they applied to become members, they were told their application was blocked until they started allowing turkey tail imports! In 2011, the government of Samoa gave in and lifted the ban so they could participate in the WTO.

I think this story should be shared around the Thanksgiving table. More importantly, as poultry enthusiasts, we collectively support homesteading, sustainability movements, and improving human rights. Maybe this will get you to start raising turkeys for food or income. If butchering turkeys isn't your thing, maybe you would consider supporting farms, like Villari Foods, that sell turkey tails in the U.S. rather than exporting them to countries that don't want them.

In 2007, Samoa put a ban on the import of turkey tails to start healing their country.



Villari sells packaged turkey tails in Walmarts across the country. I'm not saying you should eat 44 pounds of it a year, but give it a try.

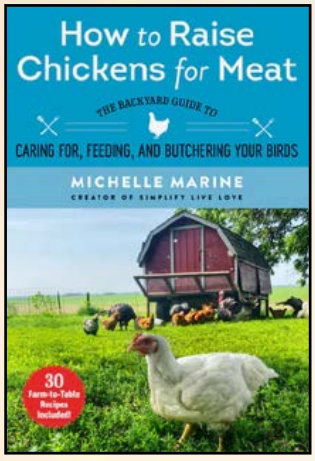




Photo courtesy of Villari Foods.

The Backyard Guide to Caring for, Feeding, & Butchering Your Birds

HOW TO RAISE CHICKENS FOR MEAT



Divided into four easy-to-navigate sections, *How to Raise Chickens for Meat* is packed with practical information. The book concludes with cooking tips and delicious tried and true farm-to-table recipes to impress even the most doubtful family member!

iamcountryside.com/shop

Here's a recipe Villari Foods recommends that's on their website:

Smoked Turkey Tails Over Rice

INGREDIENTS

6 Villari Brothers smoked turkey tails
½ green bell pepper, chopped
2 stalks celery, chopped
1 medium yellow onion, chopped
5 tablespoons unsalted butter
5 tablespoons all-purpose flour
3 cups chicken stock or chicken broth
1 teaspoon garlic powder
1 teaspoon onion powder
1 teaspoon dried thyme
2 teaspoons fresh chopped curly parsley

INSTRUCTIONS

1. Melt butter in a large Dutch oven or stockpot. Add chopped onions, peppers, and celery and cook until onions are translucent (about four to five minutes).
2. Add flour to the pot to make a roux. Cook roux until it begins to turn light brown in color. Add the broth or stock and whip until roux is dissolved into the liquid and sauce begins to thicken.
3. Preheat oven to 350 degrees F.
4. Place the smoked turkey tails in a large roasting pan.
5. Stir the garlic powder, onion powder, and thyme into the sauce, and pour it over the turkey tails.
6. Cover pot with lid or aluminum foil and let cook for 2½ hours.
7. Uncover and stir smoked turkey tails. Replace cover and let cook for another hour.
8. Remove from the oven and spoon the smoked turkey tails on a bed of white rice. Spoon the sauce over the turkey tails and rice.
9. Garnish with a sprinkle of fresh chopped parsley and serve.

While many recipes I found online involved using turkey tails to flavor beans and rice, collard greens, or stews, some recipes used the turkey tail as the main course. I encourage you to try them roasted, smoked, slow-cooked, and marinated.



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BREED PROFILE: Black Turkey

The Black Spanish Turkey Preserves Our Ancient Heritage

BY TAMSIN COOPER

Black tom.

BREED: The Black turkey is also known as Black Spanish turkey or Norfolk Black turkey. It is a heritage variety.

ORIGIN: Wild turkeys are native to North America, but modern domestic turkeys have descended from the South Mexican subspecies. They were first domesticated by Mesoamerican cultures in Central America 2000 years ago for meat, eggs, and feathers. In the early 16th century, Spanish explorers noted wild and domestic turkeys, including rare black individuals among those with the more common bronze plumage.

How Turkeys Traveled Around the World

HISTORY: In the 16th century, Spanish explorers regularly took turkeys from Mexico back to Spain. Turkeys quickly spread over Europe. The Spanish and English favored black coloring, which was also popular in France and Italy. In East Anglia, England, and particularly in the county of Norfolk, this variety was developed as a meat bird, leading to the Norfolk Black. From the 17th century onward, the Norfolk Black and other European varieties arrived at the eastern seaboard of North America with colonists. Black turkeys were bred with native wild turkeys to form the founding stock for the American variety. The American Poultry Association accepted the standard for the Black in 1874.

Although not as popular as other heritage breeds, such as Bronze, it was bred for commercial meat production up to the mid-20th century, when broad-breasted varieties were developed. By the 1960s, consumers preferred the paler carcasses of large white turkeys and traditional breeds fell out of fashion. Turkey production intensified, and today only a few genetic lines of broad-breasted whites are used for all industry production. However, these lines produce birds that cannot breed naturally, forage effectively, or survive without intensive management.

Will Turkeys Lose the Skills to Survive?

While industry turkeys are very productive in controlled conditions, we need to maintain productive varieties that retain the ability to breed naturally, raise

young, and support themselves at range. Such self-sufficient animals are vital for conserving a gene pool of traits that can adapt to future changes. In 1997, The Livestock Conservancy conducted a census of breeding stock of traditional turkeys in hatcheries and found only 1,335 head across all varieties. It began to actively promote the breeding and marketing of heritage turkeys for Thanksgiving. By 2006, the total of heritage breeding birds had increased to 10,404, with 1,163 of the Black variety recorded. However, the latter dropped to 738 in 2015.

CONSERVATION STATUS: Classified as threatened on The Livestock Conservancy's conservation priority list. The organization promotes breeding rugged, robust, and productive birds. Not only have heritage turkey varieties become endangered, but much knowledge of traditional husbandry relevant to these birds is out of print. The Livestock Conservancy has pooled traditional and modern knowledge and compiled manuals and free downloads for turkey breeders and keepers.

In the UK, the Norfolk Black turkey is at risk of extinction and is prioritized on the Watchlist of the Rare Breeds Survival Trust.

BIODIVERSITY: Although considered varieties of a single breed, heritage turkeys conserve important survival traits lost to industrial strains. To maintain genetic variation and avoid inbreeding, Black turkeys are often crossed out to other varieties, then reselected for color.

The Features of the Black Turkey

DESCRIPTION: Red head and neck (changeable to bluish-white), dark eyes, and black beak. The plumage is dense metallic black with a green luster. Poults have creamy-white head coloring and may have some white or bronze feathers, although these change as they molt. Shanks and toes may be initially black but change to pink as they mature.

SKIN COLOR: White with dark pin feathers and sometimes dark spots on skin.

POPULAR USE: Premium-quality meat, insect control.

EGG COLOR: Cream to medium brown with spotting.

EGG SIZE: 2.5–2.8 oz. (70–80 g).

PRODUCTIVITY: Poults reach market weight at 28 weeks.



Black hen in foreground followed by her poult, with Bronze hen behind.

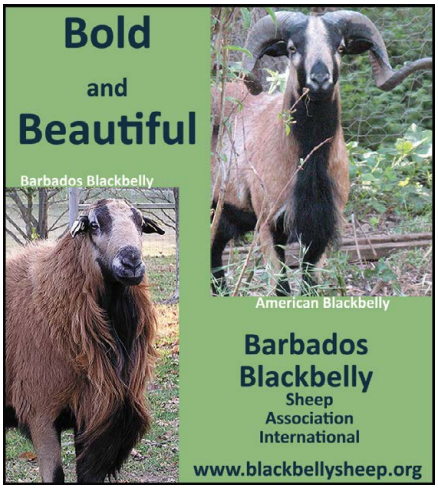


Black turkeys in woodland.

Hens mature from one year old, laying in spring and summer. They lay 40–50 eggs per year during their first two years, then fewer as they age. If brooding their own eggs, you can expect 20–25 eggs per year. Hens remain productive for five to seven years. Norfolk Black strains may lay 65 eggs per year.

WEIGHT: Mature toms weigh up to 33 lb. (15 kg), mature hens 18 lb. (8 kg), and market weight is 14–23 lb. (6–10 kg). In the UK, standard weights are 25 lb. (11 kg) for toms, 14 lb. (6.5 kg) for hens, and 11–22 lb. (5–10 kg) for market.

TEMPERAMENT: Generally calm, but varies according to breeder selection. Most can be tamed for handling.



The Vital Strengths of Heritage Turkeys

ADAPTABILITY: With a robust immune system and excellent foraging skills, heritage turkeys are adapted to pasture-based systems, and are great hunters of insects. They suit most climates, but suffer frostbite in extreme cold. Large birds are susceptible to heat stress, but cope given shade and ample water. They also appreciate rudimentary shelter from the rain and snow. Well-balanced selection produces better mothers, as larger hens can be clumsy and break eggs. Slower growth develops sound muscles and skeleton which endow hardiness and longevity, and enable birds to breed naturally. They also retain the ability to fly.

QUOTE: "The Black turkey is in need of more stewards. A renewed interest in the biological fitness, survivability, and superior flavor has captured consumer interest and created a growing market niche. This personable, attractive bird can recover to its early 20th century status with the help of a few more conservation-minded producers." The Livestock Conservancy.

SOURCES

- *The Livestock Conservancy*
- *FAO*
- *Roberts, V., 2008. British Poultry Standards. John Wiley & Sons.*
- *Speller, C.F., Kemp, B.M., Wyatt, S.D., Monroe, C., Lipe, W.D., Arndt, U.M., and Yang, D.Y., 2010. Ancient mitochondrial DNA analysis reveals complexity of indigenous North American turkey domestication. Proceedings of the National Academy of Sciences, 107(7), 2807–2812.*
- *Kamara, D., Gyenai, K.B., Geng, T., Hammade, H., and Smith, E.J., 2007. Microsatellite marker-based genetic analysis of relatedness between commercial and heritage turkeys (Meleagris gallopavo). Poultry Science, 86(1), 46–49.*
- *Lead photo credit: David Goehring/flickr CC-BY 2.0.*



TAMSIN COOPER keeps goats and chickens on her smallholding in France, where she aspires to live as sustainably as possible. She follows the latest research on farm animal behavior and has mentored on animal welfare courses.

FLOCK FILES

Fowlpox

By Lacey Hughett



Fowlpox is an old viral poultry disease found worldwide and first described in the 17th century. Several strains of the avian pox virus have been identified and named after the primary bird infected.

The cutaneous form presents signature lesions, often mistaken for fighting wounds, which appear first on the comb, wattles, and around the eyes of chickens, and on the head on turkeys. Yellow blisters scab over to form darker, wart-like growths. Additional lesions may appear on any area body part without feather covering. Scabs persist two to four weeks before softening and dropping off.

Eyes can swell shut, causing blindness for the duration of the disease. Isolate the bird and give water and food separately to prevent starvation or dehydration.

The diphtheritic form, also known as "wet pox" and "fowl diphtheria," causes internal lesions on the mucous membranes of the mouth, throat, or trachea that interfere with food and water intake and may hasten dehydration and malnutrition. Respiratory status may become compromised. Generally, birds with wet form will not survive without intensive treatment.

After biting an infected bird, mosquitos can carry the disease for up to eight weeks and infect any bird that has not been inoculated. One bird can spread the disease through the entire flock through open skin or mucous membranes in situations like picking or fighting. Owners can mechanically spread the disease as well. The virus sheds from dropping scabs during healing. Birds of any age can contract the disease at any time of year. During mosquito season, dump standing water, add mosquito-repellant plants to the landscaping, and report dead wild birds to local mosquito control groups.

The diphtheritic form needs a veterinarian's diagnosis, because lesions resemble many other serious poultry diseases, and different diseases require different mitigation.

No medications help, but performing basic maintenance can help birds fight the infection. If less than 20% of the flock shows symptoms, vaccinate the healthy birds to help control transmission. Several vaccinations are available over the counter. Follow administration directions on the package. Generally, chickens are vaccinated via the wing-stick method and turkeys get the vaccine brushed onto the surface skin of their thigh. Do not vaccinate birds who already show signs of the disease. Check birds a week after vaccination for swelling and scab formation at the site, which indicate successful inoculation.

In high-risk areas with a large mosquito population, vaccinate chickens and turkeys in the first few weeks of life with an attenuated (live virus) vaccine, and again in 12-16 weeks. Due to possibly mishandling the vaccine and infecting the flock, attenuated vaccines should only be administered by a veterinarian.

Once your flock has had an outbreak of fowlpox, then they are carriers for life.

What is it? A viral infection affecting mainly chickens and turkeys but can affect other avian species.

Causative Agent: Viruses in the family *Poxviridae*.

Incubation period: 4-10 days.

Disease duration: 2-4 weeks.

Morbidity: High.

Mortality: Low in cutaneous form (dry pox), higher in diphtheritic form (wet pox). If not controlled and treated appropriately, the mortality rate rises. Birds may simultaneously become infected with both types, which raises mortality.

Transmission: Primarily through mosquitos. Infected birds are highly contagious, and scab casings carry the fowlpox virus long after shedding.

Signs: Wart-like lesions on combs, wattles, eyelids, or feet, eyelid swelling, weight loss, decreased intake of food and water, and a reduction in egg production. Birds with diphtheritic form will have lesions in the throat and respiratory tract.

Diagnosis: Through a veterinarian or laboratory.

Treatment: There is no treatment; fowlpox usually resolves on its own or results in death. Vaccinations can prevent the spread of and the initial outbreak of the disease. Surviving birds will not become infected again but are carriers for life.

All information vetted for accuracy by Dr. Sherrill Davison, Poultry Specialist at University of Pennsylvania School of Veterinary Medicine.

HORSES, DONKEYS, AND MULES

THREE DIFFERENT WORLDS

BY STEPHENIE SLAHOR, PH.D.



HERE'S A SHORT COURSE in the three different worlds of three very different equines — horses, donkeys, and mules. Their various characteristics, foibles, and behaviors are interesting, and knowing more about them will give you a better ability when being around them.



HORSES

For tens of thousands of years, horses in the wild lived on open, flat plains in large herds. Threats to the herd or even an individual horse meant running or even stampeding, to escape. This defense not only gets the horses away from the threat but also influences how horses eat. Running on a full stomach would not be easy, so wild horses grazed most of their day, keeping their stomachs never empty and never over-full.

Even after centuries of domestication, horses still spook, shy, run, or panic at something that scares them. Remember that horses are farsighted, so if something appears "suddenly," a horse might react with a jump, ready to run. So, when working around horses, make your presence known by whistling, whispering, humming, singing, or talking softly to let the horses know that you are approaching or are nearby.

Suddenly poking out your hand to pat a horse can spook a horse, too, so avoid jerky movements.

There are over 350 horse breeds, but the vast majority of them act the same.



DONKEYS

Donkeys have served us as pack animals for centuries, but larger donkeys do serve as transportation for humans, too.

Donkeys look quite different from horses and mules. They have short, upright manes and no forelock between their ears. The hair around their eyes is usually lighter in color and softer in texture. Their tails are smooth-haired, with a little switch of hair on the end. Their legs are fairly straight. Their ears are long and can swivel to focus toward sounds — even sounds you don't hear, so those ears augment their vision. Interestingly, the ears play a role in body temperature, too — the ears are filled with blood vessels that radiate heat away from the donkey's body.

Donkeys need less food than horses. Domesticated horses might overeat if food is readily available. Donkeys don't usually overeat.

In the wild, donkeys occupied arid and desert lands rife with loose sand, uneven terrain, rocks, hills, sharp cactus and plants, and scarce water. The shortage of water kept donkeys traveling in small groups, not large herds as horses do. Donkeys also learned that desert terrain could produce injury if they stampeded away from danger as horses do. Donkeys are more controlled in their reactions to danger. They stop and ponder which of their three reactions is best — to flee, attack, or stay put. Female donkeys tend to protect one another and their young by forming a circle around the young or vulnerable and then kicking out at a threat. Mature, intact male donkeys can actually be aggressive. In the wild, they would be ousted from the group because of potential harm to the foals.

Donkeys adapt well to heat and can host a normal body temperature between 96.8 and 104 degrees F, depending on the time of day and the air temperature. Donkeys don't like cold weather and can be hypothermic if their body temperature goes below 95 degrees F.

As with horses, make soft noise or talk when approaching a donkey, and be gentle with handling or leading a donkey. Keep your hand close to the halter when holding the lead rope rather than tugging a long length of lead rope. That tugging may put your donkey into a full stop!

There are over 160 donkey breeds, most of them quite tolerant and gentle when trained.

MULES

Mules are the original 4x4 hybrid, well known for being intelligent and sure-footed.

The mule is the foal of a male donkey and a female horse. Mules probably originated way back in time when horse herds and donkey herds might have encountered each other — and Mother Nature did the rest. (If a male horse bred with a female donkey, the resulting hybrid would be a hinny, an equine with many of the characteristics of mules, but generally smaller in size because of the maternal donkey genes and the womb size of the mother donkey, which affect the



baby's growth during gestation. A hinny has a head more like a horse than a donkey, ears like a horse, and a mane and long tail like a horse. But a hinny is less strong and vigorous than a horse or mule.)

The horse has 64 chromosomes, the donkey has 62, and the hybrid mule or hinny has 63 chromosomes. Mules and hinnies cannot reproduce because their genes do not originate from the same species. Reproduction requires an even number of chromosomes.

Mules vary widely in color and weight, depending on their parents. There are mini-mules weighing around 50 pounds, and mammoth mules weighing well over 1,500 pounds. It all depends on the size and weight of the parents.

Anatomically unique, a mule has a head thicker and wider than a horse, legs straighter than a horse, hooves smaller and narrower, ears long like a donkey, and a tail and mane a little less full than a horse's. The structure of the larynx and pharynx of donkeys and mules is somewhat different and narrower than those of horses. That difference is what creates that distinctive "hee-haw."

Mules and hinnies have greater endurance than horses and are more resistant to disease. They usually live longer than typical horses.

Interestingly, if a hinny is released into a group of horses and donkeys, it will likely socialize with the donkeys, being raised by a donkey mother. Mules are more likely to choose horses for company because of being raised by a mare.

After their workday, mules and donkeys love to roll in the dirt. Mules recover from work faster than horses and are ready to go the next day. Horses might not be so eager.

Although mules live about seven to 10 years longer than horses, they are like donkeys in that they mature later. Most mules are not used for long days of work or trail riding until they are at least six years old.

Sure-footedness is the hallmark of mules, somewhat due to body strength, but more accredited to the fact that a mule's eyes are farther apart than a horse's eyes, giving the mule the ability to see all four of its feet at the same time. A horse can see only its front feet. Being able to see and figure out where to put its feet is what gives a mule sure-footedness. If you watch a mule walk and the terrain is fairly rock-free, you'll see that the front hoof impacts the ground and that the back hoof on the same side will land right in that same impact point — something horses don't do.

Mules have a narrower rib cage than horses so most riders find a mule more comfortable for riding. That's why mules are often used for outdoor adventures such as backcountry camping, hunting, and fishing trips. For over 100 years, mules have been used on the Grand Canyon's trails by prospectors, miners, and tourists!

Mule hooves are smaller than a horse's hooves, but harder and more durable, and they rarely crack. Not all mules are shod, but, on snow or ice, they may have shoes with nubs that grip.

Mules are agile! They can strike with a hoof, even if someone is holding up a different hoof — something to remember when cleaning a hoof or shoe. Mules can stand on two legs — one front foot and one back foot on the opposite side, and they can sit like a dog, and jump from a flat-footed start. Yes, indeed, they are agile!

Alas, some people think of mules and donkeys as "stubborn," but they are definitely not. Mules could flee, but that donkey side of the family adds in the other two survival modes — attack or stand your ground. Donkeys and mules ponder their course of action and, when they stop and refuse to move, they are using the stop as a defense against the perceived challenge or fright. It may look like stubbornness, but the animal is assessing the situation. So, if your mule or donkey balks, resist the urge of yanking on the lead rope if you're leading the animal, or repeatedly kicking or spurring if you are astride. Your equine is figuring out something, but probably will not be forced into action by you. You'll have to wait.

Mules are more intelligent and perceptive than horses, and they learn faster. If they are overloaded, they might lie down until the load is lightened. Mules tend to avoid bad places on a trail. They have a good sense of direction, even in the dark. Interestingly, most mules don't get barn sour so they don't usually hurry "back to start" when being worked or on a trail.

Mules can travel longer distances than horses, perspiring less, and needing less water than horses would. There must be at least a two-degree increase in a mule's body temperature before it perspires, but their hair can absorb the perspiration and put it back into the skin.

And now you have some extra knowledge to add to your collection of equine information!

STEPHENIE SLAHOR'S farm and ranch background includes cattle, horses, mules, donkeys, dogs, cats, sheep, goats, rabbits, birds, chickens, geese, turkeys, and tortoises — but not necessarily all at the same time! She would be one of the first to agree that, indeed, "Variety is the spice of life!" Her degrees are a Ph.D. and a J.D., which, she says, "cost a fortune in time and money, but well worth it!"

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BREED INTRODUCTION

BLUEFACED LEICESTER

BY JACQUELINE HARP



IN TODAY'S WORLD, the term "BFF" is a texting shortcut that stands for Best Friends Forever. In the world of sheep, however, "BFL" is the common nickname for the Bluefaced Leicester, and it might as well be interpreted as "Best Flock for Life," because of the wonderful characteristics of this breed of sheep. Unlike a texting shortcut, these sheep are not a hands-off venture, as they do require attention and care. The BFL rewards their shepherds with wonderful flock outputs and affectionate "sheepie greetings" and snuggles in the field. The returns for even a small flock more than justify the mindful management required for the BFL. Let's learn more about this gentle giant of a dual-purpose breed that provides substantial, tasty lamb and gorgeous, much-sought-after hand spinning fleece.

By way of a little history, the BFL is a longwool British sheep breed and a recent transplant to America through the efforts of dedicated shepherds during the 1980s. BFL ewes make great mothers that are heavy milkers and prolific lambers, often birthing twins and triplets with little assistance. The rams are widely used in the United Kingdom in a cross-breeding system to produce an ewe called a mule, and that role continues on in North America. A mule exhibits the fine fleece, exceptional mothering ability, and large, meaty body of a BFL with the added hardiness of another sheep breed, typically a local hill breed such as a Scottish Blackface. A mule will then be bred to a meat breed ram and those lambs will be fattened on pasture and sold to the lamb market. A BFL ram can be crossed with a variety of other sheep breeds for rigorous cross-bred lambs. Gotland, Shetland, Finn, and Cheviot are just a few of the breeds that are gaining popularity in America for crossing with the BFL, for both hand spinning and market lamb flocks.

The BFL is considered a large sheep breed. A mature BFL ewe can weigh 150 to 200 pounds, while a mature BFL ram can weigh 200 to 300 pounds. Their body type is long, wide, and well-muscled, making for good-sized cuts of mild lamb and mutton. They have large bright eyes, long and slender upright ears, broad muzzle, good mouths even in older sheep, and very prominent Roman noses. As their name implies, they exhibit deeply pigmented blue skin, especially on their faces. Both sexes are naturally polled (hornless), with fleece-free legs, under-bellies, and faces.

BFLs are not the typical "homesteading" sheep like Shetland, Icelandic, or Black Welsh Mountain. These breeds are substantially smaller than the BFL and are known for ruggedness and ability to survive on poor pastures and other less-than-ideal situations. In stark contrast, the BFL is a large sheep and needs high-quality, well-drained pastures.

Additionally, the BFL has a curly, single-coated fleece, which is very open and flowing; this can lead to sunburn.

Thus, adequate shelter must be available at all times.

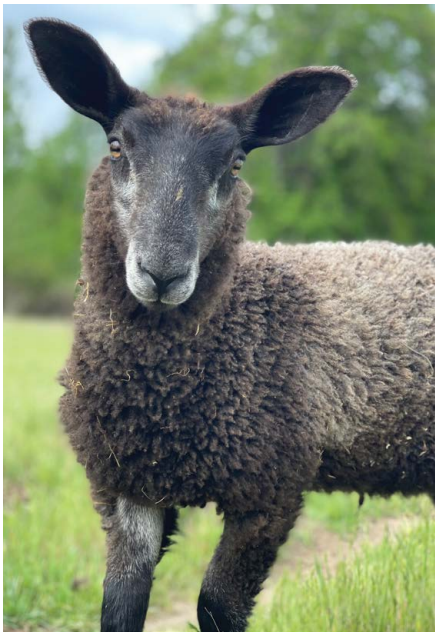
The fleece of the BFL is beloved by hand spinners due to its beautiful locks, soft handle, incredible luster, ease of spinning, and ability to take dye well. While creamy white fleeces are the norm, there are also black and other natural colors available. BFL locks tend to grow to a length of six











inches. A shepherd can choose to either shear once a year to harvest six-inch locks, or shear twice a year for three-inch locks; the shearing decision depends on several factors, such as market demands, weather, and your own fiber needs. The longer locks require more mindful fleece management, and some people are willing to pay a premium for the longer locks.

At either length, the locks are "purled" meaning that the locks naturally curl into individual ringlets — a very popular feature for hand spinners. The micron count is between 24-28 microns, which translates to very soft fibers. Fleece can be processed at home or at a mill. Fleece weight at shearing is about two to four pounds, and 75% of that harvest is preserved after processing, which is a very high percentage of usable fleece.

Despite its large size, the BFL is also known for the sweet personalities of both ewes and rams. The rams are easy to handle, and the ewes can be especially adorable as they may demand a scratch on the chin or a treat. They have a regal gait and a tight flocking instinct. Some members of a flock can be highly food motivated and can be trained to come when called. They are relatively easy to halter train and then can be placed in a livestock stand for hoof trimming, shearing, and other routine veterinary maintenance.

In conclusion, as a potential candidate for a homesteading flock, the size of the BFL and extra care required can seem intimidating at first. Yet, the gentle nature and high productivity of the BFL is what makes it such a worthy contender, especially for those beginning their shepherding journey. The cross-breeding capacity, mothering ability, mild-tasting lamb, beautiful fleece, and calm disposition are what mark the BFL as a shepherd's BFF — Best Friends Forever.

For more information regarding the Blueface Leicester sheep breed, please visit the Bluefaced Leicester Union at: bflsheep.com/about-blu/

JACQUELINE HARP is a fiber artist and certified Master Sorter of Wool Fibers through the State University of New York (Cobleskill) Sorter-Grader-Classer (SGC) Program. Instagram handle: @foreverfiberarts



GOATS of the DAM

BY ANITA B. STONE

MANY THINGS DEFY GRAVITY, including man and beast, but one of the most exciting and unusual is the Alpine Ibex, a mountain goat with split hooves and rubber-like soles that act like suction cups. From May to December, the Alpine Ibex spends considerable time overcoming gravity to obtain major nutrients missing from its winter-to-spring diet. Like many herbivores, the Ibex lacks salt and other essential minerals which they cannot get from grass and winter forage. Although some Ibex herds live in protected areas, they, along with those living in less-shielded circumstances, must seek out natural salt and trace mineral sources in their environment to provide needed minerals such as calcium, phosphorus, and iron.

Living high in the European Alps, Alpine Ibex have discovered a source of minerals in the stones and cement of a retaining wall of a dam at Lake Cingino in Italy. These goats display incredible skill, making it possible for them to cling to a near-vertical rock face to reach salt-encrusted stones. Their needs are so overwhelming that these daredevils climb a 160-degree-tall dam wall to reach the stones, cement, and lichens on the dam's face, which are loaded with mineral salts. The goats are instinctually aware of the extent to which they must strive to maintain their health and the herd's survival. Without the salts and minerals found in the rock, they know their bodies will begin to act negatively. Their bones will not grow, and their nervous systems, muscles, and reproductive processes won't function properly. Their desire and actions show awareness for their well-being and health. It's as though they know the dam wall provides unconventional salt for them, and they must seek out their own minerals. Alpine Ibex inhabit the Alps' highest peaks, and lucky tourists can see them struggling up the dam, balancing precariously on the wall in logic-straining postures.

Along with a hard shard outer hoof edge that uses the rock's small uneven surface, they also benefit from advanced balance believed to result from their unusually large ears. Their hooves are composed of two toes that operate independently. The kids follow the female onto the rock face, slipping and sliding to keep up with her. This cliff-climbing ability has the secondary benefit of avoiding any predators lurking below. Researchers and scientists believe that Alpine Ibex are attracted to ettringite. The mineral is a type of salt used in making concrete in the dam wall. The mineral is partially soluble in water, making its various elemental components available to the Ibex, as does the natural thermal and chemical stress occurring in the concrete. These components include some minerals desired by the goats. Ettringite, named for the European area where it was discovered, also occurs naturally in laminated sedimentary rock found at high

altitudes. Goats can also obtain essential minerals from this.

Alpine Ibex are not the only goats that require salt and essential minerals. Farm goats require a sufficient intake for their health and survival. Farm goats eat a lot of natural forage. However, sometimes the minerals they require are not always available in forage. Some farm goats are given a typical salt lick, but this is inadvisable because the goats may break their teeth or harm their soft tongues while trying to use a lick. Aside from loose minerals, which may be purchased, there are several important things to keep in mind when supplying farm goats with supplemental minerals. One important fact is to know that one size doesn't fit all. Mineral supplements are formulated for specific animals. Giving minerals and salts, salts made for different livestock animals, can create serious health issues with the goat herd. A mineral supplement for sheep, for instance, will harm goats due to the differences in the animal's need for copper. Goats require a great deal more copper than sheep and will become unhealthy or worse if deprived of an adequate amount of this or other specific minerals.

Since needed minerals are consumed naturally in forage, a related issue to keep in mind is that forage in a different part of the country and during different seasons of the year, may differ widely in mineral content. These changes will dictate the mineral composition of the supplement for the goats.

All supplements should contain iodine. Make sure this mineral is stated on a bag or tag when purchased. Additionally, for healthy goats, minerals needed are selenium, zinc, copper, calcium, phosphorus, iron, manganese, and sodium.

In comparison to Alpine Ibex, who roam in a free-range environment, farm goats don't have the luxury to search for various edible plants, nor do they climb rock-faced dams. Supplemental minerals must be purchased and fed to farm goats. If a farm goat demonstrates a salt and mineral deficiency, their bodies will exhibit reduced growth as well as provide reduced milk production.

ANITA B. STONE is an eco-friendly journalist who nourishes her traditional habit of nature and horticulture. Her love of the land and passion for teaching at the local community college and at senior retirement centers fills her time. She is always searching for new methods of improving the environment, growing food to benefit people, domestic animals, and wildlife. She is an author and Master Gardener in North Carolina, teaching others how to farm sensibly, making life easier and fulfilling, and admits she will always stay young-at-heart, just like her grandchildren.





Free-Ranging with Hardy Pig Breeds

Heritage Breeds Thrive on Outdoor Range

BY TAMSIN COOPER

FREE-RANGING ALLOWS PIGS TO SATISFY their curious natures and engage in fulfilling activities. They can improve land fertility and diversity, assist farmers in their work, and provide tasty and nutritious food. These benefits require good management of well-adapted breeds that can thrive outdoors with the minimum of intervention.

Choosing the Right Breed

Before meat production was industrialized, pigs were hardy and adaptable foragers. Selection for larger, leaner, more prolific, and faster growing lines has reduced hogs' natural ability to balance their diet and care for their young. Although all pigs retain the drive to perform natural behaviors, old breeds can implement them more effectively and remain self-sufficient to a much greater degree. With less emphasis on production performance, heritage breeds have been able to retain the hardy traits required for outdoor living and the flexibility to deal with changing conditions.

Heritage breeds are slower growing and produce fewer piglets per litter (four to 12). But this has its advantages. Sows are in a better position to provide and care for their whole litter, so piglets grow stronger and healthier. Their meat also acquires better flavor and texture through the long growth period.

Old breeds include some larger types, such as Hereford, Red Wattle, Mulefoot, Duroc, Berkshire, Gloucestershire Old Spots, Hampshire, Saddleback, and Large Black. Smaller breeds include Guinea Hog and Kunekune. The hardiest types, such as Ossabaw Island, Mulefoot, Guinea Hog, Choctaw, Tamworth, and Mangalitsa, are well able to provide for themselves on large ranges with minimum supervision. Think about the conditions your pigs will need to cope with and whether they are suited to those environments. Each breed has its own special adaptations: hairy coats shield them from cold and rain; hair and pigmented skin protect against sunburn; strong, sturdy legs allow foraging over rough terrain; lop ears protect eyes when rooting.

Native breeds, such as Guinea Hog and Ossabaw Island in the Southeast and Choctaw, South Central, excel at survival in their homelands. Red Wattle hogs cope well with a wide range of climates, including the heat of Texas. The Mulefoot is ideal in the Midwest

and Mississippi, where its solid hoof is well adapted to damp conditions. Hereford work well in the upper Midwest and Great Plains states. All these breeds share the essential qualities of being good foragers and excellent mothers. Most are docile, although protective mothers can be aggressive. Some Choctaw and Ossabaw Island hogs have a more feral nature, needing experienced handlers.

Can Pigs Feed Themselves?

Pigs are foraging omnivores with a highly flexible diet. Roughly 10% of their natural diet would be soil bugs, worms, and small vertebrates, as they need 10 essential amino acids. Fast growing piglets and weaners and lactating sows have higher protein needs. Unless they are very hardy old breeds with plenty of land, they will need supplemental feed. The rest of pigs' diet is plant matter, including roots, young shoots, berries, green grass, leaves, and bark. Their hind-gut microflora enable them to extract protein and energy from these fibrous feeds. Inevitably, pigs have a love of sweet and starchy foods, which serves them well at range where they require higher energy intake. Traditionally, they favor acorn and beechnut masts, grain, and (in Hawaii) fern-tree trunks. These days, we might need to supplement fast-growing and prolific breeds with grain or commercial feed. Whey, pumpkins, and excess vegetables and milk also help to satisfy protein and energy needs. Conversely, small lard breeds like American Guinea Hogs and Kunekunes are prone to obesity and are better kept on a high-fiber forage diet.

Does Foraging Nurture or Destroy the Land?

For pigs to be self-sufficient and non-destructive, they need plenty of land. All breeds dig up soil and root around for grubs and roots, even those famed for being gentler on pasture, such as Kunekune. On the one hand, they are useful for preparing beds: they plow up turf, turn up stones, eat nettles, weeds, and roots; they loosen and aerate the soil and you can guide them to areas to weed and decompact by scattering seed. They can be trained to seek out slugs and snails. They can work stony ground unsuitable for a machine. On the other hand, they do not till the soil as finely as you would wish, even compacting soil where heavy sows trample, lie, and wallow.

You would not want them to use the same pastures



as herbivores, because they would destroy turf, making the ground more uneven, and delaying recovery of vegetation. So where should they free range? Woodlots and marginal lands are ideal, as are plots that will be converted to vegetable beds the following year, crop beds after harvest, and orchards. The secret is to rotate frequently before land and trees are stripped bare. If pigs denude the land, it will take a long time to recover, suffering erosion and water-loss. Woodland takes even longer than pasture. You will need to monitor how quickly pigs are getting through the vegetation and move them on before 70% is damaged. The land will need at least 30 days to recover, but it is best not to return pigs for a year, to avoid reinfection by parasites. Managed carefully, pigs can actually help to restore biodiversity by clearing predominant weeds and scrub and opening soil for new species to colonize. But care must be taken not to overstock the land, allowing no more than one to five pigs per acre, depending on available sustainable forage.

Another useful job for pigs is clearing up windfalls and leftover crops after harvest, preventing the spread of mold and disease as well as supplementing their diet. Their manure can be used as fertilizer after six months in the ground or when composted, perfect timing for a clean-up visit to the vegetable garden in fall.

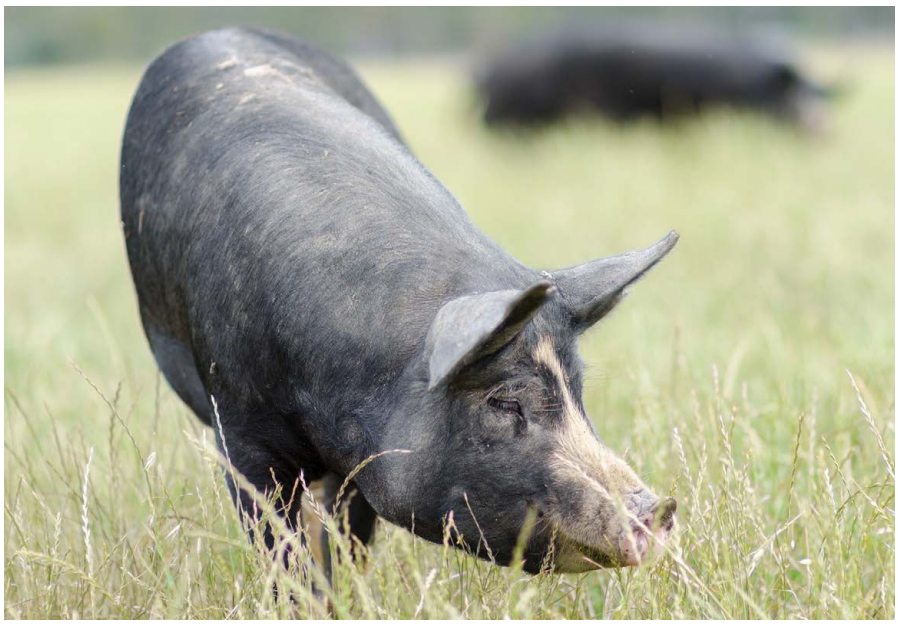
Essential Fencing, Shelter, and Water

Initial outlay in sturdy fencing is essential. Pigs love to rub against posts and trees and their weight can easily break fencing. Woven wire on sturdy wooden posts works well with a nose-level hot wire and braced corner posts. Once you've trained piglets to avoid hot wire, you can use electric fencing to temporarily mark out additional foraging areas. Check regularly to ensure low wires do not short out. Shade and water are vital, as pigs easily overheat at temperatures over 73 degrees F, and pale skins are prone to sunburn. A woodland stream provides a natural solution: running water on a dirt surface allows a pig to form a wallow; through bathing, mud cools on the skin and provides a protective layer. Trees and portable wooden huts can offer shade. For best effect, place huts in areas pigs favor when resting. Providing straw bedding in winter allows hardy animals to overwinter on the land.

Natural Farrowing

Pigs are happiest in female family groups including last year's offspring. However, sows seek solitude a day or two before farrowing. She may walk some miles to find the ideal, sheltered site away from herd. She may choose to nest in thick vegetation, even if you provide her with the perfect barn. Once found, she digs a shallow and protects it with branches which she lines and overlays with grass and soft vegetation. In cold weather, she will build it thick and warm. Once complete, she starts to farrow. She remains passive during birth to avoid accidental trampling of young. So, it is important that she remains calm and undisturbed. She remains close to the nest for a couple of days, then starts to join the herd for morning feed. After a week, piglets start to join her and gradually integrate with the flock. Good mothers are protective and sensitive to the cries of their young, lessening the chance of predation or crushing. However, if you need to bring them in to avoid predators, provide a large, private area with a separate dunging zone, and sloping bars beside the nest to allow piglets to escape crushing.

Allowing pigs to express these natural behaviors and consume a varied diet provides a happier, healthier life for you and them, and can play a role in holistic land management.



SOURCES

Cornell Cooperative Extension | Špinka, M., 2009. Behaviour of Pigs. The Ethology of Domestic Animals | Pork Information Gateway | Sepp Holzer

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How to Make Fermented Garlic and Honey

BY ANN ACCETTA-SCOTT



WHEN I FIRST BEGAN FERMENTING FOODS, it was the typical beginner's recipes and fermented beverages that I started with. My counter was lined up with kraut and fermented beverages such as kombucha and water kefir. If I could ferment it, it was going to be fermented! This included fermented garlic and honey and little did I know, this would be the most favored ferment on our little homestead for years to come.

Garlic is a staple in many homes, with the general use as an ingredient for cooking. In addition to seasoning food, the cloves can be preserved at home through various methods. Take, for example, drying the cloves to make garlic powder or garlic salt. Smoked garlic is also incredible. As is pickled garlic that is achieved through the canning or fermentation process, which by the way, is incredibly delicious!

However, it wasn't until I discovered fermented honey garlic that my world changed. Is this a dramatic statement? Yes, it is, but if you're as much of a food lover as I am, you will understand why fermented garlic and honey must be available in your kitchen at all times.

Selecting the Best Garlic Variety

Growing garlic is extremely easy, and if you're new to gardening, I would highly encourage you to give it a try. The bulb can be grown in containers as well as in raised beds or sown directly into the ground. As I stated, garlic is essential around our homestead which means we often grow 150 heads of garlic a year. The tip to ensuring you have enough garlic for eating fresh, dehydrating to powder, or fermenting, is learning how to properly cure garlic bulbs.

When planning your garlic beds, consider planting an equal amount of both hardneck and softneck garlic. Hardneck garlic, because of the size of the cloves, is much easier to preserve, whereas softneck garlic is great for storing, once it has been cured. This does not mean the smaller cloves of softneck garlic cannot be used the same way, it simply means, you'll have to peel more cloves, and that is okay!



Using Fermented Honey Garlic

What can you not use fermented honey garlic for?

- Marinate meat such as pork and chicken.
- Dipping sauce for homemade breads, focaccia, and even pita bread.
- Drizzle on top of roasted vegetables.
- Add cloves to homemade pizzas and salads.
- Use along with an over-fermented kombucha to make a delicious vinaigrette.
- Consume a clove and a teaspoon of the honey daily to boost the immune system.
- Add a small amount to the chicken waterer to boost the immune systems of chicks and other young poultry.

How to Ferment Garlic and Honey

If you're new to making fermented garlic and honey, beware of a few things:

- Natural probiotics can be found in this ferment, promoting good gut health.
- Items ferment best between 68-80 degrees F.
- To allow the fermentation process to begin, add just enough honey to cover the cloves. Adding too much honey can hinder the process.
- At the end of the fermentation process, the honey transforms from its natural thick texture to a liquid, due to the moisture found within the garlic cloves.
- The fermentation process can take up to one month to complete. However, the temperature where it is stored can slow down or expedite the process.
- This ferment will supposedly last over one year, though I use it up long before then.
- Over time, the garlic will become softer in texture and will lose its spicy bite, taking on a sweeter flavor.

INGREDIENTS

- Fresh garlic cloves
- Raw honey

EQUIPMENT

- Wide mouth, quart size canning jar with lid, preferably a plastic lid to prevent rusting; however, a two-piece metal lid and ring will also work.
- Jar funnel
- Air bubble remover

INSTRUCTIONS

1. Peal enough garlic cloves needed to fill the jar. How many cloves will depend on the garlic variety and type.

2. Using the air bubble remover to move cloves around, add just enough honey to completely cover the garlic.

3. Next, screw the lid to finger tight. Make sure to place the jar onto a small plate. During the fermentation process, the bubbles can force the honey from the jar, causing a mess.

4. Within three to seven days, depending on the temperature of your space, small bubbles will start to form on the surface of the honey. Allow the mixture to ferment for roughly one month, gently turning the jars once a week.

Turning the jars moves the honey within the jars, mixing the honey in its natural form with any honey mixture which has begun to liquify.

The fermented garlic and honey can be consumed at any time during the fermentation process. However, to enjoy the garlic as a pickled item and consumed from the jar, allow the mixture to ferment for at least one month.

ANN ACCETTA-SCOTT homesteads on two acres in Washington State, raising poultry, goats, and rabbits. She is an educator and encourager of all who are seeking to live a more sustainable lifestyle. Ann is also the face behind the website *A Farm Girl in the Making* and author of *The Farm Girl's Guide to Preserving the Harvest*.

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Holiday Mac Pizza

BY HANNAH MCCLURE

This is the season for delicious food and the never-dying question, "What do I do with all these leftovers?" Aside from leftovers for dinner and turkey sandwiches for days, you can easily make a pizza topped with your leftovers. Maybe it's the pizza-loving side of me that suggests this. Or maybe it's having had mac and cheese pizza from the store once upon a time and never seeing pizza the same. Of course, like many things, after I fell in love with its unique flavor burst, they stopped selling it. The nerve! No worries. I'm a recipe writer and friend of food.

And so I created a delicious pizza similar to the surprisingly good store-bought mac and cheese pizza. Just in time to save the leftovers from this holiday season, I'd like to share with you a fun and delightful pizza recipe. You can adjust this to be as homemade and farm-fresh as you like, or as quick and store-bought as you need. I sure hope you love this one.

HOLIDAY MAC PIZZA

INGREDIENTS
- 1 pizza crust (store-bought or homemade)
- 1 cup mozzarella cheese, shredded
- 1 cup cheddar cheese, shredded
- 2 cups shredded cooked turkey/chicken or cubed ham
- ½ cup diced green peppers
- 4 cups macaroni and cheese, cooked and prepared as directed (homemade or from a box)

If using leftover mac and cheese, warm up a little and add ¼ cup whole milk to make it a little creamy again. Otherwise, your pizza will be incredibly dry.

For this pizza, you will want to parbake your pizza crust for 10-12 minutes at 375 degrees F. If using store-bought, follow the temperature suggestions and cut the cooking time in half.

INSTRUCTIONS
- Prepare crust on a lined cookie/baking sheet or pizza pan and parbake.
- After the crust is parbaked, allow to cool for five minutes.
- Evenly spread prepared macaroni and cheese over crust.
- Sprinkle one cup cheddar evenly over macaroni.
- Evenly distribute cooked turkey/chicken/ham and diced green pepper.
- Top with one cup mozzarella cheese.

Bake at 400 degrees F for 10 minutes or until the edge of the crust is golden brown.

Additional toppings that make for a great treat (depending on your family's likes) are peas, broccoli, jalapeños, banana peppers, and diced tomatoes.

If you would like to make just a cheese version (no meat or veggies), simply complete the first three steps and then add mozzarella.

I sure hope you enjoy turning leftovers into pizza night this season!

HANNAH N. MCCLURE is an old soul homemaker and mother of four from Ohio. Gardening, keeping bees, sewing, raising chickens/seasonal hogs, and baking/cooking from scratch are a few things she enjoys in her homemaking. Always learning and always chasing her littles.

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MUFFINS by the Dozen

BY DOROTHY RIEKE

HOW WOULD WE EVER GET ALONG WITHOUT MUFFINS? Muffins are so versatile. They can be adapted to tastes with different additions such as fruits, seeds, and nuts. They represent a treat for breakfast, a complement to lunch, a mid-afternoon snack, or even a healthy dessert.

Actually, muffins have been around for a long time. They originated in England during the mid-18th century. One hundred years later, muffin men traveled the streets of England at tea time selling muffins. They wore trays of English muffins on their heads and rang bells to call customers to their wares. Actually, muffins have come a long way since those times.

In fact, because of their popularity, some states in America have adopted official muffins. Minnesota has adopted the blueberry muffin as the official state muffin, Massachusetts adopted the corn muffin, and New York chose the apple muffin.

Through the years, some muffins have gained a bad reputation because they were high in calories with large amounts of fat and sugar. However, even with a few extra calories, they can easily be part of a healthy eating plan. In fact, muffins bring together highly nutritious ingredients like whole grains, eggs, wheat flour, wheat germ, carrots, and apples — all lower in calories.

My experience with muffins has been widespread because I have served them in almost all situations. They have even earned a place on my holiday tables gaining compliments and requests for recipes.

> Even with a few extra calories, muffins can easily be part of a healthy eating plan.

COFFEECAKE MUFFINS

Certain muffins have layers of spices and sugar. Coffeecake muffins are enriched with flavor with a "coffee cake" filling.

Do you like coffee cake? If you do, these muffins will be your favorites.

Heat oven to 375 degrees F

- 1 ½ cups flour
- ½ cup sugar
- 2 teaspoons baking powder
- ½ teaspoon salt
- ¼ cup shortening
- 1 egg beaten
- ½ cup milk

Spicy mixture
- ½ cup brown sugar
- ⅓ cup chopped pecans
- 2 tablespoons flour
- 1 teaspoon cinnamon
- 2 tablespoons melted butter

Sift flour, sugar, baking powder, and salt into a large bowl. Cut in shortening until mixture resembles coarse crumbs. Blend egg and milk. Add all at once to flour mixture. Stir just until moistened. Alternate layers of batter and spicy filling in greased muffin cups, placed in a muffin pan. Fill pans ⅔ full. Bake at 375 degrees F for about 20 minutes. Yield 12.

HOLIDAY PLUS MUFFINS

This recipe is one of my favorites for company, especially during the holidays. Indeed, it is one special combination of ingredients for good eating.

Heat oven to 350 degrees F

- 1 cup granulated sugar
- ⅔ cup vegetable oil
- 1 cup orange juice
- 2 eggs
- 3 cups all-purpose flour
- 1 tablespoon baking powder
- 1 teaspoon baking soda
- ½ teaspoon salt
- 1 cup drained mandarin oranges, cut into pieces
- ⅔ cup peanut butter chips

In a large bowl, beat together the sugar and oil. Stir in the orange juice and eggs.

In a small bowl, sift together the flour, baking powder, baking soda, and salt. Blend into the sugar/egg mixture just until mixed.

Stir in the pieces of mandarin oranges and the peanut butter chips.

Mix until all ingredients are moistened and combined. Spoon batter into greased or paper-lined muffin cups. You will need two muffin pans.

Bake at 350 degrees F for 15 to 20 minutes or until a toothpick inserted in a muffin comes out clean. Yield 24 muffins. Store any leftover muffins in the refrigerator.

SUNNY DAY MUFFINS

This recipe is a long-time favorite. It is filled with fruit and nuts which give it a special flavor. Try it, you will like it.

Heat oven to 350 degrees F

- 1 ⅔ cups whole wheat flour
- ¾ cup brown sugar
- 1 teaspoon baking soda
- ½ teaspoon baking powder
- 1 teaspoon cinnamon
- ½ teaspoon salt
- 1 egg, beaten
- ⅓ cup vegetable oil
- ½ cup sunflower seeds
- ⅔ cup raisins
- 1 cup grated, peeled carrots. (about two medium-sized)
- ½ cup water

In a large bowl, mix the flour, brown sugar, baking soda, baking powder, cinnamon, and salt. Add the beaten egg and oil to the dry ingredients. Mixing together, add the sunflower seeds, raisins, carrots, and water to form a thick dough. Do not over-mix batter.

Fill greased or paper-lined muffin cups ⅔ full. Bake at 350 degrees F for 20-25 minutes or until browned. Cranraisins are also a nice addition to this recipe. Yield 12 muffins.

TASTE-TEMPTING CHERRY MUFFINS

These muffins are flavorful and moist with cherry preserves. With coffee, they are superb, with meals they are equally superb. This dough will keep up to six weeks in the refrigerator.

Heat oven to 375 degrees F

- 3 cups all-purpose flour
- 1 teaspoon salt
- 1 teaspoon baking soda
- ½ teaspoon cinnamon
- ½ cup chopped pecan meats

1 cup cooking margarine
1 cup granulated sugar
3 egg yolks
3 beaten egg whites (reserve these until later)
1 cup milk
1 cup cherry preserves

Sift together flour, salt, baking soda and cinnamon. Add the pecan pieces to the flour mixture. Place the margarine, sugar, and egg yolks in a large bowl. Mix two minutes with an electric mixer or beat well by hand (200 strokes). In another medium-size bowl, beat the egg whites until stiff. Set the egg whites aside. Mix the milk and cherry preserves together. Slowly add the dry ingredients and milk/preserves mixture alternately to the margarine, egg yolks, and sugar mixture beginning and ending with the dry ingredients. Now, carefully fold the stiffly beaten egg whites into the mixture.

Use about ⅓ cup of dough for each muffin. Spoon the dough into greased muffin pans or use paper liners. Bake at 375 degrees F for 12 to 15 minutes. Yield 36 small muffins.

Do not overbake any type of muffins as they become tough.

Tips

•Always work with shortening and other ingredients at room temperature.

•Do not overstir the batter. Stir the mixture to fold in the ingredients so they will be combined. The dough may be lumpy, but it will be fine when baked.

•Use small muffin pans if you want a small bite or two. Bake for shorter times at 325 degrees.

•Muffins freeze well. Wrap in plastic, then in foil and freeze.

•Fruit breads can be baked as muffins in muffin pans.

•Use small measuring cups to pour dough into liners or greased cups.



PECAN PIE MINI MUFFINS

These tiny bits of delight are not for the diet-conscious person. However, for a treat once in a great while, they are perfect. Try serving them for dessert with a small dip of whipped topping or ice cream!

Heat oven to 350 degrees F

- 1 cup brown sugar
- ½ cup flour
- 1 cup chopped pecans
- ⅔ cup butter
- 2 eggs, beaten

Combine brown sugar, flour, and pecans. Set aside. Combine butter and eggs mixing until creamy. Stir into flour mixture just until moistened. Fill greased and floured or paper-lined mini-muffin cups ⅔ full. Bake at 350 degrees F for 20 minutes until set. Remove immediately from the pan to cool on wire racks. Yield 12 mini muffins.

APPLE-ORANGE MUFFINS

Health-conscious Americans have switched from doughnuts to muffins. These flavorful muffins with with oat bran and only one tablespoon of oil will make them glad they did.

Heat oven to 350 degrees F

- ½ cup shredded, peeled apple
- 2 beaten egg whites
- 1 tablespoon cooking oil
- ½ cup apple juice
- 1 teaspoon orange extract
- 1 cup all-purpose flour
- ½ cup oat bran
- 2 teaspoons baking powder
- ½ teaspoon baking soda
- ½ cup brown sugar
- ¼ cup chopped English walnuts

In a medium bowl, mix the beaten egg whites, oil, apple juice, extract, and shredded apples together. In another bowl, sift the dry ingredients together. Add the walnuts to the dry ingredients. Add the liquid ingredients to the dry ingredients and stir just until blended.

Use a ⅓ measuring cup to dip the batter into the paper-lined cups or greased cups in a muffin baking pan. Bake at 350 degrees F for about 20 minutes or until or until a toothpick inserted in a muffin comes out clean. Yield 12 muffins.

If you plan to keep these for several days, store them in the freezer.

EVERYDAY BANANA MUFFINS

Bananas are known as healthful fruit, so, as ingredients in muffins, they add nutrition. This is a good banana muffin recipe. I have baked these muffins numerous times with no failures.

Heat oven to 350 degrees F

- 1 ½cups all-purpose flour
- 1 teaspoon baking powder
- 1 teaspoon baking soda
- ½ teaspoon salt
- 3 large bananas, mashed
- ½ cup granulated sugar
- 1 egg, lightly beaten
- ⅓ cup vegetable oil

Sift together flour, baking powder, baking soda, and salt. Place the mashed bananas in another large bowl. To the bananas, add the granulated sugar, the lightly beaten egg, and the vegetable oil.

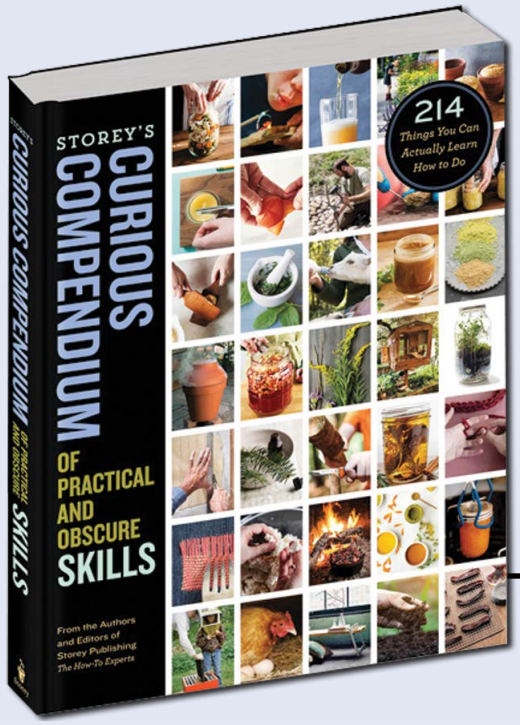
Stir the dry ingredients into the sugar, egg, and oil mixture. Stir only until mixed.

Use a ⅓ measuring cup to pour dough into greased muffin or paper-lined muffin cups. Bake at 350 degrees F for 15 minutes or or until a toothpick inserted in a muffin comes out clean. Yield 12 muffins. At times, I have added a teaspoon of orange flavoring; a good addition.

214 Things You Can Actually Learn To Do

Storey's Curious Compendium of Practical & Obscure Skills

Have you ever wondered how to capture a swarm of bees?
Predict the weather by the clouds?
And just how do you darn a pair of socks, anyway?



Anyone curious about the myriad ways people have taught themselves to make, grow, and build things will find everything they've ever wondered about in this colorful, inviting volume. Whether you plan to "do it yourself" or just love reading about how things are done, this rich compendium will educate, fascinate, spark conversation, and inspire new hobbies and experiences. ***Hardcover, 344 pages***

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FLOUR POWER

BY RITA HEIKENFELD



WHEN I WAS GROWING UP, Mom had an aluminum canister of flour in her tiny suburban kitchen. The fact that she allowed it to take up precious counter space explained its importance. Flour was used frequently in the food Mom fixed for our large family.

The kind of flour in that canister was all-purpose bleached wheat flour, though I don't remember Mom calling it that. She just called it "flour."

Gosh, how the culinary world has changed since I was a kid growing up in the 50s. Today, all-purpose or AP as it's sometimes called is still the most popular wheat flour. But trailing right behind are whole wheat, bread, cake, pastry, and self-rising.

So here's a primer of sorts about wheat flours, from all-purpose to pastry, along with tips on how to use each.

Before I talk about the kinds of flour, let's start with the wheat grain itself.

INSIDE A KERNEL OF WHEAT

If you were to peel a kernel/grain of wheat, you'd see three parts: bran, endosperm, and germ.

Bran. The outside shell that is high in fiber and B vitamins.

Endosperm. This is what's inside the bran, and that makes up most of the kernel. It contains mostly starch.

Germ. Inside the endosperm is the germ, the "heart" of the wheat kernel. Vitamins, minerals, and healthy fats are all wrapped up in this tiny center of the kernel.

Depending upon how many of these components wind up in the flour is what determines the varieties of flour and the protein and gluten content of each.

Gluten is also what makes some dough "spring back" when you try to roll it out. Let it relax for a bit and you're good to go.

Unless labeled "whole wheat," all flour is white flour milled from the starchy endosperm part of the wheat kernel.

BLEACHED OR UNBLEACHED: WHAT'S THE DIFFERENCE?

Technically, all flours are bleached. Bleaching is simply an aging process that allows flour to soften and achieve the white color. There's no "bleach" involved.

Bleached flour uses chemicals to achieve the goal quickly. Way back in 1906, the FDA listed bleaching agents that were safe. The list continues to be monitored for safety.

This process leads to a finer grain and extends the shelf life.

Unbleached flour uses a slower, natural aging process of exposing the flour to oxygen. That results in an off-white color and a bit coarser grain. (Read labels to see if it has been treated with other chemicals.)

Time is money and that's why unbleached flour costs more than bleached.

Is Bleached Better Than Unbleached?

Foods made with bleached flour have a softer texture, brighter color, and a little more volume than food made with unbleached flour.

Bleached flour makes nice pie crusts, quick bread, cookies, muffins, pancakes, and even some cakes.

Unbleached flour gives a good structure to baked goods like pastries, breads, cream puffs, etc.

Yes, they can be used interchangeably.

You may notice a very slight difference in volume and color, but for the most part, the outcome will usually be the same with either. It just depends upon your preference and budget.

ALL-PURPOSE FLOUR

This is the most commonly used flour, milled from a blend of high-protein hard wheat and low-protein soft wheat.

All-purpose has a fine texture. It's perfect for a home cook. From making gravy to pastries to cookies, cakes, and some breads, all-purpose is the workhorse of the flour family.

WHOLE WHEAT FLOUR

The name tells it all. Whole wheat, high-protein flour contains the entire kernel of the wheat berry — the bran, endosperm, and germ.

But its gluten-forming capacity is compromised by the bran and germ, so whole wheat flour tends to produce denser baked goods. That's why this flour is often bolstered with all-purpose or bread flour to "boost it up."

There are two whole wheat flours: red and white. Red is made from whole red wheat with a slightly higher protein content than flour made with whole white wheat.

White whole wheat is to my palate a bit more sweet and delicate and produces a lighter color in baked goods.

Tips on Whole Wheat Flour

Whole wheat flour contains the germ, which contains fat. Do the sniff test.

If it smells "off," it is probably rancid.

Store airtight for several months in a cool, dry pantry away from light.

For longer storage, it will last up to six months in the freezer.

More absorbent than all-purpose flour, whole wheat flour requires more liquid.

Whole wheat products will have a denser crumb, darker color, and stronger flavor than the same made with all-purpose.

Whole wheat flour can be used in a variety of baked goods. Try it in breads and crackers.

71 Recipes for Making & Using Probiotic-Rich Ferments



- Dairy & Plant-Based Yogurts
- Cultured Butter, Cream, & Cheese
- Healthy Soups, Drinks, & Desserts

With probiotic-rich foods increasingly recognized as essential to gut health, yogurt and kefir are gaining popularity as a source of protein and beneficial bacteria. In *Homemade Yogurt & Kefir*, cheesemaker and small-scale dairy producer Gianaclis Caldwell opens the door for fermentation enthusiasts and dairy devotees to make and use yogurt and kefir in the home kitchen. She explores the many culture choices and techniques for working with cow, goat, sheep, water buffalo, and even some plant milks.

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BREAD FLOUR

Some breads require a higher protein content than all-purpose flour. Bread flour's stronger gluten content allows the kneaded dough to achieve a stronger rise and a texture with a good chew.

Bread flour, with its high protein content, makes excellent sturdy yeast breads, pizza doughs, and rolls.

Subbing in All-Purpose for Bread Flour

For the most part, you can substitute in all-purpose flour for bread flour, in equal amounts. Your baked goods will be a bit less chewy, but still good.



CAKE FLOUR

Think delicate, fine crumbed cakes. Although all-purpose flour can be used in many cakes, cake flour, with its lower protein content, produces blue-ribbon- quality angel food and pound cakes. It's nice for extra tender, light muffins and quick breads.

Make Your Own Cake Flour

A good substitute for cake flour is to add two tablespoons of cornstarch to ⅞ cup of all-purpose flour.



Bread flour, with its high protein content, makes excellent sturdy yeast breads, pizza doughs, and rolls.



PASTRY FLOUR

Sometimes labeled "bakers flour," pastry flour has a low protein and gluten content. To me, it's a flour that's between cake and all-purpose flour.

Bakers love it for flaky, tender pie and tart doughs, and some cookies.

SELF-RISING FLOUR

Southern bakers have a strong bond with self-rising flour. It is an all-purpose flour with leavening and salt added to it. Think meltingly tender biscuits and pancakes that stack high and light.

Make your own self-rising flour:

To every cup of all-purpose flour, whisk in 1½ teaspoons baking powder and ¼ teaspoon salt.

Tip: Flour does have a shelf life.

Except for whole wheat that should be stored in the refrigerator or freezer, flour can be stored in the pantry up to six months from the time of purchase.

Read labels for expiration dates.

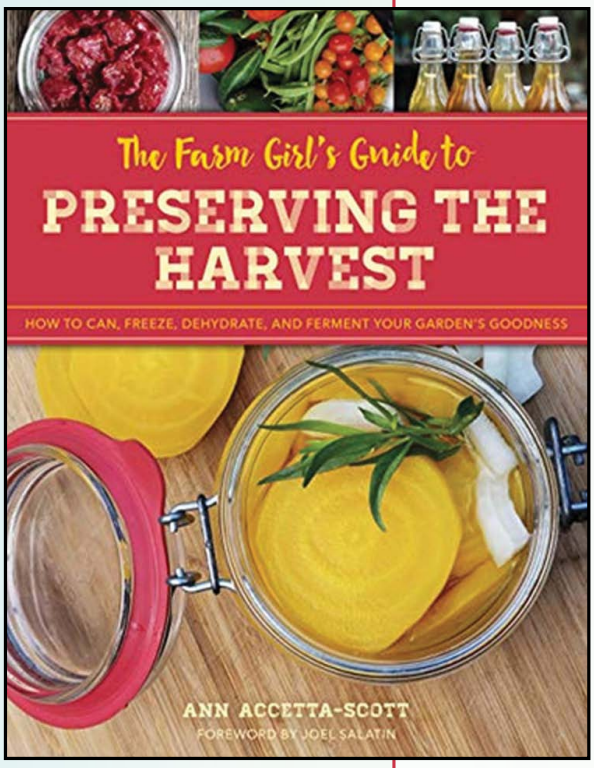
RITA HEIKENFELD comes from a family of wise women in tune with nature. She is a certified modern herbalist, culinary educator, author, and national media personality. Most important, she is a wife, mom, and grandma. Rita lives on a little patch of heaven overlooking the East Fork River in Clermont County, Ohio. She is a former adjunct professor at the University of Cincinnati, where she developed a comprehensive herbal course.

abouteating.com column: rita@communitypress.com

The Farm Girl's Guide to Preserving the Harvest

How to Can, Freeze, Dehydrate, and Ferment Your Garden's Goodness

By Ann Accetta-Scott



This guide takes home preservers through the beginning, moderate, and advanced stages of preserving. Newcomers can start with a simple jam and jelly recipe using a hot water bath canner, while others may be advanced enough to have mastered the pressure canner and are ready to move onto curing and smoking meat and fish.

With more than 30 delicious and healthy recipesand Ann's expertise and encouragement, the home preserver will build confidence in the most common methods of preserving.

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How To Make a Magnesium Sleepy Time Lotion

BY JENNY UNDERWOOD



MAGNESIUM ... I'M SURE YOU'VE HEARD OF IT. But what exactly is it and what does it do? Magnesium is a mineral that our body needs, and any low levels of magnesium or deficiency can cause a myriad of symptoms. These symptoms include muscle aches and cramps, anxiety, fragile bones, and difficulty sleeping. You might be thinking that you eat a well-balanced diet so why would you have a deficiency? Unfortunately, our soils are rather depleted of many nutrients, including magnesium. Therefore, it can be very helpful to take a supplement, eat magnesium-rich foods, or use a magnesium cream.

Some people have a harder time than others absorbing minerals and nutrients from supplements or foods, especially if they have certain health problems like leaky gut. In this case, a cream or lotion can help bypass that channel.

A few years ago, I had a lot of trouble with restless legs and cramping when I slept, so I found magnesium sleep lotion. It helped my symptoms amazingly and I used it regularly but I got to thinking ... I could make this! So, one day I did and it turned out great. It was super cheap and easy to make. I ordered everything online and can make multiple batches from what I ordered.

First of all, you will need magnesium chloride, water, and oils (I use coconut oil, cocoa butter, shea butter, and hemp oil), essential oils (I used a blend called tranquility; stick with calming, peaceful oils for sleep), jars or reusable tins, and a pan.

INGREDIENTS

- ¼ cup coconut oil
- ¼ cup cocoa butter or shea butter
- ¼ cup magnesium oil
- Essential oils

INSTRUCTIONS

Start by adding coconut oil and other hard fats to the pan and melting over low or melt setting. If you have a double boiler, you can use it or just stir often and keep the temperature on the lowest setting possible. When the oil and fats are melted, stir in magnesium oil* and mix well. Remove from the heat and add essential oils and any liquid oils that you wish to use. Place in the refrigerator or freezer until slightly firm. Using an electric mixer or stick blender, beat until the mixture is whipped. Scoop into jars and screw on the lid. At night, simply apply a dime-sized amount to each leg and your stomach to help promote a night of restful sleep.

**To make the magnesium oil, take magnesium flakes and water. You will need equal parts of each so if you have one cup of water, you will need one cup of flakes. Heat the water to boiling, then add in the flakes. Turn the water off and stir until dissolved. Remove and let cool. You can then use this in your lotion recipe or in a spray bottle.*

Magnesium can cause itching when you first apply it. In my experience, that happened for a while then quit altogether, but some people have more sensitive skin so try a small amount first.

Each of the oils you use should help nourish your skin and hold the cream at a stable texture. Coconut oil is a great base because it makes the cream spreadable. Cocoa butter is wonderful and adds hardness. Using liquid oils like hemp, extra virgin olive oil, or grapeseed oil will add moisturizing benefits, but don't add more than a few drops or your





TOP LEFT: Whipping the lotion.
TOP RIGHT: Chilled lotion before whipping.
BELOW: Melting the oils.



finished product will be too runny.

Essential oils are a favorite thing of mine and while you can stick with single oils like lavender, you can also go with soothing blends. There are many excellent places to buy essential oils. My recommendation is to read about the oils, see if testing has been done on them, try the oils, and buy the best you can afford. In my opinion, the outrageously expensive ones are not superior to the high-quality oils that have a lower price tag provided the company is stellar. Do NOT add fragrance oils or oils that say for aromatherapy only. Those are usually not pure and may be harmful if you use them on your skin. Only use an oil that you have tested (diluted) on your skin in this recipe. It would be terribly disappointing to do all that work then find you were sensitive to the essential oil you used!

Another option would be to make your magnesium oil with an herbal tea such as lavender or chamomile. This would be a gentler version and still smell wonderful. Just brew your tea extra strong, measure out the desired amount, boil, and add the flakes. Turn off the heat and stir until dissolved.

Don't forget to choose your jars or containers wisely. If using a glass jar, make sure you use a wide mouth to get the cream out easier. I often reuse heavy plastic lotion or salve jars that I originally bought. I've successfully used these over and over. They're practically indestructible, which is incredibly helpful. Store the cream in a cool but not cold place since it will change somewhat in texture according to the temperature. It tends to get softer in hotter weather and harder in cold. Also, be sure to label your container so you aren't guessing what's in it if you have several varieties of creams.

Making your own lotion is a great way to know exactly what goes in your skincare so remember to choose quality ingredients and have a wonderful time creating a magnesium sleepy time lotion!





MAKE YOUR OWN ORGANIC SKIN CLEANSERS

BY STEPHENIE SLAHOR, PH.D.

MAKING A FEW OF YOUR OWN COSMETICS will save you money and help you avoid those products that usually have a long list of unpronounceable ingredients. Get started with these easy homemade "products," but be sure you have no allergies to the ingredients, and be sure your skin is clean before applying them.

ASTRINGENTS

Mix equal parts of apple cider vinegar and water. You may add a few drops or a spray or two of your favorite fragrance, if desired. Splash on the mixture after washing or showering.

Squeeze out the juice from a medium cucumber. Mix the juice with a couple ounces of witch hazel (available at a drug store). Splash the mix on your face and neck.

MOISTURIZERS

On your next grocery shopping trip, find a simple, pure margarine — one with no artificial colors or ingredients. Use about a tablespoon of the margarine directly on your face, neck, and hands.

Combine a couple of ounces of melted raw lanolin with four ounces of almond oil or olive oil, and massage it into your skin.

Use pure castor oil, cocoa butter, coconut oil, or almond oil and rub gently into the skin. (Coconut oil can also be massaged into the scalp.)

FOR YOUR FACIAL

Separate an egg. Lightly beat the egg white and apply it to your face, leaving it on for a few minutes, then rinse clean.

Mix a raw egg, a teaspoon of honey, and a couple of tablespoons of whole, full-fat milk. Apply to the face and let the mixture harden. Rinse clean with warm water.

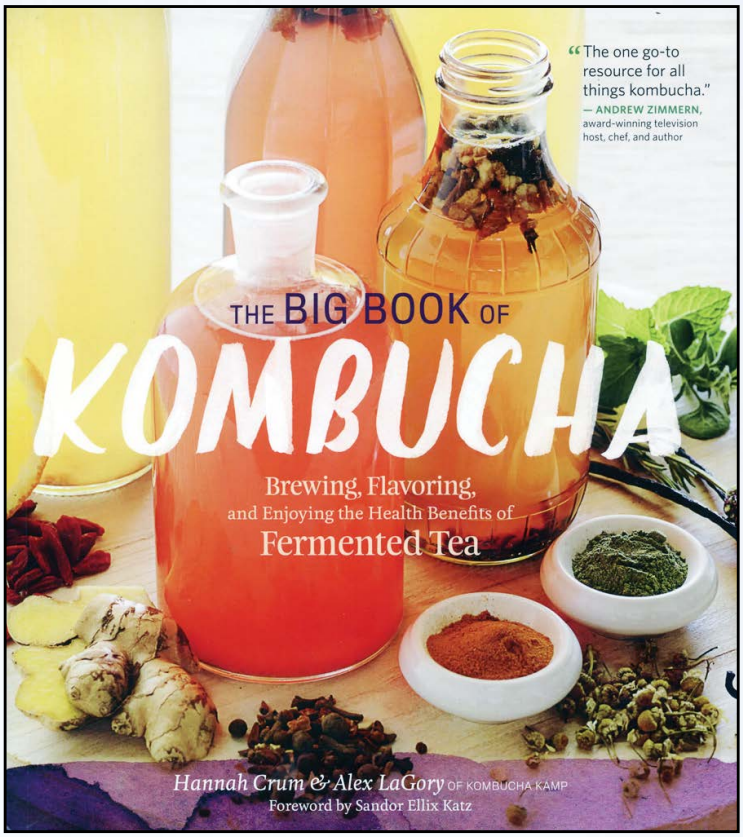
Mix a tablespoon of honey and a tablespoon of wheat germ oil and smooth it onto your skin. Let it set a few minutes, then rinse clean with warm water.

Mash a soft banana and blend in pure almond, sesame, or sunflower oil until the mixture has the consistency of a soft, smooth paste. Apply the mixture to your face. Let it set 15 minutes. Rinse clean with warm water.

The Big Book of KOMBUCHA



By Hannah Crum & Alex LaGory



Brew your own kombucha at home! With more than 400 recipes, including 268 unique flavor combinations, you can get exactly the taste you want — for a fraction of the store-bought price.

This complete guide, from the proprietors of Kombucha Kamp, shows you how to do it from start to finish, with illustrated step-by-step instructions and troubleshooting tips.

Also includes information on the many health benefits of kombucha, fascinating details of the drink's history, and recipes for delicious foods and drinks you can make with kombucha (including some irresistible cocktails!).

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Secrets of Simplicity

BY PATRICE LEWIS

DO YOU LONG TO LIVE A SIMPLER LIFE but despair because you can't afford that metaphorical cabin in the woods? Fear not; there's hope.

Simple living has long been associated with certain stereotypes (minimalism, tiny homes, rural living, etc.). But these associations imply those with large, cluttered, urban homes are incapable of living a simple life. That is incorrect. Nearly anyone can simplify their life by following a few simple (yes, simple) suggestions.

Believe it or not, simplicity can be summed up in three words. Just three words — that's it. Got a pen and paper? Here goes:

MAKE. GOOD. CHOICES.

It's that magic word, CHOICE, that characterizes simplicity. Choices. That's it. Whether you're urban or rural, rich or poor, old or young — making good choices works for nearly everyone, in nearly every circumstance.

It was Confucius who said, "Life is really simple, but we insist on making it complicated." He was onto something.

Most people are in charge of their lives and have the ability to make endless daily choices. Some of these decisions are huge, and some are minor — but all can have an impact, either immediate or cumulative. Your job is to make the right choices.

"But I have no choice … !"

I can hear you now: "How can I live simply in a worsening economy? How can I get out of debt if I can't find a job? How can I work on my marriage if my spouse is the one having an affair? How can I live simply if I'm facing a debilitating disease?"

You're right — some things are beyond your control. Stuff happens. Life is messy.

So here's what you do: Seize and simplify the things that ARE in your control, and work to make good choices within those spheres.

Not everything is fixable. You might have suffered a trauma in your past or been buffeted by economic forces in the present. You might have suffered a devastating illness that wiped out all of your assets. But nothing prevents you from making good choices about your future.

This doesn't mean everything is within our control. Bad stuff happens no matter how many good choices you've made. The birth of a disabled child. A hurricane or tornado that levels your home. A job loss. A car accident or other devastating health issue. Life happens, and making good choices doesn't make us immune from bad things.

But those who have a rock-solid foundation beneath them built on good choices are better equipped to handle bad stuff when it happens. That last sentence is important,

so I'll repeat it: Those who have a rock-solid foundation beneath them built on good choices are better equipped to handle bad stuff when it happens.

It's these good choices that help make bad things not as bad. If you've chosen a good spouse, then having a strong marriage will help you handle a disabled child or losing your home in a fire. If you've chosen to live frugally, then losing your job may not have as big an economic impact as if you choose to go deeply into debt with car payments and a hefty mortgage. In other words, by making good choices with the things you can control, it helps you better weather the things you can't control.

I know a woman confined to a wheelchair from a debilitating genetic condition. Her health will never improve, and she's not likely to live another 10 years. She didn't choose to be born this way.

What she DID choose was how to live her life within the confines of her disability. She chose to marry a hard-working man who adores her. She chose to be a good mom to her only child. She chose to smile her beautiful smile on everyone she meets, makes friends everywhere she goes, and creates a huge support group of people who love her and enjoy her company.

Despite her worsening health and physical difficulties, she has peace of mind. Her life is simple.

Stop Trying to Impress Others

How many poor decisions do we make because we're trying to impress someone? Stop worrying about what others think. It will vastly simplify your life.

We spend a lot of time obsessively worrying about the opinions of others. To some extent, this is good; it helps keep our behavior in check. But when it negatively impacts our finances or relationships, it becomes bad. Did you buy an expensive home with too large of a mortgage, even though you can't afford it? Did you get a college degree with a huge student loan debt even though there are very few professional jobs in your field? Did you marry the handsome Big Man On Campus even though he treats women badly?

How many of the major decisions in your life are based on what others might think? And who are you hurting in an effort to please someone else? How much money are you spending to keep up appearances and impress your neighbors?

If you can cultivate the ability to disregard the unimportant opinions of others — within reason, of course — then your life becomes simpler.

Find What Troubles You

Armed with your newfound understanding of simplicity, now you have some homework to do. You need to figure out what is "complexifying" your life. Whether your problems stem from finances, debt, relationships, disability, or other factors, it's time to step back and reassess.

As mentioned before, life is messy. Things happen beyond our control. We all hit speed bumps and make mistakes. But it's the people who make bad choices again and again who have the most complicated lives. It's how you handle the big and small choices, and decisions from now on that will determine how simple or complex your life will be in the future.

Your homework is to determine what is in your control and make good choices about those things. From this day forward, you can chart a new path. Don't forget to cultivate gratitude for your blessings because you have a lot more than you think.

You may never achieve the so-called "simple life" on a homestead. You may find yourself living in an urban apartment or a suburban cul-de-sac for the rest of your life. But you know what? If your marriage is strong, your children well-behaved, your work satisfying, and your soul at peace — who cares?

Remember this: Make good choices. That's it. That's the key.

I wish you the joy of a simple life.

PATRICE LEWIS is a wife, mother, homesteader, homeschooler, author, blogger, columnist, and speaker. An advocate of simple living and self-sufficiency, she has practiced and written about self-reliance and preparedness for almost 30 years. She is experienced in homestead animal husbandry and small-scale dairy production, food preservation and canning, country relocation, home-based businesses, homeschooling, personal money management, and food self-sufficiency. Follow her website http://www.patricelewis.com/ or blog http://www.rural-revolution.com/.

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O Christmas Tree, No Christmas Tree

BY MARSHALL NYCH

AS THE CALENDAR TAKES ITS FINAL FLIP, declaring December, children everywhere are anxiously counting down the days until Christmas. From family traditions, the kids enjoy year after year to the sights, smells, and sounds of the season, so much joy is packed into a relatively small, frosted window — one particular facet of the Advent that has become an adventure — the Christmas tree.

Selecting the Tree

Our family of four bundled up to explore the family farm for the "just right" tree. Once the children have accepted the fact that Dad is not willing to use an oak, maple, or fence post this year, they inevitably arrived at a 14-foot conifer fuller than Santa's beard. Mathematics is apparently not their strong suit; the ceiling looming over their childhood is nine feet high.

Cutting the Tree

The spruce was intimidating, to say the least. Humbly hunching to the ground with a saw in hand, I was horrified by the split trunk conifer capable of defeating Paul Bunyan. Each trunk was thicker than a telephone pole. I feared the wild limbs might actually kick.

As sawdust flew into the frigid December air, refugee birds and mice flew from the crown and into my winter coat. Such intimacy with nature is often a key reason cited for why people select a real tree. Much like finishing dinner, natural versus artificial tree was never a choice to a farm kid. Growing up where natural pines pepper the property, the price was right on a free tree. Had we ever seen an artificial tree sprouting in the back 40, we would not have discriminated.

Setting up the Tree

As I wiped the sweat from my brow and grabbed at my heart, the children yelled, "Timber!" I thought they were referring to me. The tree had finally surrendered. Next year, I'll be sure to pay off the reindeer to rub the growing trees or juvenile delinquent saplings as I endearingly refer to them. They grow to be conifer convicts. Though a battle had been won, a war had been waged. On a good day, I scarcely get through our home's front door with an arm full of groceries. Cramming in with a sizeable fraction of the forest was an act of Christmas contortionism.

The entire family noticed a significant lean. I suggested they tilt their heads for the month. My wife, smarter than me, tossed me last year's toys the kids no longer play with and are quite ready to substitute in mere weeks. I shimmied them beneath the stand, which was screwed into the trunk of the tree like a Frankenstein monster. With respect to haunting, some presents mysteriously opened themselves while others vanished entirely. The kids blamed the tree's mischievous limbs jutting against the window towards freedom. I believe them.

Caring for the Tree

My allergy dictated a no-cat policy. So went my excuse for falling trees. Most families blame felines for such festive blunders. It's funny how the tree that was next to impossible to fell could now barely stand. As if a needy pet, the tree required watering and grooming. Each time I opened the door, I sensed its desire to escape. If only my doctor would prescribe an allergy to pine trees.

Decorating the Tree

Arguably my favorite step is watching the children decorate the tree. My son meticulously attempted to dangle a bowling ball-sized ornament from a delicate offshoot. My daughter has created no less than 75 ornaments in her four academic years. Nothing says sentimental like paper, plastic, or, especially, macaroni. NASA called in a complaint they were receiving interference from the amount of tinsel my kids caked onto the tree. Funny, they did not mention the strands of lights do not work half the time.

Enjoying the Tree and Sharing with Company

The first thing that holiday guests notice as they enter our home is our magnificent tree. "It is the biggest Christmas tree I have ever seen!" The second thing they comment on is the green carpet.

It is embarrassing, for me, not the visitor, as I must correct, "We do not have green carpet. It's tan." They say Christmas should live in your heart all year. I find it, and nomadic needles reside more in my feet.

Disposing of the Christmas Tree

When the holidays are over, and I am in debt, the mobster deep inside me maniacally ties a cinder block to the limbs. Patiently waiting until well after nightfall, I secretly dump the stump into the farm pond. Some might recognize the beautiful cycle that the tree will now provide habitat for next year's fish served on Christmas Eve dinner. I see only revenge.

Where some carol O Christmas tree, O Christmas tree, I sing to a different tune … No Christmas tree, No Christmas tree.

MARSHALL NYCH writes farming humor pieces harvested from his campestral Pennsylvania home. Nych is an accomplished, award-winning outdoor writer and editor. Most importantly, Marshall is father of two and husband to one.



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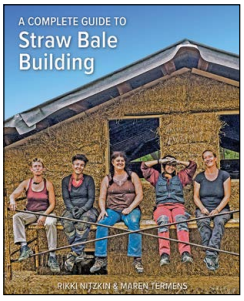

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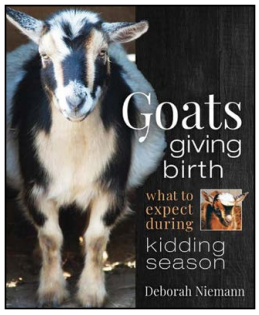

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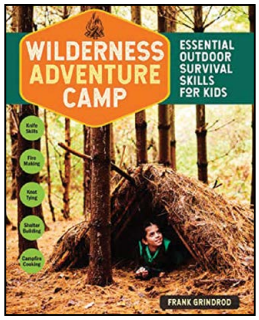

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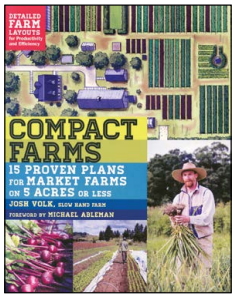

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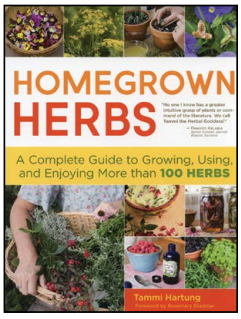

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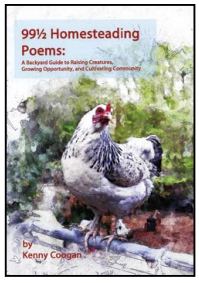

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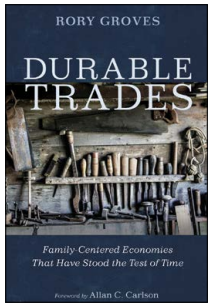

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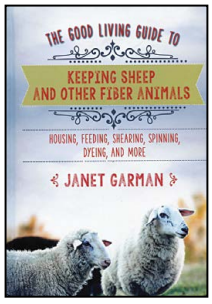

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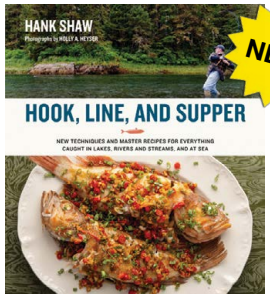

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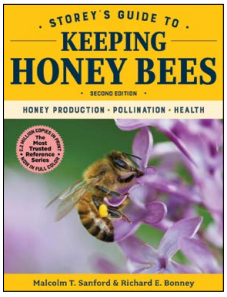

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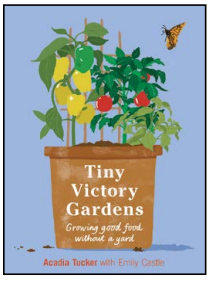

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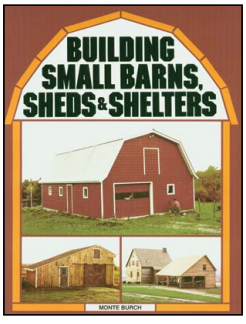

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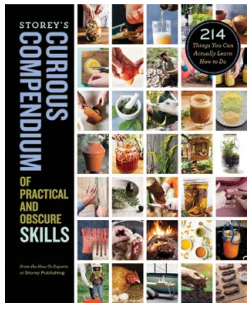

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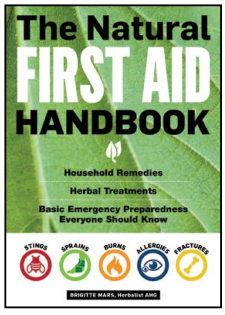

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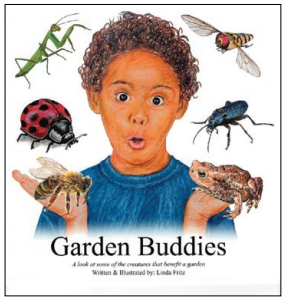

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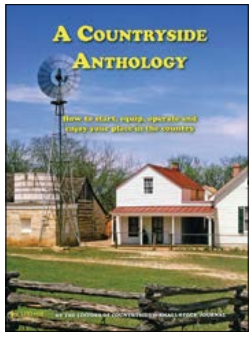

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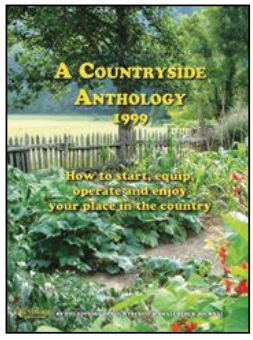

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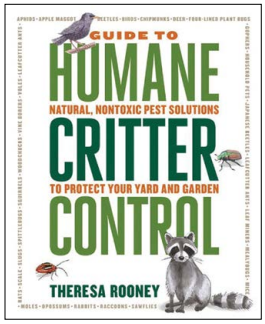

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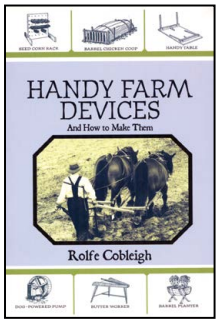

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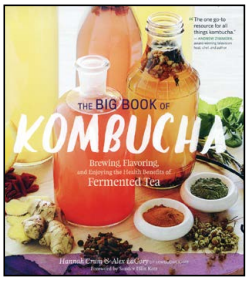

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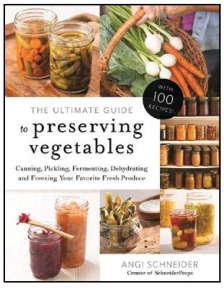

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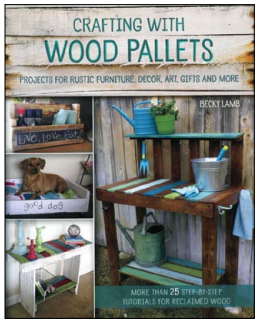

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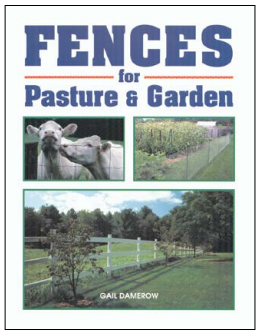

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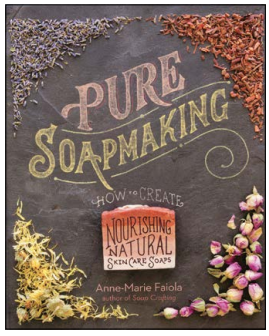

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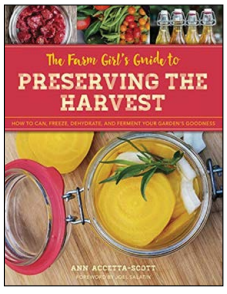

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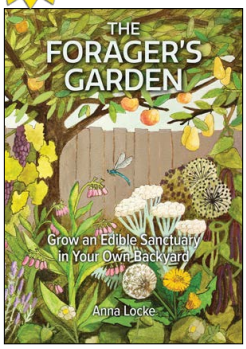

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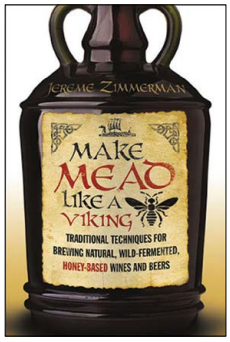

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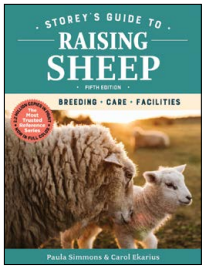

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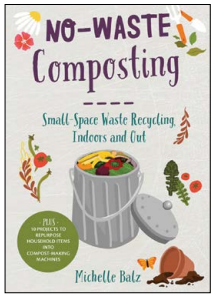

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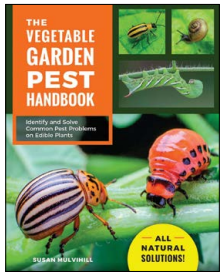

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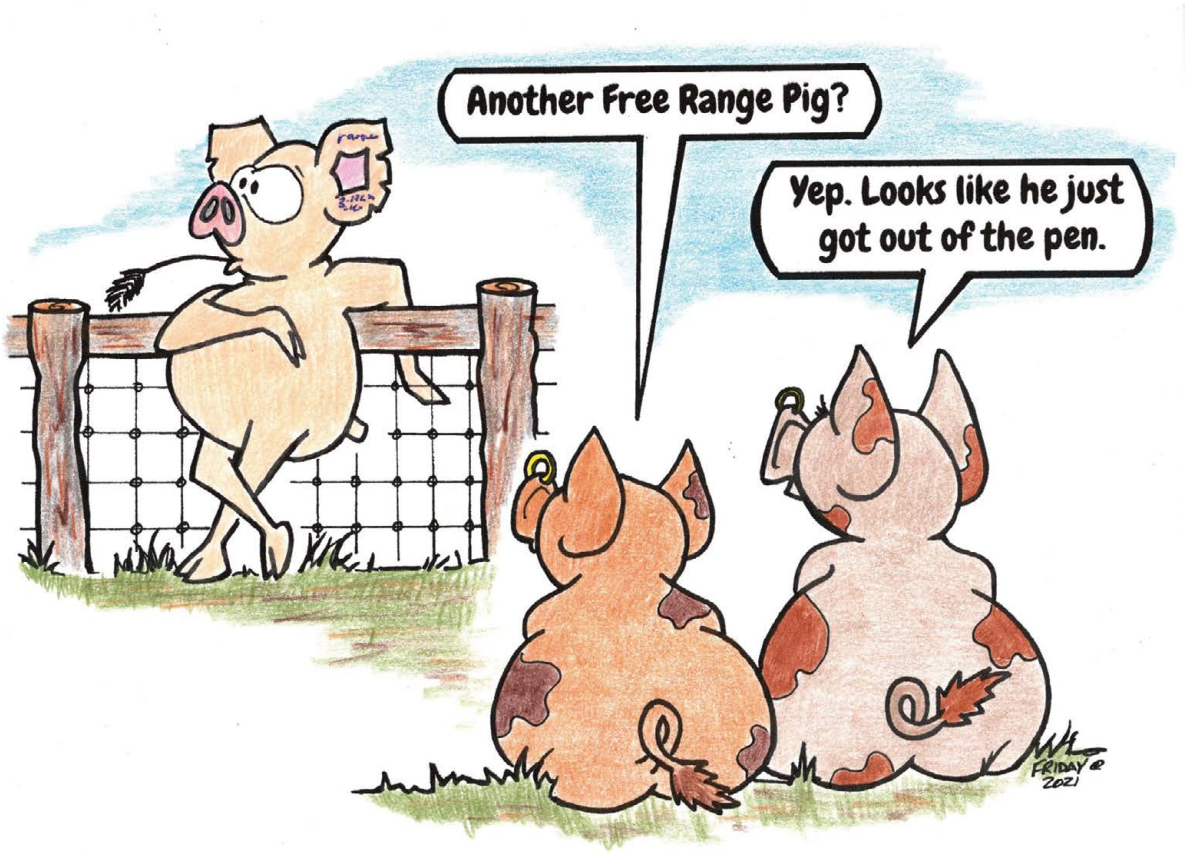
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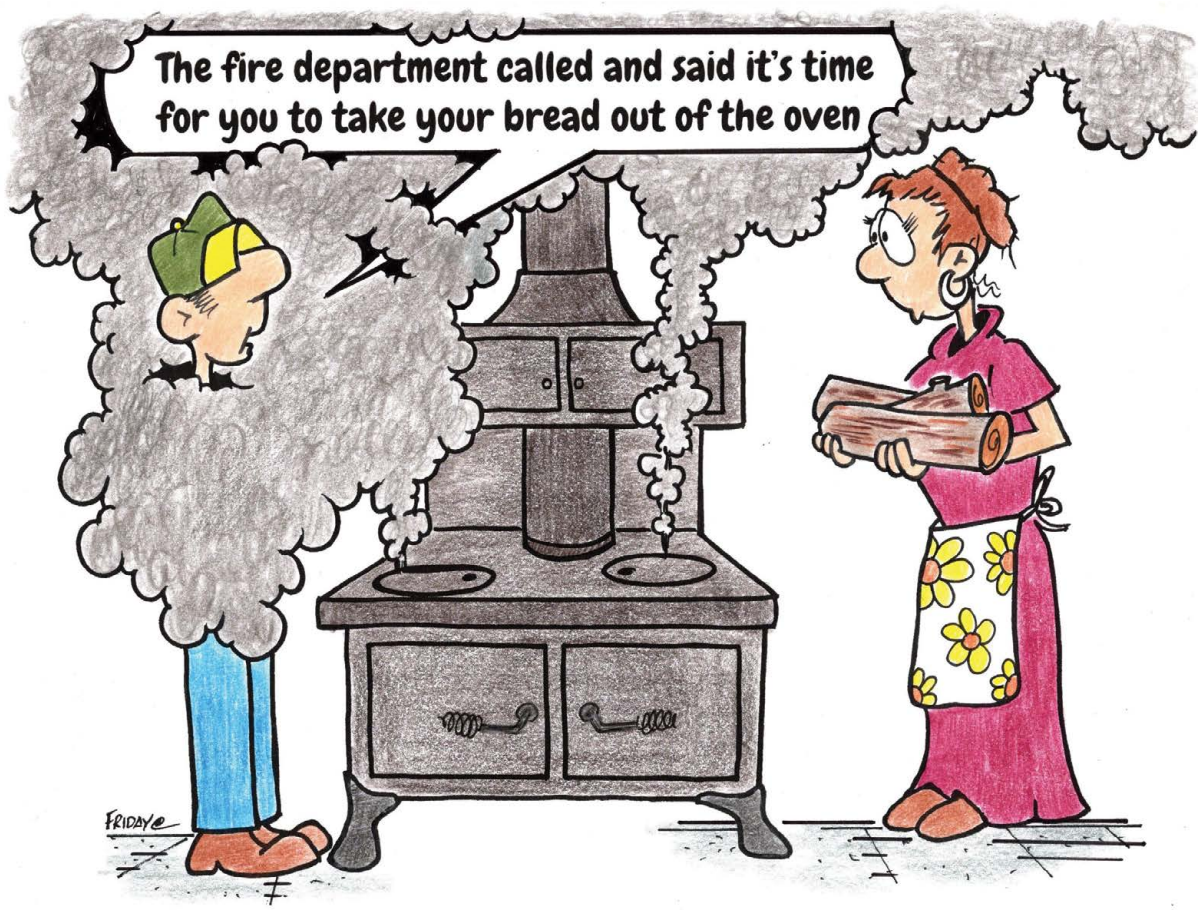
The fire department called and said it's time for you to take your bread out of the oven
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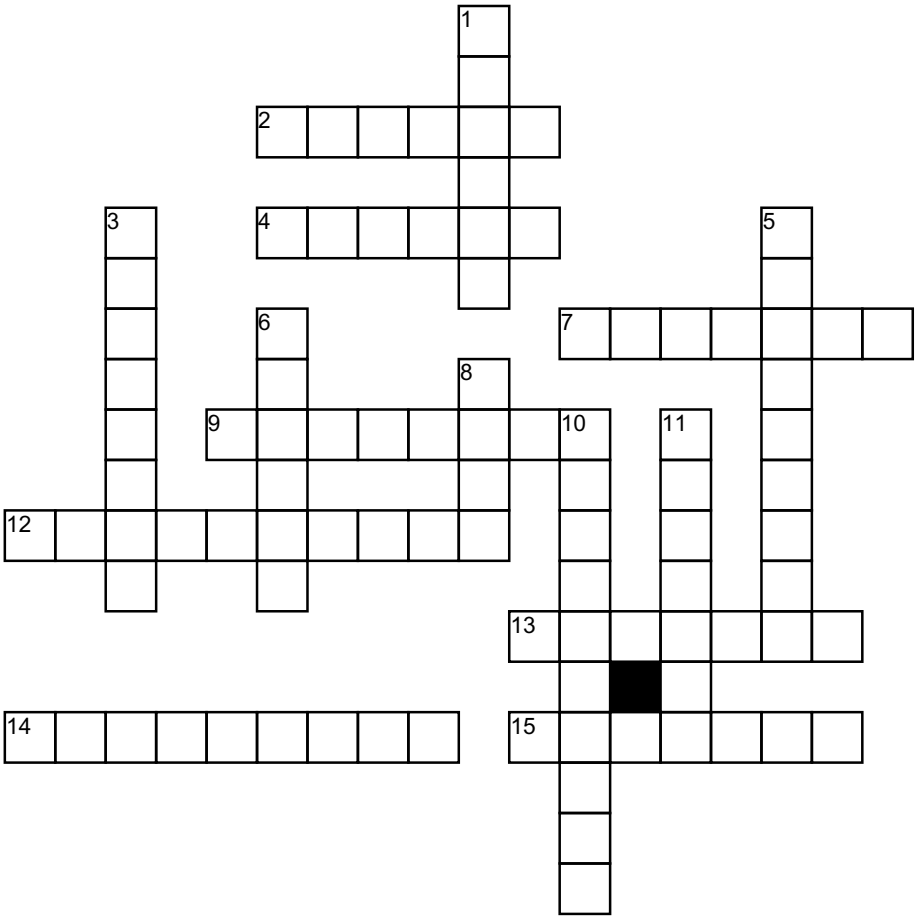

ACROSS

2. When _____ react with lye, soap heats up quickly.

4. This is a type of carnivorous plant.

7. _____ assistant jobs are usually flexible ways to earn extra income.

9. _____ breed pigs are slower growing and produce fewer piglets per litter.

12. When temperatures are at approximately 55 degrees F or lower, bees will cluster on _____.

13. These have served us as pack animals for centuries.

14. Minnesota has adopted the _____ muffin as the official state muffin.

15. Mules and _____ have greater endurance than horses and are more resistant to disease.

DOWN

1. A _____ tail is the part that connects the showy feathers and houses the oil-preening gland.

3. Magnesium sleep oil helps restless legs and _____.

5. For solar panels to work at their maximum output, you must have almost clear access to the sun in a _____ direction.

6. This is a type of silo: _____

8. Alpine Ibex benefit from advanced balance believed to result from their unusually large ____.

10. The Florida weave trellising system is an _____ method for keeping tomatoes off the ground.

11. Fermented honey garlic is a good marinade for pork and _____.

Name: _____ Address: _____

Email: _____ Phone: _____

The winner will be chosen randomly from all of the submissions returned by December 1, 2021. The winner of the July/August Reader Contest was Hannah Farrin, Oregon. Congratulations to you, Hannah! Enjoy your new camp mug.



Win a *Countryside* Mug! To submit, either:

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Countryside Reader Contest
P.O. Box 1690 Greeley, CO 80632

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editor@countrysidemag.com

Be sure to include your contact information so we can inform you if you won the *Countryside* mug. Available for purchase at iamcountryside.com/shop

Poor Will's COUNTRYSIDE almanack

POOR WILL'S GUIDE TO FARMING AND GARDENING LATE FALL AND EARLY WINTER OF 2021

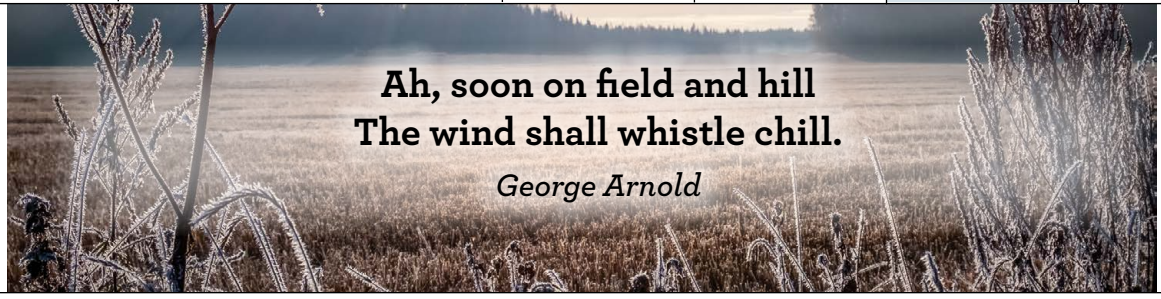
BY W. L. FELKER

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	Be prepared for frost deep into the South as the upcoming Deer Rutting Moon brings chilling weather on the winds of the November 2 and 6 cold fronts. 1	Sow your earliest bedding plant seeds under lights near the new moon (Nov. 4 and Dec. 4). Nurture them throughout the winter for April and May flowers. 2	Divide and transplant your perennials and bulbs while the moon is still dark. Put a little fertilizer and/or compost in with everything, and then water generously. 3	Today's new moon with perigee is likely to bring severe weather. Be ready for storms and a late hurricane with heavy rains across the Southeast. 4	Throughout the South, seed winter greens and grains. Autumn pastures are often soggy, resist extending the grazing season at the risk of destroying next spring's forage. 5	Place a cloth or flexible door over your pigs' shelter in order to reduce winter drafts. Keeping your pigs warm is essential during winter weather. 6
Today's end of Daylight Savings Time is often related to accidents in the late afternoon and evening. Be especially careful since deer may be in heat. 7	Reduce number of animals per acre on pasture and transition them to winter feeding patterns; worm animals; check for foot rot, and trim feet; treat for mites/lice. 8	Take orders for all your Thanksgiving turkeys. Consider the turkey feather market for your roadside stand. Brightly dyed feathers sell best. 9	Plan ahead to offer specialties for Kwanza displays, foods such as squash, yams, and sweet potatoes. 10	Eliminate drafts from the livestock barn but not the ventilation. Be alert for pneumonia in your pigs; check them more often as the weather worsens. 11	Increase litter in your chicken coop to help your flock stay warm. In fact, keep everyone's litter dry! 12	Fill rose collars with dirt to protect from frost. Winterize climbing roses by laying them on the ground and covering with soil mulch. If left standing, wrap with burlap. 13
Purchase seed for winter and late-spring frost seeding of lawn and pasture, which allows freezing and thawing to plant the seeds. 14	Plant an evergreen in the yard — now that the leaves are down, you will be able to position it for best winter appearance. 15	As weather becomes colder, watch for declines in livestock milk production that are not related to feed changes or drying off; declines could be due to health/stress factors. 16	Cool-weather pastures may not produce the kind of nutrition you need for livestock. Just because a pasture is green doesn't mean it will let you get by without feeding grain. 17	Carefully monitor nutrition of your pregnant animals. That is one of the major ways to prevent abortions. 18	Tonight's full moon is likely to bring stormy weather and influence the November 20 and 24 cold fronts, complicating Thanksgiving travel. 19	The moon's third quarter (this week) is associated with a higher risk of abortions in livestock and people. Monitor nutrition and activity more carefully as the moon wanes. 20
Increase grain to feeder stock in order to have them at desirable market weight in Late Winter and Early Spring. 21	Horses bred in April begin their period of most rapid fetal development at this time of year. Keep exercising them even if the weather is cold. 22	A shepherd's winter calendar: transitioning to winter feeding patterns; ketone tests for pregnant ewes; worming your flock; trimming feet; treating sheep for mites/lice. 23	Complete sow breeding for early spring litters. Prepare farrowing quarters that are warm, have good ventilation, but are protected from the wind. 24	Thanksgiving Day: Rest up before setting out your Christmas trees to sell. 25	Honey bees can keep their hives warm if they have enough honey and enough ventilation to keep them dry and protected from bitter winds. 26	Avoid overcrowding in the barn to cut down on pneumonia in livestock. Cover round bales of hay with heavy tarps before the late-autumn rains and snows intensify. 27
Rheumatism increases as winter grows colder. Rheumatism may worsen when the barometer drops, easing when the barometer is high. 28	Witch hazel blossoms wither, and the last of the golden beeches, the willows, Osage, and oaks come down, improving your odds hunting squirrels and deer. 29	Provide a dry run for your rabbits and offer toys that will help them overcome boredom and be more active through winter. 30				

November

December

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			Heavy December snows may put pressure on coyotes to find suitable prey. Make sure your fences are adequate and that drifting snow does not cover them up. **1**	Tamp down the snow around younger fruit trees after each snowstorm to protect them from mice working under the surface. **2**	Make a calendar with dates for seed, fertilizer, herbicide, and pesticide purchases, livestock due dates, fair and other show dates, fall breeding periods, estimated planting and harvest. **3**	Today's new moon and lunar perigee again brings turbulent weather to the country. Be ready for wind and snow. Frost finally arrives in the northern portions of the Deep South. **4**
Start feeding grain to stock which will be birthing early in the year. Make year-end tax decisions, and take inventory of animals, capital items, crops, feed, and supplies on hand. **5**	Consider options for diversification. Discuss the possibility of a loan to expand your operation. Sit down with the tax person and see if there's a way to reduce your taxes next year. **6**	A light feeding in the morning and a heavier feeding toward dark will provide your chickens with a little more in their stomachs to heat them up as the mercury falls. **7**	Pullets which will produce summer eggs are hatching. Plan now to have broilers ready for market as early in the year as possible. **8**	If you are planning to market sheep or goat milk and cheese next year, be sure you have the right freezer – one that has enough room and freezes the milk quickly. **9**	Egg production can be expected to decline when highs stay below 30 degrees, but warm water will help keep the hens happier and, hopefully, laying a little. **10**	New curly dock is often growing back in the Southern wetlands. The freshest spears can be picked and used for salad greens or sautéed with onions and maybe a small piece of bacon. **11**
If temperatures are relatively mild, hens could start laying, after molt, with about 13 hours of light (but use a low-wattage bulb). **12**	Keep plenty of lukewarm water available for your chickens when temperatures fall below freezing. Pregnant livestock also appreciate warmer water. **13**	Turning lights on early and keeping them on after dark can help keep your chickens eating for more hours in the day. **14**	Buyer pickup time for lambs and kids has begun for the Christmas market. It is not too late to cull your flock and herd for winter. **15**	If you intend to breed ewes and does in January and February, consider keeping lights on to at night to create "16-hour days." **16**	Chinese New Year takes place on February 1 - 3 next year (the Year of the Tiger). Plan a marketing strategy for this niche. Make stuffed tiger toys to enhance your displays. **17**	Today is full moon day, likely to influence the December 20 and 24 cold fronts. Crime, dementia, and irritability are also worsened by the full moon. **18**
The better the hay, the less grain is required. But most of your goats' nourishment should still come from hay. **19**	Plan for Dominican Republic Independence Day, February 27, for selling your kids and lambs that weigh between 20 and 35 pounds. **20**	A tree, outbuilding, or neighbor's chimney is now suitable as a gnomon for tracking solar movement after solstice (today). Keep track of the sun and watch spring come. **21**	Starting today, the sun rises and sets a little bit further to the north every 24 hours. See if you can notice the slight daily change with your gnomon. **22**	Increase feed by about a third if your animals are nursing twins. Increase by 50% if they are carrying triplets. **23**	Separate your thinnest pregnant animals now and give them extra attention in order to improve their body condition and reduce risk of abortion. **24**	The worst winter weather usually comes in the third week of December, the first 20 days of January, and the first two weeks of February. **25**
Don't forget to fatten weaner calves and piglets (and your pocketbook) with your extra goat (or sheep or cow) milk this winter. **26**	Easter is April 17 next year. Plan to have your lambs and kids in the range of 40 to 60 pounds ready to sell to this lucrative Easter market. **27**	The end of Ramadan is May 2. Now is the time to investigate the halal market in areas near your homestead. **28**	Plenty of forage for your livestock will help ensure that they produce enough heat to keep warm in these bitter days. **29**	Schedule routine maintenance and foot clipping under the dark, fourth-quarter moon. Clip your fingernails in preparation for lambing. **30**	Precipitation and relatively mild conditions often occur before the last front of the calendar year. Then deep winter grips the nation for three weeks. **31**	



THE SUN Daylight Saving Time ends on November 7 at 2:00 a.m. On November 22, the Sun enters its Early Winter sign of Sagittarius. Winter solstice occurs on December 21 at 10:59 a.m. The Sun enters the Deep Winter constellation of Capricorn at the same time.

Sun-Standing-Still Time, the darkest period of the year, begins December 5 and lasts through the first week of the New Year.

PHASES OF THE MOON Late Fall is the time for deer to come into estrus, and mating takes place throughout the last months of the year. Combined with the end of Daylight-Saving Time, deer rutting makes this period one of the most dangerous for driving.

In December, as Early Winter moves south from Canada, sandhill cranes ride the cold waves far above the deer toward the warmer temperatures of the Border States and the Deep South. Listen for their haunting cries high overhead.

THE PLANETS Jupiter and Saturn are Evening Stars in Capricorn as the weather becomes wintry. Venus moves into Sagittarius, visible at dusk deep in the southwest, a third and the brightest Evening Star. Mars in Libra and then in Scorpio becomes a Morning Star as December approaches.

THE STARS Directly above you at 10:00 p.m., Perseus stands below the North Star, Polaris. In front of Perseus, to the west, find Andromeda, and then the Great Square. East of Perseus is Capella, the brightest star of the Milky Way (except for Sirius in the far southeast).

By midnight, the Pleiades and Taurus will be almost directly overhead, Orion will be fully visible behind them. Regulus, the brightest star of spring, will be just starting to rise along the eastern tree line.

THE SHOOTING STARS The Leonid meteor shower reaches its best on the night of the 16-17. Expect about 30 shooting stars per hour. The Geminid meteor shower lasts from December 6 to 19, and its peak occurs on December 13 and 14, sometimes bringing up to 100 shooting stars per hour. The 12th month's second shower, the Ursids, will fall across the sky on December 22-23 at the rate of just a handful every hour.

THE WEATHER OUTLOOK Weather history suggests that the cold waves of this period usually cross the Mississippi River on or about November 2, 6, 11, 16, 20, 24, and 28 and December 3, 8, 15, 20, 25, and 29. Snow or rain often occurs prior to the passage of each major front.

New moon on November 4 and lunar perigee on November 5 create a definite pattern for freezing temperatures deep into the Border States and at higher elevations throughout the country. Blizzard conditions are possible across the West and Great Plains. Then look for a killing frost and snow at full moon time, November 19, well into the South.

New moon and lunar perigee on December 4 will strengthen the first cold front of December and bring freezing temperatures past Tennessee. Full moon on December 18 will influence the two Christmas weather systems (the 20th and 25th), increasing the likelihood of snowy weather before and after the winter solstice. Will there be a white Christmas? The full moon says there well could be — for the northern half of the United States!

For more weather information, consult Poor Will's Weather Book, available on Amazon.

LUNAR FEEDING PATTERNS FOR PEOPLE AND BEASTS

When the Moon is above the continental United States, creatures are typically most active. The second-most-active times occur when the Moon is below the earth.

DATE	ABOVE	BELOW
November 1 - 7	Midnight to Dawn	Afternoons
November 8 - 14	Mornings	Evenings
November 15 - 20	Afternoons	Midnight to Dawn
November 21 – 29	Evenings	Mornings
November 30	Midnight to Dawn	Afternoons
December 1 - 6	Midnight to Dawn	Afternoons
December 7 - 13	Mornings	Evenings
December 14 - 20	Afternoons	Midnight to Dawn
December 21 - 29	Evenings	Mornings
December 30 - 31	Midnight to Dawn	Afternoons

November 4: The Deer Rutting Moon is new at 4:15 p.m.

November 5: Lunar Perigee (when the Moon is closest to Earth): 5:00 p.m.

November 11: Second Quarter: 7:46 a.m.

November 19: Full Moon: 3:57 a.m. and Partial Lunar Eclipse visible in most of the United States.

November 20: Lunar Apogee (when the Moon is farthest from Earth): 9:00 p.m.

November 27: Last Quarter: 7:38 a.m.

December 4: The Sandhill Crane Migration Moon is new at 2:43 a.m.

December 4: Lunar Perigee (when the Moon is closest to Earth): 5:00 a.m.

December 10: Second Quarter: 8:36 p.m.

December 17: Lunar Apogee (when the Moon is farthest from Earth): 9:00 p.m.

December 18: Full Moon: 11:35 p.m.

December 26: Last Quarter: 9:24 p.m.

THE SCKRAMBLER

NOVEMBER/DECEMBER

PREDATORS

While it is possible you may lose some livestock this winter, it is not likely that you will have all these PREDATORS stalking you and your animals. If you do, you are in big trouble!

DABREG	LAITGNIR
OYOTCE	KKUNS
FOLW	ATC
GDO	WAKH
LBCAK EARB	EEALG
YARG FXO	LLGTRAIAO
BBOCTA	SEALWE
UNTAINMO NOIL	ERD XFO
TRESED WERHS	QUITOSOM
AOOCCRN	TEARG WHTIE KRASH

Poor Will shall pay five dollars to the 3rd, 27th and 44th, persons to mail their correct answers to

Poor Will
P.O. Box 431
Yellow Springs, OH 45387

before the answers appear in *Countryside*. If you happen to find a typo, you may skip the word without penalty.

WINNERS & ANSWERS

JULY/AUGUST SCKRAMBLER

The Almanack promised $5.00 to the 2nd, 8th, 23rd, and 54th persons who submitted the correct answers to the July-August Sckrambler: The 2nd was Marjorie Avery of Gladwin, Minnesota; the 8th was Marjorie Lindsey of Jamestown, New York; and the. 23rd was Lee Bates of Viola, Idaho.

GALEA/ALGAE	LALAH/HALAL
TALS/SALT	QUSHA EBTELE/ SQUASH BEETLE
NOHYE/HONEY	OOECYT/COYOTE
EARSH MSAR/ SHEAR RAMS	OAOCCNR/RACCOON
TEIMS/MITES	SITITMAS/MASTITIS
TATEOR URESTSAP/ ROTATE PASTURES	EEEIPRG/PERIGEE
TBO GEGS/BOT EGGS	OCASRN/ACORNS
ATEH ROKEST/ HEAT STROKE	PFFBLLUA/PUFFBALL
EUSSRT/ESTRUS	PERPATEWHI/ PAPERWHITE
RRYEBLBCKA/ BLACKBERRY	VCCNTNAIAIO/ VACCINATION

A CALENDAR OF FEAST DAYS AND HOLIDAYS FOR FARMERS, GARDENERS, AND HOMESTEADERS

November 25, 2021: Thanksgiving

November 28-December 6, 2021: Hanukkah Jewish Festival of Lights: Traditional lamb dishes for this feast are commonly "finger foods" such as ribs and kibbeh (torpedo-shaped dumplings made with spiced ground lamb and bulgur wheat). This festival is eight days long and offers many possibilities for marketing.

December 25, 2021: Christmas: Milk-fed lambs below 20 pounds are favored for this market.

December 26-January 1st: Kwanza: Market specialty items for this celebration throughout December.

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We love getting a glimpse into your everyday homesteading moments.





Capture YOUR COUNTRYSIDE



1 Some things just fill your heart without even trying. **Kara J., Colby, Wisconsin.**

2 Moshe with his winter coat after the huge snowstorm in February 2021. **Emerie Maldonado, Texas.**

3 Two non-turtle doves. **Susan Pickerman, Michigan. @chickouttawater**

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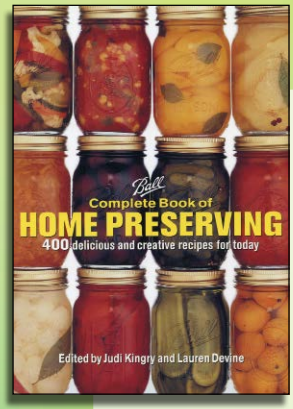

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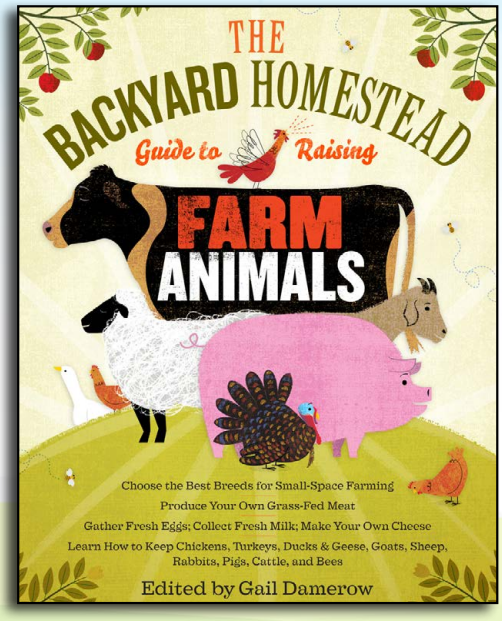
The Backyard Homestead Guide to Raising Farm Animals



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TEXEL SHEEP BREEDERS SOCIETY, Niki Fisher Secretary. 2720 NE 25th Ave, Payette, ID 83661. Phone Inquiries: Walt Threlfall 740-881-4417. <usatexels@gmail.com> <www.usatexels.org>

AMERICAN ROMNEY BREEDERS ASSOCIATION, JoAnn Mast, 58221 Lee Valley Rd., Coquille, OR 97423. 541-572-3094. <secretary@americanromney.org> <www.americanromney.org>

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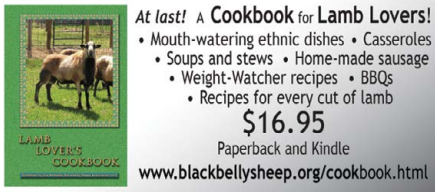

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