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# COUNTRYSIDE

**& Small Stock Journal**

Volume 98 • Number 6  
November/December 2014

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# COUNTRYSIDE

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## Our Philosophy

It's not a single idea, but many ideas and attitudes, including a reverence for nature and a preference for country life; a desire for maximum personal self-reliance and creative leisure; a concern for family nurture and community cohesion; a belief that the primary reward of work should be well-being rather than money; a certain nostalgia for the supposed simplicities of the past and an anxiety about the technological and bureaucratic complexities of the present and the future; and a taste for the plain and functional.

COUNTRYSIDE reflects and supports the simple life, and calls its practitioners homesteaders.

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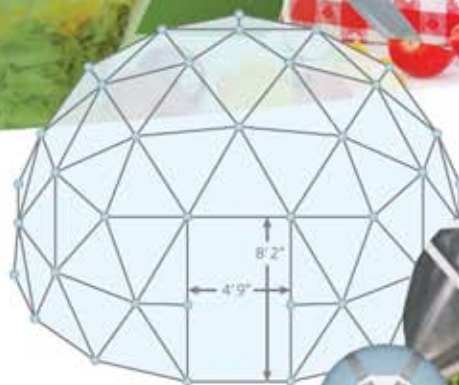
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## Country conversation & feedback

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### Thoughts on preparing for and surviving difficult life situations

COUNTRYSIDE: You never think it'll happen to you. Death of a loved one, divorce, losing a home, fire, drought, flood, tornado, etc., can happen any time and anywhere. We all face at least one life changing situation or even a few in our lifetimes.

I've had my share already – losing homes, death, divorce, tornado, and more. But I've led a charmed life really, walking away from a rolled car, plus all the above – and I'm still “upright and taking nourishment,” as my dear friend likes to say.

So rather than dwelling on the event, let's look at the aftermath. Memories are where we store things about people and places the best. So I choose to remember mostly the good things and times, and I don't miss them as much as if I think of losing them. My dreams are flexible, crushed and trampled, just to be reborn. Home is where you make it, whether street corner, tent, apartment, or shared with others. “Home” starts with the heart and spills out from there.

Some say we create our own destiny. I agree with this to a point, to where our lives touch and interconnect with others. I believe that much of our reality is a joint creation, the people around us and the Creator or Being in charge of life. To have the

biggest sway in our creations, is to choose how we see life, and how we react when we get hit with a curve ball.

Take time to grieve, it is necessary when you lose someone or something dear. Then go ahead and get mad. Life isn't always fair or kind. And owning our feelings is also necessary. Finally, choose to move on. Don't get stuck in the grief/anger quicksand. It's the decision to move on that breaks you free!

What do you need to move on? For me, it's my faith, friends and family. My faith has always been my staff, letting me see and know that I can get through it. And my friends and family, well, they've provided amazing help and support when I needed it. Know that what you've gone through will help you to help others facing similar situations. The more others support me, the more I see the need to support others.

After surviving two F4 tornados that wiped out 2/3 of our village and damaged most of the rest of it, I have even more advice about how to prepare for disasters and unexpected life situations.

1. Be the kind of person you want to meet and have around you. This is how you develop the friendships that you can lean on in times of need.

2. As you are blessed, learn to see how you can help when you're called to. I've seen how many willing hands working together can change things in short order!

3. Amassing “stuff” towards “that day” may or may not work. Many events can whisk all your earthly

goods away. People can let you down, and mechanical things can fail. So what does last? What does work?

Faith – in a higher being and in yourself, will never forsake you! It has always been my faith that has kept me going.

Knowledge is so important! Learn life skills and trades. Learn how to “put up” foods, cook, sew, hammer a nail, use a wrench, etc. Knowledge can be bartered, make your life easier and better, and only dementia will take it away!

Have as many sources of income as you can manage. Job skills, savings – have a way to earn and save.

Invest in things that stay – choose some land, build wisely for weather and energy, and plant gardens, food trees, etc. The land usually stays put, even though the rest leaves. By diversifying your landscape, you'll always have a harvest of something, if not everything.

Lastly, have a well thought out insurance policy. I know, some of you say you'll never need it or it's a waste of money, but it's the one time you do need it you'll be happy you had it! I'll share briefly what I've learned after having two home claims (once to fire, once to a tornado). Choose a Township Mutual that is locally well respected, for your home insurance. And insure your house, buildings, and contents of all for replacement value. A good agent can explain these choices to you; I won't take the time here. But in many ways even over health insurance, home owners insurance is important!

If you have to walk away from

## Old Cookbook Reveals

# “Amazing Details of Washington’s Dining Habits”

by Guy Coalter,  
Special Features Writer

**Canton OH, Special** - With hundreds of servants at her command... a person would think our first First Lady was a woman of leisure.

Not so... according to a new historical discovery. A long out-of-print volume entitled, “*The Martha Washington Cook Book*” shows Mrs. Washington personally supervised her entire household staff... and especially the kitchen and dining room servants.

Martha made sure every dish served at Mount Vernon... as well as in the first Presidential “*White Houses*” in New York and Philadelphia... was prepared exactly as called for in her personal cookbook.

The family cookbook was given to Martha at the time of her first marriage.

In 1749, beautiful seventeen-year-old Martha Dandridge married Daniel Parke Custis. As a wedding gift, the Custis family presented Martha with a family cookbook entitled *Booke of Cookery and Booke of Sweetmeats*.

Handwritten by an unknown hand, there is evidence the recipe book had been in the Custis family for generations. It is quite likely this was a family heirloom dating back to the early 1600s. In all, there were over five hundred classic recipes, dating largely from Elizabethan and Jacobean times, the golden age of English cookery.

Later, Martha Custis became a widow and in 1759 she married Col. George Washington. Washington was to become the Father of our country and its first President. Martha, of course, became our very first, “*First Lady*.”

Martha kept and used her family cookbook for over fifty years. In 1799, she presented the book to her granddaughter, Eleanor Parke Custis as a wedding gift when she married Lawrence Lewis.

The cookbook was handed down from mother to daughter until 1892 when the Lewis family presented it to The Historical Society of Pennsylvania where it still resides today.

In 1940, the Society gave permission to historian Marie Kimball to study the manuscript and prepare a cookbook entitled, “*The Martha Washington Cook*

*Book*.” Although now long out-of-print, an Ohio publisher was recently commissioned to reprint a limited edition of this rare and amusing piece of Americana.

Accordingly, a limited number of copies are being made available to the public at this time. Each volume is numbered and when the present printing is exhausted, there is no contract to print more. These cookbooks could very easily become valuable collectors items.



**Martha Washington**

“*The Martha Washington Cook Book*” includes facsimile copies of several actual pages from the one-of-a-kind original manuscript. Then, Mrs. Kimball chose over 200 delicious unique recipes from Martha Washington’s personal cookbook and completely modernized them so you can easily prepare them in your own kitchen!

The original recipes were written for a huge household including numerous servants. Many called for dozens of eggs and gallons of one thing or another. Marie Kimball “*trimmed*” each recipe to quantities of ingredients for a family of six.

You’ll get dozens of delicious recipes for Soups, Fish, Meats, Meat Pies, Poultry and Game, Sauces, Eggs - Mushrooms and Cheese, Fritters and Pancakes, Pastry - Pies and Tarts, Cakes, Creams and Jellies, Puddings, Preserves, and Beverages.

Perhaps more interesting for us history buffs is the detailed description of the kitchen and

dining habits in the George Washington household. Martha sat at the head of the table with her husband at her side to the right.

Despite dozens of servants around the table, either Martha or George always carved the meats to be served!

You’ll absolutely love dozens of other interesting details of this historical dining room.

“*The Martha Washington Cook Book*” is a beautiful perfect bound book you will be proud to display on your coffee table, bookshelf, or where ever you keep your very best books.

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your land (I have a few times) and move on, know that what you're leaving will help the new owners and others, that you've done your best, and then get excited about the next chapter! — *Lorna Jean Fosgate Banks*

## Twill is harder than denim

COUNTRYSIDE: I would like to make a suggestion/addition to Thomas Sciacca's 50 essentials in the homestead preparation article in Sept/Oct 2014. On page 19, under the topic "fabric," I recommend getting twill instead of denim.

I am a professional seamstress with 45 years of sewing experience and have patched many jeans. Denim has a major fault—the big white threads seldom break. Examine a torn knee in your jeans and you will find the blue threads are baby fine. This is a major weakness in denim and it's murder on the hands to hand wash denim.

Twill, on the other hand, has equal fibers/threads and is woven similarly. Twill is what is used in shop uniforms for mechanics, etc. I prefer the eight- or nine-ounce twill with a "professional finish" of a 65% poly 35% cotton blend if you want very durable wear. It will outlast denim by many years! I wear twill skirts all year. The seven-ounce can be used for shirts. The 100% cotton is not as durable or as colorfast as the blend. I usually get mine from Richlin Fabrics in Kansas City, Missouri.

While getting needles, get a thimble, too! Needles will rust with exposure to the atmosphere. Store them in their packages inside a jar with the lid closed. A good place for needles, thread and other supplies is Wawak Sewing, 800-654-2235 ([www.wawak.com](http://www.wawak.com)).

Question: Where do you find potassium iodate? Milk thistle is a liver cleanser and restorer and will help in case of radiation—even medical

radiation. (Ed. note: Potassium iodide [KI] can be found at your pharmacy, without a prescription. The National Center for Biotechnology Information claims potassium iodide has fewer side effects than the iodate — [www.ncbi.nlm.nih.gov/](http://www.ncbi.nlm.nih.gov/). Also visit the Centers for Disease Control and Prevention, [www.bt.cdc.gov/radiation/ki.asp](http://www.bt.cdc.gov/radiation/ki.asp). There are health risks of taking KI, so do not take it without the advice of public health/emergency management officials!)

As for shoes, I have had some misfortune with shoes that are a bit old. If you buy at a yard sale, twist them, especially house shoes—the soles may break up in pieces. If the sole is glued on, age will cause the glue to dry too much and come loose. Go for real leather uppers that are stitched on. Leather allows the feet to breathe, there's less foot odor and fungus, etc. I'm not sure what kind of soles will store well since the only thing I have stored have been moccasins for a short time. I'm not sure how they have fared. I do know a pair of good shoes bought less than a year ago has come unglued from the sole. Try storing shoes in something the humidity can't get to. Leather will mold, though it can be brushed away and worn. You might want to store a bit of saddle soap and Neets foot oil along with the leather shoes in case they get hard and "unwearable." Ask a good shoe store or saddle shop for more instruction on how to revive old leather shoes.

On page 70, regarding the Zucchini Sausage Soup canning recipe: I have trouble using ground spices and especially black pepper in any pressure canning. It tends to crawl in between the sealing surface of the flat lid and the edge of the jar and lodge. It will seal, but in the middle of the winter, I hear the unhappy "ping" of one unsealing with no way to know which jar it is in a few hundred. (Ed. note: Try pushing on the lids—the unsealed lid should "give" a little when pushed.)

One more question: How do you keep envelopes from sealing themselves before you are ready to use them? — *Mrs. Larry Martin, Missouri*

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## What good will "prepping" do?

COUNTRYSIDE: I received my latest issue of COUNTRYSIDE this past week, and began to read it last night. I have to admit that I was a bit disturbed by the tone of a couple of the first few articles and related ads. These articles related to "Get Home Bags" and home survival when local services have ceased. In spite of the fact that the authors made a slight mention of earthquake or fire, it is clear that their fear was not this, but some sort of wider breakdown in civil society. Additionally, I recall that there is a picture of one heavily armed man talking about his survival skills, in an ad.

While I do understand the desire of many to live off the grid, to grow their own food, raise their own animals, and live a lifestyle closer to the earth, I believe that most of your readers look toward this lifestyle as an end in itself, not to avoid some sort of Armageddon-like occurrence. I sure hope COUNTRYSIDE is not going to turn into some survivalist magazine with articles by extremist crazies, as this is not what I subscribe to your magazine for.

Yes, there will always be those who consider the COUNTRYSIDE "ethos" as a means to create some sort of post-apocalyptic society, but I feel these folks are at the fringe of current society and don't have a true grasp of what's happening in the world around. I'd hate to have COUNTRYSIDE veer in this direction as well. — *Bob Williams*

## Readers comment on the pros & cons of the new paper

COUNTRYSIDE: We saw that coming, didn't we? From all informative, no nonsense, all black and white, we saw our COUNTRYSIDE pick up the habits of *Country* magazine and *Mother Earth News*. Pictures, colors, less and less text and more and more photos. And it was only one more step until this

glossy paper came.

This then will be my last year of subscribing. I will page through the glossy magazines at the store; I will subscribe to an all-glossy magazine like *Victoria* and consorts. What a pity! — *Ingrid Durden, Georgia*

**This reminds us of the issue where we showed gardens/flowers in black and white—we got a backlash for not showing flowers in color. You can't please everyone.**

## Pretty slick

COUNTRYSIDE: Regarding this change of paper for COUNTRYSIDE (my favorite magazine in the world); I would rather pay more and keep the old stiffer paper. This is too floppy and hard to hold on to. — *Jeanne Grant, California*

## I missed my show!

COUNTRYSIDE: I get your magazine at the library and always enjoy it, but the July/August issue is especially great. I was so absorbed in it that I actually missed the first half hour of my favorite tv show! — *Gail Powell, Ohio*

## Resourcefulness in the farm home

COUNTRYSIDE: Out of the many things often thrown away in a typical farm household, quite a few are actually usable for something. Here are just some examples.

**Coffee grounds** are an excellent soil amendment for alkaline or "sweet" soil. Coffee grounds can particularly benefit the growth of blueberry, azalea, raspberry, lily-of-the-valley, and lingonberry plants.

**Typewriter ribbons**, if made from nylon, can be used in a number of ways after their writing careers have faded. They can be turned into string for tying garden plants or to hang items such as thermometers, bird feeders and reflectors. They can even be used in sewing, as reinforcement on the inside seams of a garment—a black garment, of course.

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**Venetian blinds** break frequently. No problem, use the broken-off pieces as garden markers, or plant-pot labels.

**Shower curtains** can be used as weed-smothering cover for areas where you need to get rid of weeds. Just spread the shower curtain over the area and weight it down with heavy rocks in each corner and at midway points between corners.

**Garden vegetables** often have edible parts that are seldom used. Examples include the outer leaves of cabbages (not included in the head), the seeds of watermelons (if roasted), the tendrils on pea plants, the leaves of celery, the blossoms of squash and pumpkins (male-blossom buds on squash plants are often harvested and fried), and the leafy tops of rutabagas. Do not think, however, that all of plant matter from the garden is edible. Eggplant and tomato leaves, for instance, are poisonous.

**Coffee cans** are useful for many things, besides stashing cash for some planned purchase. They are good containers for soil inoculants, sewing supplies, small tools, leftover paint, even bills and receipts. They do not make good containers for storing seeds for planting.

**Foxtail grass heads**, even after they are killed by cold weather in late fall, can be collected and bundled together to make brooms for spider web removal. The temporary broom can be discarded, along with the spider webs that cover it.

**Baling twine** can be made into a trellis, although some weaker brands may require being doubled or tripled over for this purpose.

**Baling plastic** can be used in the same way as shower curtains, to smother weeds, and cover a much larger area.

**Nylon stockings** can be used to strain "lumpy" paint.

Used **garden twine** made from a natural fiber such as sisal can be burned as fuel in a honeybee smoker. Beekeeping experts claim it is among the best and most stable of all smoke sources.

**Spent matches** usually still have a good portion of their wood un-

burned. This type of wood is particularly flammable. Spent matches can be good tinder for a fire.

**White chalk** can be rubbed onto walls and similar surfaces to stop the movement of ants. Ants cannot hold onto the chalk, and they fall. — *Jeffery Goss, Jr., Missouri*

## Keeping snakes out of the chicken coop

COUNTRYSIDE: This is how I keep snakes out of the chicken house.

We have a lot of large brown chicken snakes. I believe they are in the King Snake family. They are big and seem to keep the poisonous snakes away. I'm not a snake or chicken expert and I like them both, but I don't like snakes eating my eggs and chickens. Snakes don't crawl across sharp or very rough surfaces — it cuts their belly. So I seal all the holes in the chicken house with wood or screen.

Make the people door tight so a snake cannot squeeze underneath. My chickens' door is elevated with a little ramp. I nail cross pieces on so the birds don't slip around when it's wet. At the base of their door I nail an old saw blade with the points facing up. The chickens just step across, but a snake would tear its belly up. If your snakes are real agile and can slide up the sides, put saw blades all around their entrance. Old chain saw chains can be tacked up and around the chicken door quite easily. Hack saw blades work pretty well if they're sharp. I don't like the tack strips for carpet because they can hurt the chickens' feet. I imagine the old rough rope lariats the cowboys used around their sleeping bags to keep the rattlers at bay worked the same way. Also, I do not use netting over the top of the outside chicken pen. Baling string running from the coop peak to the top wires discourages hawks and owls as they fear being caught in it. This works on garden rows stakes too. Crows do not seem to go under string because they can-

not escape quickly without getting their wings caught.

I only have time to write this because I broke my ankle when I stepped in a mole hole while watering the Hubbard squash. I've not grown them before, but I think they might just be the perfect survival food as they are said to keep for up to two years if stored correctly. No canning or refrigeration needed. Recipes would be appreciated. Thank you! — *Annette Snow, Tennessee*

How do you prepare Hubbard squash? Send your recipes to COUNTRYSIDE Editorial, 145 Industrial Dr., Medford, WI 54451 or editor@countrysidemag.com.

## Methane easily produced on farms

COUNTRYSIDE: In the May/June issue a reader wrote about a "propane" production idea.

I would like to respond to his misconception. Propane, or liquid petroleum (LP) is a product of the first stages of refining crude oil. It is a light volatile that is easily liquefied under fairly low pressure.

What the reader is referring to is production of methane/biogas. This is more like natural gas than propane. Like natural gas, methane is very light and of lower Btu/ft<sup>3</sup> than propane.

Also, if you have propane equipment and wish to convert it to biogas, there is a physical conversion process — check with the manufacturer.

You'll need to convert the equipment so that it actually feeds more methane than the required amount of propane, due to its lower density.

The reader is right about the production and source of raw material. Methane gas can easily be produced in a farm situation. Almost any bio matter can be used. The gas is produced by the anaerobic decay/digestion of bio matter. This means that the system works without oxygen.

Basically the bio matter is put in a tank with enough water to make slurry and the bacteria will do their

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Without lies humanity would perish of despair and boredom. — Anatole France

thing. The carbon to nitrogen ratio needs to be right, but basically that's about it.

A lot of CO<sub>2</sub> is produced in the first stages of digestion. Then methane comes in after that.

Methane is a great fuel. It can be used for the same things that propane or gasoline can be. However, it does take more of it to do the same job.

Another positive of biogas production is that the spent slurry is a high nitrate sludge that can be used on field crops. Therefore, there is no hazardous waste to dispose of. Instead, you have a very useful by-product. Industry and the petroleum producer can't claim this. They produce tons of hazardous waste products. — *Keven Wilcox, Maine*

## Cisterns weren't on the official's agenda?

COUNTRYSIDE: Let me tell you about an experience I had years ago while living in Torrance, California.

I received a letter from some "water" organization telling about how they were monitoring the water wells in some of the Los Angeles area and if I wanted to be on the mailing list, I should return the card. I did that and for the next 1 1/2 to two years I received a "report" on the work that they would do, how they had to shut this well and that well down because they were pumping salt water, and how they put a barrier on a few wells so they would stop pumping salt water.

The last letter I got, they wrote about conserving water because our rainfall for the last year had been so low. I wrote back to them explaining they should have a city ordinance that all houses and apartments have a cistern in ratio of the roof area. That would give jobs to truck drivers hauling dirt, cement workers, plumbers, electricians, etc., and when the cisterns were dry the relay would switch back to city water.

Well, they took me off their mailing list, which makes me think they

do not really want to save water. What do you think? — *Delaine Bleich, Illinois*

## Suggestions for Ball Canning

COUNTRYSIDE: When I received my July/August issue I rifled through it quickly on my way back from the mailbox. My eyes lighted on the product review for the Ball FreshTech Automatic Home Canning System. I went immediately to the 'net to check it out further and within an hour one was on its way to me. Uncharacteristic, as I usually stalk a new purchase of this sort for quite a while before committing, but I had to have it. Having now used it four times, I pass along my impressions.

First of all, I like it and I'm glad I have it and I will use it. For the smaller household, for convenience, for not heating up my kitchen it's a wonderful toy. That said, I think Ball is shooting themselves in the foot if we are to believe the instruction manual.

My pre-purchase impression was that anything you water bath can could be done in this unit. The instructions indicate that only the specific recipes they provide may be done. For instance, the batches of strawberry jam I ran through are ok, the batches of strawberry rhubarb jam and sauce are not. Seriously? If indeed only the recipes provided may be used then this is a completely and utterly worthless device, unless you feel \$300 to put up your annual strawberry jam is a good deal. The machine has six categories (jams and jellies, sauces, tomatoes, salsas, pickles and fruits) and six settings to be used for each of those categories. And yet if I followed the letter of the law I couldn't make currant jam or can cherries? I bet they'd faint dead away if they knew I used my Tattler lids.

Here's what I suggest Ball do toot-sweet: post what the settings for the categories are and a how-to chart to figure them out for our own flexible use. If it helps your lawyers sleep at night add as many disclaimers per

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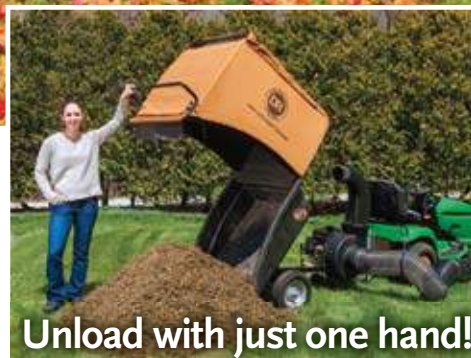
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page as need be. Then this will be a useful, flexible, helpful addition to our kitchens. Otherwise it's a toy at best.

And please *immediately* put out an Automatic Home Pressure Canning gizmo. I'll buy two. — *Sally Anderson, New York*

## Save the waterfowl

COUNTRYSIDE: The other day my mom and I were discussing the chickens she and a friend purchased. The topic of these things fowl reminded me of growing up with ducks and duck eggs, as well as some information I came across as I obtained my degree in livestock and responsible stewardship of the environment.

Along the Columbia River are numerous nesting sites set aside for Canadian geese. These habitats have fish and game professionals tending them to make sure they remain viable for the geese. Part of tending these habitats requires they remove any non-migratory birds (predominantly waterfowl) that are nesting in these areas by any means necessary.

Talking with one of the biologists that had been on site for a number of these occasions, I learned this means in many cases just "stomping on eggs" while still in the nest. The destroyed clutches are left in their shattered condition to discourage more eggs from being laid.

On occasion of tending a habitat, the biologist witnessed an individual feed ducks that were semi-tame. Once one of the ducks was close enough to the individual he reached out, caught the duck and wrung its neck, tossing it into the bed of his truck. That easy; and the fish and game (Washington) experts present did nothing, as it was "a gray area."

So as my mom purchases chickens I can't help but think of all those waterfowl that could have been given a better shot as livestock. The fish and game departments do not have the time nor inclination to do any differently, along the Columbia River or elsewhere. How many of those that read this magazine have raised ducks or other fowl, and have

a better understanding than some “experts”? I think there are many people who could do better than the current effort.

If Washington’s Fish and Game Dept. does not see anything wrong with their current approach for Canada geese habitat, I have to ask what other habitats could have similar issues. This also tells me someone a little more responsible should be checking into such effort. We should be checking into it, those who have the ability and experience. Smashing the eggs of a potential livestock resource is wasteful. Retrieving instead of smashing eggs really could be like killing two birds with one stone. – C. Uebler, Washington

## Brandywine tomatoes have a sketchy history

COUNTRYSIDE: In response to “Big Deal – 12 of the Most Overrated Garden Selections” by Mr. Jeffery Goss, Jr. in the March/April 2014 issue of Countryside.

I was surprised Mr. Goss wrote he considered the Brandywine tomato’s flavor to be “unremarkable.” I’ve grown that variety often and have been very pleased with its flavor. Even though there is no accounting for taste, I wondered if there might be more than mere individual preference behind the wide difference between Mr. Goss’s perception and my own. I did some research. Two telling facts quickly emerged: the Brandywine tomato’s origins are disputed, and more than one variety called Brandywine is currently in circulation.

According to Craig LeHoullier in “Brandywine and Company” at Webgrower.com, we only know one thing for certain about Brandywine’s origin, that the Sudduth Strain of Brandywine “found its way” into Seed Saver’s Exchange in 1982. He suggests several possible progenitors for the 1982 variety, Turner’s Hybrid from Burpee, Mikado from Henderson Seeds, and a Johnson and

Stokes seed named Brandywine. The result, he says, is that “numerous selections” and/or sub-strains are now “out there” (some of which are inferior in flavor or performance), with no easy way of knowing which strain you have.

William Woys Weaver in “Heirloom Tomato Varieties,” *Mother Earth News*, October 4, 2013 seems certain of the true Brandywine’s origins. Based on a catalog description of the tomato, he claims that “it was

introduced in January 1889 by the Philadelphia seed firm of Johnson & Stokes.” Nonetheless, more than one variety uses the original name. He claims that a tomato called “Red Brandywine” is genetically unrelated to the Johnson & Stokes introduction. Another variety derived from Stirling Old German is sometimes called Brandywine. He says neither of these is very flavorful. However, he judges that the true Brandywine “has the lusciousness of a Burgundy



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wine and tastes as though minced parsley has been scattered over it." This accords closely with my own perception of Brandywine's flavor.

I couldn't find any Internet references to the taste tests claimed by Mr. Goss to judge Dester and Vorlon tomatoes superior to Brandywine. I wonder if he would share those sources. — *Don Perkins, Missouri*

## National Debt vs. Deficit

COUNTRYSIDE: AS I read the two letters to the editor regarding an article in the July/August 2014 issue, while I do not dispute the numbers involved, perhaps your readers should understand where those numbers come from and what they mean to the taxpayer. I do not have the exact percentages, but rather this letter is meant to help educate people on how a federal budget and national debt work for those who are unfamiliar with the nuts-and-bolts of these issues. My real

complaint with both these letters is that they compare full terms for four presidents with the figures for only two years in one letter and one term in the other for President Obama. This is misleading, especially for readers who do not understand the make up of the national debt.

First, the numbers noted by R. Chancy and Larry Larson, are probably fairly close to accurate. What they leave out is not that both parties are responsible for this debt, but where much of it comes from. A significantly large portion of it is debt to the Social Security Fund, us the taxpayers, to repay the loans taken by the U. S. Government to fund tax cut deficits in revenues, starting with Reagan. We are in fact the single largest creditor this nation's government has, at over 50% of the national debt. The remainder is debt incurred to pay for the running of this government for 315,000,000 people. Much of it is in the form of treasury bonds, both small savings bonds owned by individuals and large bonds traded

on the bond exchanges and held by corporations and other nations. All of this debt was approved by Congress as part of their budgets, for 17 of the last 20 years while the GOP controlled the fiscal purse strings, and while Bush Jr. ran two wars with appropriations bills off the budget books to the tune of over \$3 trillion dollars plus interest.

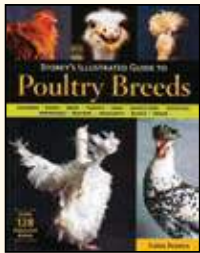
Second, the increasing debt is the result in large part for the increasing interest on this debt that is not being paid. Our government officials gripe about paying our debt but it is a debt to us that they are griping about, the debt to the Social Security Trust Fund which is why the fund is in financial trouble.

Third, in his first term, President Obama shows the largest jump in national debt, but this figure is misleading. It reflects the money allocated and borrowed to meet the TARP and Reinvestment Acts (a hopefully one-time event). While the second was about \$877 billion, the TARP bill was just as big and was actually approved by Congress under G.W. Bush, so it should be allocated accordingly. In addition, President Obama put the costs of Afghanistan and Iraq back into the budget along with its accrued debt. So when you look at the increase of debt under Obama it is not as it appears. In addition, in the first term of Mr. Obama, the largest jump in national debt was the result of these actions and a reflection of the true accruing debt from all the previous debt. I read, during my research for my doctorate in public policy, that in his first four years, President Obama did not add as much to the national debt as President Bush had in his, but that his budgets reflected the true nature of our fiscal state as the result of large tax cuts and two wars, not new debt.

The national debt is very different from the national deficit, and many people do not understand the nuances involved. Simply put, our national debt is how much money we owe on money we have already borrowed and spent, and the only way to reduce it is to pay the debt off, not roll it over year after year

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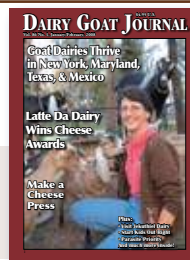


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Our national deficit is the result of the difference between what we manufacture here and sell overseas and what we import into this country. This national deficit will continue to plague us and drag down our economy as long as we allow... corporations to shelter income overseas. It is enabled by tax loopholes and cuts for the corporations and very wealthy, things like tax inversions that allow companies to change their homeland nation to avoid U.S. taxes. Until we force the wealthy and corporations to pay not only their tax share based on international profits, close loopholes, and force corporations to bring back U.S. jobs at a living wage, we cannot have enough money to buy products to make our economy grow nor manufacture enough product to export at a fair price, thus we get fluctuations in the national deficit, which we must borrow money to make up for the losses. Addressing the national deficit does not necessarily fix the problems of national debt — only tax reform and demanding that Congress, which actually controls the budget and all fiscal allocations not the President, act responsibly instead of following the failed economic policies of pre-WWII Austrian economists.

When you consider that under Bush, Jr. the Congress that ran up the debt was controlled for six years by the GOP and under Obama by the GOP for the last four, that makes a total of 10 years out of 14, so perhaps when we are talking about national debt and national deficit, we might want to look more closely at Congress rather than Presidents, and also note that under President Obama, the national deficit has gone down faster than at any time since WWII, and that means that the national debt should also be dropping, as reflected in the figures for the second years in Larry Laron's letter. — Rev. Devon J. Noll, B.S.B.A., M.P.A., New Word Universal Fellowship Church; [www.newworduniversalfellowship.org](http://www.newworduniversalfellowship.org)

## Goat School event

**Missouri:** Nov. 1-3 Goat School Missouri will be hosted at Kinder Acres in Rogersville (just 12 miles east of Springfield and 45 miles northeast of Branson) as part of the 2014 Goat School on the Road, run by Ken and Janice of GoatSchool.com.

Sat/Sun topics will include choosing your new goat, management, breeding, kidding, medical problems, nutrition, hoof trimming, milking, tattooing, necessary paperwork, record keeping, and a special segment on emergencies. We will cover numerous aspects of raising goats for meat, fiber and dairy as well as a milking demonstration. Mon: A Goat Cheese and Goat Soap class. Lunch daily and Goat School Manual included.

More info: 417-860-8246 and <http://goatschool.com/id18.html>.



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# Securing your valuables with HIDDEN storage solutions

By JIM COBB

**A**s you continue to become more independent on your homestead, sometimes you will find yourself acquiring quantities of items you may wish to hide from casual view. These include long-term stored foods, firearms and ammunition, perhaps precious metals you're storing to use for barter down the road. While there are many different styles and sizes of home safes, the better quality ones are pricey as well as cumbersome. A DIY solution for keeping your valuables secure is to utilize hidden storage areas within your home.

Before we get into recommended storage solutions, let's first go through a few of the places the bad guys often look. Sometimes, when we think we're being clever, we're actually just making things easier for thieves. Remember, criminals watch movies too. Under the bed is one of the first places they will look, as well as between the mattress and box spring. Closets are always rifled through and

dresser drawers are dumped out on the floor. Bookcases will be swept clean, exposing anything hiding on the shelves behind the books. In the kitchen, cereal boxes will be emptied as that's another common place to hide cash and other valuables. And here you thought you were being so sneaky, hiding your goodies in a box of Cheerios, right?

There are many locations in the average home that lend themselves to storing items out of sight, while still keeping them reasonably accessible. Let's start in the basement and work our way up. Go downstairs and look up. If your basement is unfinished, you're probably seeing pipes, wiring, and HVAC ducts. Do you think anyone would notice an extra run of that large diameter PVC pipe? You can purchase several feet of it fairly cheap at any home improvement store. Don't forget to pick up the hardware for hanging it. If possible, try and match the same style or type of hanging hardware as what is currently being used in your basement. Rig up the PVC in an area

of the basement ceiling on the opposite side of the home from where the existing pipe is located, otherwise it will look odd. The inside of this PVC pipe is great for canned goods, rifles, and ammunition. Seal each end of the pipe with a threaded cap so you can easily open it and remove the hidden items.

If you have a finished basement with a drop ceiling, you can still hide things above the ceiling tiles. Don't rest them on the tiles themselves, of course, as odds are your stashed items will just crash through. Instead, consider using L brackets to install a narrow shelf between the floor joists above the drop ceiling.

Just about everyone has boxes of out of style clothing, old dishes, and other junk sitting in the basement. Consider adding a few more boxes, these containing some of your valuables. Label the boxes as "Grandma's old clothes" or something else along those lines. You could even go so far as to toss a few old shirts or something on top of your goodies before closing the box, just in case someone peeks

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<sup>†</sup>Comparison based on average 4G speeds, comparison will vary based on actual speed.

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### Who would expect to find anything valuable in a ratty old suitcase?

inside. Few burglars or other ne'er-do-wells are going to be interested in Grannie's nightgowns or Dad's work pants. Helpful hint, though—if you are hiding something heavy, such as ammunition, make sure the box is labeled as something equally heavy, like coffee mugs. (*Ed. note: You might want to let family members know those boxes should never be given away, as they too may think it's just a box of old coffee cups!*)

Moving up to the main living areas of the home, flat items, such as currency, can be hidden in photo frames, between the picture and the cardboard back. As long as the frames themselves appear to be cheap plastic, thieves will likely leave them alone.

The kick plate running along the bottom of your kitchen cabinets is usually removable. Many items can be stored under the cabinets, then reattach the kick plate using magnets or hook and loop patches so you can easily access your hidden treasure.

If you're handy with tools, you could add an extra baseboard heat vent. Simply buy the size vent you'd like, then cut out the drywall where you want to install it. Hide your stuff in the wall itself, and then cover with the vent. A variation on this theme would be to cut out a square of drywall, starting at the floor and going up, then, after storing your items, just cover the hole with a bookcase. Of course, moving a full bookcase to access your items wouldn't be an easy task but in a true emergency you could just tip it over.

Inside most closets, just above the

door, there is space where you can install a small shelf. While perhaps not as secure as some of these other suggestions, few people ever look directly above the door inside the closet.

Speaking of closets, if you have one that is particularly deep, and you know what you're doing, you could construct a fake wall at the back of it. Place your long-term food items or your precious metals in slim boxes on the floor or on homemade shelves, then frame the new wall in front of them, sealing it all in with drywall. Paint the wall to match the rest of the closet interior. Naturally, this isn't a great solution for anything you want access to any time soon. When the time comes, though, simply use a hammer or mallet to smash through the drywall and remove your stuff.



**If you're going to bury your treasures, you might want to have a "dummy" of scrap metal buried above it.**

Let's continue our journey through the home and head up into the attic. If this is where you store all of your old junk, the stuff you are convinced you just can't part with despite the protests of other family members,

you can utilize the fake box trick we talked about when we were in the basement. If, on the other hand, your attic is nothing more than insulation and joists, all is not lost. Fairly light items could be hidden within or under some of that insulation. However, bear in mind that attics are subject to wide swings in temperature—very chilly in the winter and blazing hot in the summer. Don't store anything here that cannot handle those temperature variations.

In addition to hiding items within the home, you could also consider constructing and burying a *cache*. A cache is simply a waterproof container in which you can store items such as firearms or survival supplies, then bury for long-term storage. Most commonly, caches are made using PVC pipe. One end is sealed with a cap, items are placed inside, then the other end is sealed. It is important to be double darn sure you know exactly where it is buried so you can find it later. One way of doing so is triangulating the location between three very stable landmarks—a tree, a boulder, and a property marker stake, for example. Another option is to use a uniquely shaped rock, one easy for you to identify, to mark the location. The rock should be fairly large, of course, and not easily moved. One more word of caution regarding caches. If you have metal items in the container, they could be easily found through the use of a metal detector. What you can do to help mitigate that risk is to bury the cache deep, say three feet or so. Cover it with a foot of dirt, scatter some bits of scrap metal, then finish filling the hole. The hope, of course, is a searcher finds the scrap metal and assumes that is what triggered the metal detector.

Hiding your valuables around the home can actually be rather fun. It reminds me of when I was a kid and I wanted to keep my "treasures" safe. Of course, back then those valuables consisted of things like cool looking rocks and horror comics I didn't want my parents to see. The point is, get creative and think outside the box when it comes to hidden storage locations. 🍂

Alternative energy:

# Is windpower for you?

## A few questions will help you decide

BY DAN FINK

My interest in wind power started with a particularly brutal winter up here off-grid in the Colorado mountains at 8,200 feet elevation. It howled, it roared, the windows rattled, the snowdrifts piled up and we all felt those little jets of piercingly cold air through every crack around every window and door we hadn't sealed properly. "There *must* be some way to put all this energy to good use," I thought, while hauling yet another sled load of firewood to the stove. And as it turns out, small wind turbines can be very effective in generating electricity – if you install the right one at the right location in the right area for the right reasons.

A decade later, I'm still an advocate of small wind energy. In many situations, it's an extremely effective complement to solar energy. But nowadays when I talk with potential clients, I find myself spending more time talking them out of wind power entirely instead of designing a system for them. Why? Most people overestimate how much wind power potential they have available, are interested in it for the wrong reasons, and underestimate both their own electricity needs and the scope of the project required to meet those needs.

Are you a good candidate for wind power?

If you:

- Live in an urban or suburban area;

- Buy electricity from the utility and don't have a battery backup system;

- Want to use wind power just to reduce your household utility bill;

Then you'll likely be disappointed in the expense and long payback time of wind power. I'll be trying to talk you out of the whole idea, and talk you into a solar electric system instead.

*On the other hand, if you:*

- Live in a remote or rural area on a property of at least four acres;

- Have battery backup electricity for your home or business;

- Live off the grid or are planning to do so;

- Already generate some of your own electricity from solar;

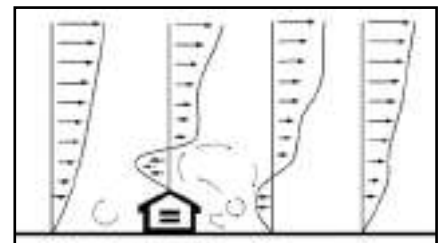
Then you might be a good candidate for a wind turbine.

**Location, location, location**

You wouldn't mount a solar panel in the shade, would you? It would cost you a lot of time and money, with very little energy output to show for it. Just as solar arrays need bright, direct sunlight to live up to their potential, wind turbines need smooth, fast-moving air. Friction with ground cover and turbulence from nearby obstructions slow down moving air, and wind speed is the number one factor in how well a wind turbine performs (see the sidebar "How wind power works," pg. 27).

Those are the primary reasons that small wind power in urban and suburban areas has never been very effective, and likely never will be.

Anyone from a cold, windy climate has seen strategically-placed snow fences that cause drifts to form around the fence instead of on the road, and in desert climates sand fences are used the same way. The fences are obstructions to slow down the wind and make it turbulent, so that snow and sand drops out. Buildings and trees work the same way with wind turbines, drastically reducing power output and causing extra wear and tear on the turbine (photo 1).



#1: The effects of ground friction and turbulence on wind speed and direction. The longer the arrow, the faster the wind.

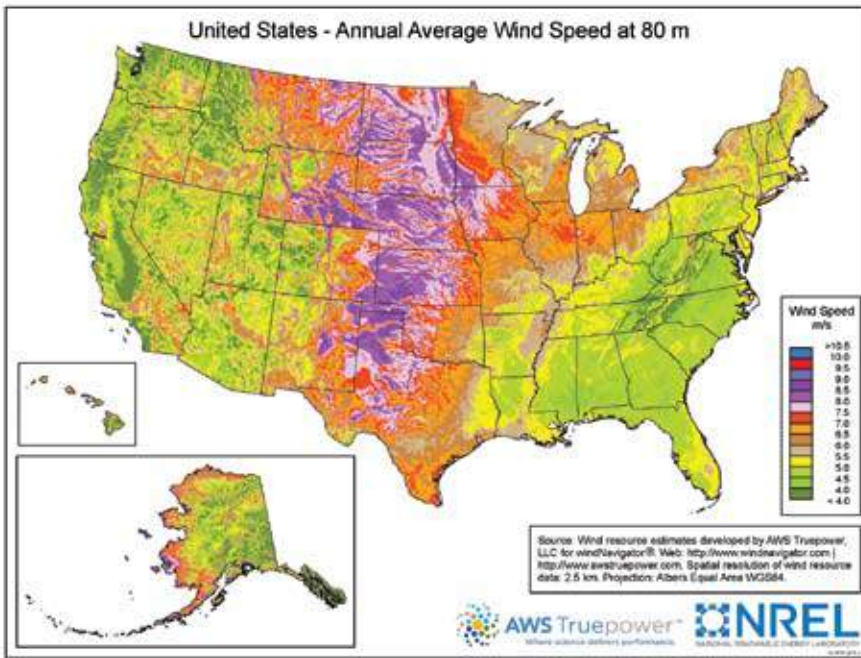
The only solution is to fly the turbine well above any obstructions. A general rule in the small wind industry is 30 feet above anything within 500 feet in any direction, measured from the lowest point of the rotor. That presents a variety of problems in more populated locations! Many local statutes limit the height of towers for any purpose to 30 or 40 feet without a variance – not nearly high enough to meet the 30/500 rule – and a vari-

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**#1.5: U.S. annual average windspeed map.** Photo courtesy National Renewable Energy Laboratory

ance usually requires a lot of red tape, a hefty fee and permission from all your surrounding neighbors. Local statutes often include setback rules, too: a tower must be located so that if it falls, everything lands at a minimum distance from any structures, roads or property lines, and that required distance may be up to 200 percent of the tower height.

A tower tall enough to get you above the 30/500 rule is also a significant investment. Plan on spending at least as much on building and installing the tower and foundation as you spend on the wind turbine itself. There are a variety of tower types, each with advantages and disadvantages. See the “4 types of towers” sidebar for more details about how to get your spinning hardware up in the smooth air where it needs to be. Off the grid, we can cheat that 30/500 rule a bit, to maybe 30/300 or 20/300, but also remember — trees grow!

### How much wind do I really have?

Thanks to decades of sun intensity monitoring data (which factors in weather patterns) solar site assessment has become a very simple and precise science, to the point that some solar installers will even offer

performance guarantees in kilowatt-hours per month for the systems they design and install. Not so with small wind power. Because of terrain effects and the difficulty of measuring wind speed and turbulence at different heights above the ground, wind site assessment is far more tricky.

The critical number from which you can make monthly and annual



**#2: A professional-grade logging anemometer.** Photo courtesy of APRS World [www.aprsworld.com](http://www.aprsworld.com)

energy output predictions is called “annual average wind speed,” which also factors in all the hours each year the wind is not blowing at all. An annual average of 10-12 mph or better is considered good, though in remote, off-grid situations lower average speeds might still be useful. If you are planning a significant investment in wind power, it pays to hire a trained wind site assessor for an evaluation. But there are a few tactics you can use on your own to get a reasonable idea of how much energy you’d be able to produce from a wind turbine at your site.

**Wind maps:** The U.S. Department of Energy publishes detailed wind maps for every U.S. state, and these can give you a general idea of your wind potential (#1.5). But remember, these maps are usually for 50 to 80 meters (164 to 262 feet) above the ground — much higher than your tower will likely be — so actual wind speeds closer to the ground will be much lower.

**Anemometers:** Inexpensive home weather stations that include a logging anemometer are available at your local big box store, and can also give you a general idea of what to expect. More capable professional loggers are available too (#2) in the \$600 range. But unless they are flying at the intended height of your prospective turbine, the data won’t be very accurate. On the bright side, if data from near your rooftop shows good wind, it will get much better as you go higher. Also keep in mind that there are good years and bad years for wind; one of the reasons solar site assessments are so accurate is all the decades of ground station data, while your anemometer might only be logging for a year or two at most.

**Tree “flagging”:** Sometimes the best wind site assessment information is just plain common sense. If there are conifer trees near your proposed turbine that look like photo 3, you can be quite sure that’s a windy site, and from which direction the prevailing winds blow! More subtle tree flagging (photo 4) is still a good indication of steady winds. There’s even a chart, called the “Griggs-

# 4 types of wind towers

There are four basic types of towers for small wind turbines: Monopole, freestanding lattice, guyed lattice and tilt-up. However, the most important question to ask yourself is, are you trained and willing to climb a tower, or would you rather be trained in how to tilt a tower up and down? Many experienced turbine techs will tell you that climbing is far safer, if you have the proper training and equipment. Training is needed for tilt-up towers too, as they can be very unpredictable and must be laid out and rigged very precisely to be safe when raising and lowering.



#8: Monopole

**Monopole:** These are the most aesthetically pleasing of all the tower types, with their smooth, tapered lines and no guy wires, and take up the smallest “footprint” of land when viewed from above (#8). Some can be tilted up and down, others require a crane and are designed to be climbed. They are also by far the most expensive type of tower, and require a massive pour of steel-reinforced concrete for a foundation. They also

become exponentially more expensive as you go higher, compared to other tower types.

**Freestanding lattice:**

This design also needs no guy wires, and is designed to be erected with a crane and climbed. The footprint is larger than a monopole but the foundation can be less massive, with a smaller steel-reinforced concrete footing under each of the four tower legs (photo 9). Less expensive than a monopole, but more expensive than other types.



#9: Freestanding lattice

**Guyed lattice:** The least expensive tower type, still with a relatively small footprint (photo 10). Most are designed for climbing only, though some can be tilted up



#10: Guyed lattice

and down. A crew of two (a climber and a ground support person) can erect these towers with no crane needed by using a movable davit as each tower section is lifted by a pulley from the ground. Thanks to the three guy wires and anchors, no concrete is required, not even for the tower base, though in some situations (for example rocky ground) concrete is needed if helical guy wire anchors cannot be driven into the ground or the base is on uneven terrain. These towers are popular with ham radio enthusiasts, and so are often available used as surplus.

**Tilt-up tube:** Despite their dangers and disadvantages, most people installing small wind turbines prefer tilt towers for the simple reason that the wind turbine can be installed and maintained on the ground. The danger comes during raising and lowering; a change in wind speed or direction, or a poorly laid-out base, guy anchors or guy wire lengths can cause a disaster in the blink of an eye (I’ve been there and done that.) Tilt-up towers have the largest footprint of any tower type,



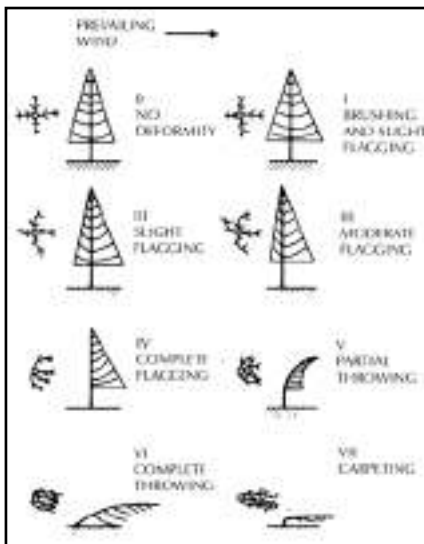
#11: Tilt up

and the entire area must remain clear of brush or other obstructions for raising and lowering (#11). No concrete is needed except in the same special cases as guyed lattice towers. Raising and lowering is usually done with an electric or hydraulic winch, though a truck or tractor can be (perilously) used in a pinch for shorter towers.

I advise getting professional training before tackling a tower project, no matter if you’ll be climbing or tilting. There are dozens of trainers offering tower climbing classes across the U.S. thanks to the proliferation of cell phone towers and big wind farms. There are a smaller number of outfits offering tilt-up tower training, but classes are still available. If you can’t find one in your area, try contacting a local small wind installer and ask if you can tag along and learn the next time they raise or lower a turbine. The crew might appreciate your presence, even if just for fetching tools and keeping bystanders away.



#3 & 4: Examples of not-so-subtle and subtle tree flagging.



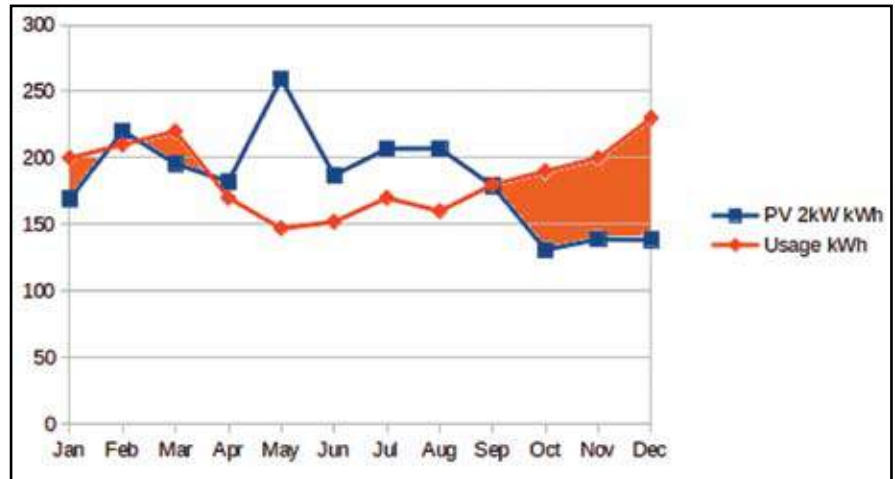
#5 The Griggs-Putnam tree flagging index.

Putnam Index," (#5) that predicts annual average wind speed based on conifer tree flagging.

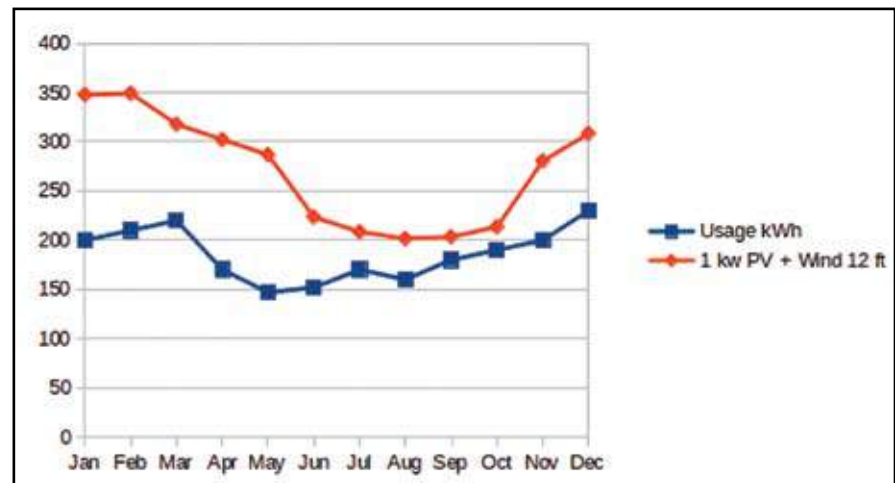
**"Wet-finger" wind prospecting:** "It's always windy around here." This gets many folks into trouble by overestimating their wind potential, as they tend to remember only those times the wind is blowing strongly, and forget all about the far longer periods of calm air.

**Off the grid or on it?**

If you live off the grid or are planning to move or build there, wind power can be an excellent complement to solar. And the farther north



#6: An off-grid case study in upstate New York, with the shaded area showing frequent generator run time because the 2 kilowatt solar array is not adequate in winter.



#7: The addition of a wind turbine to this off-grid system was a perfect match to cover extra wintertime loads.

you are, the more important it can become. On the grid, electricity use and generation are usually combined into a net figure, with excess solar generation during the flush summer months credited towards excess usage during winter. Off the grid, though, what's most important is having enough power to keep the lights on *right now*, tonight, and for the next couple days. The combination of reduced solar gain plus more lighting and heating loads is a real double whammy in the winter off the grid.

Take a look at #6, showing a solar versus wind case study for an off-grid home in upstate New York, which has few sun hours in the winter due to high latitude, and many days with poor sun intensity due to the "lake effect." The shaded area shows those

times of year when the existing two-kilowatt solar array couldn't keep up with energy usage, and lots of generator run time was needed. Adding more solar would have helped, but would have also resulted in excess energy in summer with nowhere to store it when the battery was full. Now, add a wind turbine instead of doubling the solar, and look at #7. An off-grid wind power success story!

On the grid, I'm afraid the tale is vastly different. The wind turbine needed to power a typical American home (1,000 kilowatt-hours per month) on a site with good wind resources and a tall tower would need a rotor 23 feet in diameter, and cost over \$60,000 installed. Smaller turbines, like a 12-foot diameter model typically used off the grid,

## How wind power works

The phrase may be “light as air,” but air does have mass. At sea level, a cubic meter of air weighs about 1.2 kilograms. As the sun shines on different areas of the earth, large masses of air are heated unevenly, and they move to try and achieve equal temperatures. That’s wind—and in fact you could say that wind power is just a roundabout way of collecting solar power.

A wind turbine works by slowing down this moving air, and transferring its energy into a spinning shaft that drives an electrical generator, pump or grain mill. But it can’t do the job with 100 percent efficiency, because...that would stop the wind! In 1919 Albert Betz proved that at most we could harvest 59.26 percent of the power available in the wind; beyond that point air simply moves around the collector instead of through it. That number is called the Betz Limit.

The formula for how much power is available in the wind is very simple, but has some interesting effects. It is:

$$P = \frac{1}{2} \cdot d \cdot A \cdot V^3 \cdot cP$$

where P = power in Watts, d = air density in kg/m<sup>3</sup>, A = rotor swept area in m<sup>2</sup>, V = wind speed in m/s and cP = coefficient of power, which can never exceed the 0.526 Betz Limit. (Most small wind turbines operate at a cP of 0.25 to 0.35, or 25 to 35 percent efficiency)

Notice that “cubed” for wind speed? It’s the most important number in wind power, as it means that if you double the wind speed, you get eight times the power. That shows the importance of flying wind turbines on tall towers, where wind speeds are faster and less turbulent, and also shows why wind turbines must have a system to protect themselves in high winds. A wind turbine that hums along at 1,000 Watts output in a 30 mph wind will have 8,000 Watts driving the shaft in a 60 mph wind, which would burn that 1,000 Watt alternator to a crisp.

Swept area is also extremely important. Because of the “squared” in area, doubling the diameter of a wind turbine rotor gives you four times the power. That shows the fallacy of tiny, rooftop-mounted wind turbines whose manufacturers claim “it can power your whole house!” Nope, the collector is too small unless you live in a doghouse.

Note that “swept area” refers to the area of the circle that the blades and rotor spins in, not the actual surface area of the blades themselves. The latter is called “solidity,” and while it may seem counterintuitive, less blade surface area is actually far better for generating electricity. Rotor designs with many blades—like common farm water pumping windmills—spin at slower speeds but with more torque. That’s great for moving a heavy pump shaft up and down, but very inefficient for generating electricity, where faster rotation means better efficiency and a lower-cost generator.

I’m often asked about converting old farm windmills into electricity-producing wind turbines, but unfortunately it’s a thankless task. Gearing is required to boost the RPM, and the friction from that robs the turbine of most of its low-wind performance. Since low winds between 7 and 20 mph are by far the most common, that’s a significant reduction in energy output. Best to leave farm windmills to the job they are best suited for: pumping water. In fact you’d actually be hard pressed to find a successful wind-electric water pumping system, as farm windmills do a better job at lower cost.

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are far less expensive (under \$10,000 installed) but at a 10-12 mph average wind speed site on a tall tower would typically produce only 250-350 kilowatt-hours per month—\$25 to \$30 worth of electricity at an 11 cents per kilowatt-hour rate. Not a very impressive payback against your utility bill. But *off* the grid those kilowatt-hours are pure gold dust! They often come in exactly when you need them the most, and they are competing against very expensive energy from your gas-fired backup generator instead of cheap, subsidized utility rates.

There are some exceptions to the poor prospects of on-grid small wind. The first is if you have a battery backup system for critical loads. The wind turbine may not make a significant difference in your monthly utility bill, but if there's a grid blackout—and even more crucially an *extended* blackout that effectively puts you off-grid for days or weeks—it could be a key element to keeping your homestead running until the power comes back on.

Another exception is if you have an agricultural application that uses a whole lot of power each month, racking up an extensive bill. An investment of \$60,000 to \$100,000 and up in wind power (photo 8) might seem extreme, but if your monthly electric bill is over \$5,000, the return on investment can be relatively rapid if you have a good site with steady wind. In fact, the small wind industry has been rapidly moving towards larger, more expensive wind turbines for just this sort of application, as “grid-tied backyard small wind” with

## KidWind

### Wind for kids!

If you're interested in wind power, there's a good chance your kids will be too. The Kid-Wind Project ([www.kidwind.org](http://www.kidwind.org)) can provide you with a

plethora of free educational material, and even better, a whole bunch of inexpensive parts from which your kids (or your class) can build and experiment with safe, tiny wind turbines that can run in your backyard or in the wind from an electric fan. They hold the “KidWind Challenge” at schools across the country each year, but beware—oftentimes, the kid's little turbines out-perform those designed by their teachers!



the intention of offsetting household utility bills turned into a boondoggle of dissatisfied customers and bankrupt wind turbine manufacturers over the last few years.

Fortunately for those of us who live off the grid and have modest energy needs, a few of those companies still remain and still build relatively inexpensive small turbines for the relatively small off-grid market. You can even consider building and flying your own wind turbine (“Build your own,” page 30), though it's not a project for the feint of heart. In addition to lower cost, though, one big advantage of building your own turbine is that if it breaks, you already know exactly how to fix it and can easily get replacement parts!

### How to choose a wind turbine

If after you've done your homework and decided that wind power

will help your power situation, that you have a windy site, figured out how big a wind turbine and how tall a tower you need to meet your energy needs, if you even have enough room for the tower type of your choice, get approval from local authorities if needed (and don't forget to talk to neighbors, too), then it's time to consider which turbine to purchase. There is a daunting array of choices, and I hope these guidelines will help you quickly winnow out the wheat from the chaff.

- Choose your turbine size by swept area, not manufacturer's “rated output”;
- Ask a professional small wind installer what brand of turbines he installs and why, and which brands and models to avoid;
- Check to see if the turbine has been certified by the Small Wind Certification Council ([www.smallwindcertification.org](http://www.smallwindcertification.org)), and if not ask the manufacturer why;

- Find out how long the manufacturer has been in business and how many turbines they have operational in the field;

- Ask the manufacturer to put you in touch with a happy customer who can show you at least a year's worth of energy output data and maintenance records, or maybe even let you visit the site to see and hear the turbine in operation;

- Inquire about the length of the warranty, plus what is covered and what is not. (Continued on p. 30)

An advertisement for Mt. Healthy Hatcheries. At the top, the company name "MT. HEALTHY HATCHERIES" is written in a large, red, serif font. Below it, in smaller text, is "Since 1924" and "Home of the healthiest chicks." Underneath that is the slogan "A Hatching Tradition for over 80 Years!" in a bold, black font. The central image shows several fluffy, yellow chicks. On the left side, there is a vertical list of products: "CHICKENS", "DUCKS", "TURKEYS", and "GAME BIRDS", each in a different colored font. At the bottom, it says "Hatching year round!" in red, followed by "Order On-line or Call Us Toll Free" in green. The phone number "1-800-451-5603" and the website "www.mthealthy.com" are listed at the very bottom in a large, bold font.

## Vertical Axis Wind Turbines

If you're an avid boater, what would you say if someone came up to you on the dock and told you they'd invented a radical new **boat propeller** design that:

Is far more high-tech than this old-fashioned kind #13.



#13: Boat propeller

Is slow and quiet;  
Works in both calm and rough water;  
Doesn't kill fish;  
Pushes more water;  
Is revolutionary and patented;

Will change the world of boating forever;

And finally, all you have to do is invest some money now so they can

build their first one to test, so you'll be "in on the ground floor" and get rich when it hits the market?

If you're like most boaters I know, the response would be "Go jump in the lake."

Unfortunately, exactly such claims spring up



#14: HAWT. Photo courtesy Bergey Windpower, [www.bergey.com](http://www.bergey.com)

like crabgrass each year for new Vertical Axis Wind Turbine (VAWT) designs, mostly on "tech" websites that purport to show the latest and greatest upcoming gadgets. Just substitute birds for fish in the claims above. These turbines spin on vertical shafts as opposed to more typical **Horizontal Axis Wind Turbines (HAWTs)** and use different blade designs. They purport to be the new high-tech replacement for "old-

fashioned" wind turbine designs like #14.

For the rest of the story...

**Paddle wheels** (#15) were a very early form of mechanical boat propulsion, dating back to the first century A.D.



Photo 15: Paddlewheel. Photo courtesy Mississippi Department of Archives and History

Their numerous disadvantages included: complexity, fragility and the very large size needed for adequate thrust, making them very expensive to build and maintain; poor performance in rough water; and poor efficiency due to their slow rotational speed and limitations in paddle design. Upon the invention of the far more efficient and inexpensive screw propeller, paddle wheels faded into history, and are now used almost exclusively for tourist ships because they are an aesthetically pleasing piece of the past. Their only advantage, shallow draft, was overcome with the invention of waterjet drive in the 1950s.

**Vertical Axis Wind Turbines** (#16) were a very early form of machine to harvest wind power, dating back to the first

century A.D. and used for grinding grain and pumping water. Their numerous disadvantages included: complexity, fragility and the very large size needed for adequate power output, making them very expensive to build and maintain; poor performance in both turbulent and smooth winds; and poor efficiency due to their slow rotational speed and limitations in rotor design. Upon the



#16: A vertical axis wind turbine (VAWT)

invention of the far more efficient and inexpensive three-bladed, lift-based Horizontal Axis Wind Turbine, VAWTs faded into history, though working examples still exist in remote parts of Persia (now Iran and Afghanistan) and few other parts of the world.

So why do VAWTs seem to be making a comeback now, while paddle wheels remain in obscurity? My theory is simply that we boaters are a far more cynical lot than the general public. I for one wouldn't invest in a new propeller or stink bait formula without proof that it actually works, like watching my buddy using it to catch more fish. Always refer to the wind turbine buyer's checklist here before pulling out your wallet—and do it even more carefully if the design is new, unusual or makes spectacular claims.



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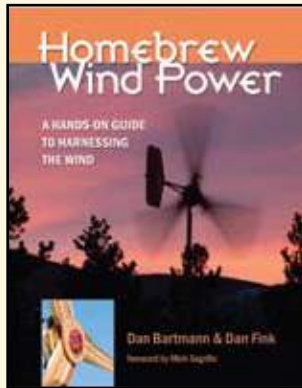
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## Build your own wind turbine?

When I first became interested in wind power in the 1990s, there were only a couple turbine options available, and they were far beyond my budget at the time. "These things don't look very complicated," I said. "It should be easy to build one." So I joined forces with neighbor, machinist and gearhead extraordinaire Dan Bartmann and we built a small wind turbine based on a surplus tape

drive motor. And it worked! For about a week. Then it blew into pieces scattered about the yard. We kept trying, had some minor successes but never came up with anything that lasted more than a few months at best.

Then we finally got to meet Hugh Piggott of Scoraig, Scotland, took one of his classes in the U.S. and learned how to design and build a wind turbine that holds together for years (with regular maintenance). Hugh's "secrets," which he shares freely worldwide, are simple: Build a heavy, sturdy machine for durability, as the weight doesn't matter once it's on top of a tower. Design the rotor and blades carefully so the turbine spins at low RPM, making it both quiet and reliable. Build the permanent-magnet alternator from scratch so it generates good power at low RPM, instead of mucking about trying to adapt surplus equipment. And build in a very simple, (almost) foolproof "furling system" that automatically turns the turbine out of the wind when wind speeds get too high, then rotates it back into place when winds become more reasonable.

We took those ideas and ran with them, and ended up with our book *Homebrew Wind Power* (2009, Buckville Publications LLC, ISBN 978-0-9819201-0-8). It gives step-by-step, illustrated instructions for building your own wind turbine, in addition to all the relevant theory that explains how wind power works and how turbines are designed. If you are interested in building your own turbine, this book is an essential addition to your library. Also be sure to get copies of Hugh Piggott's books *Windpower Workshop* and *A Wind Turbine Recipe Book* to complete your education.

You can look at Hugh's work on his website [www.scoraigwind.com](http://www.scoraigwind.com), and ours at [www.otherpower.com](http://www.otherpower.com). Hugh offers week-long hands-on wind turbine building classes at his location in Scotland, as well as France; we offer our classes two or three times a year at various locations in the U.S. Consider these workshops "small wind boot camp," and expect to come out exhausted, exhilarated and with all the knowledge and skills you need to build your own turbine at home.

### At the end of the day...

Small wind power is not for everyone. In fact, I think it's not for at least 99.99 percent of the population, who would be much better served by solar energy. But in the right off-grid location and working to complement solar energy, small wind turbines can be extremely effective. Plus, they are dynamic, exciting and fun to watch,

making solar look pretty darned boring by comparison! ❁

*Thanks to Dr. David Laino of Endurance Wind Power for the humorous inspiration behind this comparison, from the lecture he gave at the Small Wind Conference in Stevens Point, Wisconsin in June 2014 ([www.smallwindconference.com](http://www.smallwindconference.com))*

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## The machine shed:

# BOAZ

## A Chinese mini-combine

BY BENJAMIN HOFFMAN

Bob Mowdy and I have independently fooled around with small grains for about 10 years. Last year we began working together and sharing the frustrations. We both want to grow grains for bread, cereal and livestock, on a small scale, but unless you go back to scythes or sickles for harvesting and winds and buckets for winnowing, you are stuck. Gravely walk-behinds cut too low and gather too many weeds, and sickle bars on tractors push too many stems over. There are plans on the internet for modifying chipper-shredders for threshing and several designs for winnowing, but harvesting, other than scything (difficult for lefties), is a problem.

Bob ran across some Chinese mini-combines on the internet, and we investigated importing one. Currency exchange, customs, EPA regulations, dealing with people you don't know and unknowns finally steered us to Eddie Qui, of EQ Machinery, in Medford, Massachusetts. Eddie imported a slightly larger machine that we wanted, but we bought BOAZ from him. BOAZ is a three-wheeled machine, 11-feet long, with a 13 HP gasoline engine, and weighs in at 948 pounds. We preferred diesel, but the close proximity of exhaust gases to the operator makes gasoline exhaust "safer." Cutting width is 2.62 feet (one meter) and productivity is about 1/4 acre per hour (when everything runs properly). The machine was designed for rice and wheat, and therein lies the problem with tall grains like rye and triticale.

When cutting grain, you need to cut higher than the weeds in order to reduce the load of greenery and weed seeds going into the threshing chamber. BOAZ has two cutter-bars, both adjustable in height. The upper bar cuts the grain heads and can raise as high as 42 inches while the lower one cuts the stubble four-to-six inches above ground level. Having had problems with machine harvesting in tall weeds, we were especially pleased with the cutting aspects of BOAZ.

We had seen videos of BOAZ in wheat, barley and rice, and it worked well. But we tried it in five- to six-foot rye. The rye had been broadcast, the stand was not dense, the weeds were well developed and rain had loaded the grain heads with water and caused the spindly stems to droop in all directions. Even when raised to the maximum elevation, the intake reel pushed many of the stems away and the cutter bar attacked stems at an angle and pushed many of them to the ground rather than cutting them. Add to that a poorly adjusted butterfly valve controlling airflow to the bag, and we ended up with 1/3 of a bag of grain and 2/3 of chaff until we got smart and adjusted the airflow.

Our rye patch was a demo for several knowledgeable observers who were machine-savvy. Though disappointed with cutting rye, we solved several problems in learning to operate the machine as well as some problems inherent in the machine's design. Subsequently, we have harvested oats and two different varieties of wheat. The butterfly valve that separates grains from chaff needs

to be fine-tuned to the size/weight of grain kernels and the chaff. If the grain is too green, the chaff may hang onto the kernel and it will be passed out with chaff.

The basic machine design is simple and straightforward and the quality of components seems good. There is a hand clutch to engage the threshing mechanism and a hand clutch for driving the machine. When threshing, although the manufacturer recommends full throttle, we have found that 1/4 throttle works well with the larger engine. First you engage the thresher, then the main drive, and once everything is turning, the engine speed can be lowered. Hand clutches to control each front wheel are conveniently mounted on the handlebars. Elevation of the grain head uses a hand-pumped hydraulic cylinder next to the operator's seat and elevation of the stubble cutting bar is done with a hand control that cannot be confused with any other controls. The seat (and angle of attack) is raised and lowered with a small crank in front of the driver's seat.

As a model train fan, I have been impressed with the quality of tiny drive trains and electric motors made in China, but less impressed with the alloys and welding in some garden tools. And BOAZ has sacrificed some niceties in order to keep the price down. Operating conditions are not attractive to a typical American worker, and low cost means minimal operator comforts. No air conditioning and stereo. Getting into the seat is a bit more difficult than getting into the saddle on a horse with his tail in the air and the three-wheel design leads to some problems in control when backing. To steer, the operator uses his feet to direct the single rear wheel and independent hand clutches (no brakes) for each front wheel. Initially, unless you have strong legs, and are prepared, if you hit a small obstacle while backing, the wheel can turn 90 degrees before you can control it.

We identified several potential problems and safety hazards with BOAZ. First, there are three speeds



The BOAZ tackles a small test plot of rye.

forward and one reverse. Use third gear only on a paved road, *after* you are experienced with second, and wear a safety helmet. To control the throttle, the operator must bend down and reach the side of the engine for the fuel control lever, an awkward, potentially unsafe situation. This can be easily remedied. When speed must be cut in an emergency, the operator must shut off the ignition or throw in the hand clutch—neither is good for the engine. Another minor problem is the close proximity of the exhaust to the operator’s left knee, partially solved by a seven-inch exhaust extension.

Normally, I buy farm machinery in the crate and assemble it myself or with Bob’s help. Eddie Qui insisted that his personnel were the only ones qualified to do so, and lacking a good English operator’s manual, this was somewhat true. However, after about four hours of use, we removed all of the guards and covers from the machine, cleaned it thoroughly and lubricated it. Many of the zerk (grease) fittings were loose, some were missing and two that should have been 90 degrees were straight and could not be serviced. Several bolts were loose, one was missing, and one had no nut. While it would be nice to have zerk fittings (eight) for the pickup reel, oiling every four hours with summer-weight bar and

chain oil (which has a “sticker”) should suffice.

If you buy a BOAZ, there are three absolute musts before you operate it. First, do not accept delivery without an operator’s manual written in understandable English. Second, read the owner’s manual and become thoroughly familiar with the machine. Third, remove all guards and covers, check every zerk fitting, look for missing zerks/bolts/nuts, grease all zerks, and oil all friction points that do not have zerks; also do this after every four hours of use. Keep a supply of straight, angled and 90-degree, 6 mm zerks on hand. Some models were shipped with an idler pulley drilled for a zerk fitting but with insufficient clearance for it. Though there are grease gun fittings that can service this pulley, have a local machine shop make a three-inch pulley to replace the two-inch pulley on the machine.

In addition to operating as a self-propelled combine, BOAZ can do stationary threshing of small grains, dry beans and corn. For safety in stationary threshing, the intake reel and both cutter bars should be disconnected, a fairly simple task.

We did a cost estimate on BOAZ based on several assumptions:

- The machine will last 20 years, averaging eight hours/day for six days on winter grains, six days on

spring grains and four days as a stationary thresher (dry beans and corn), a total of 16 days or 2,560 hours over 20 years. At its rated productivity of 1/4 acre/hour, or about 10 bushels/hour, it should produce 25,600 bushels. At a purchase price of \$5,000 (ignoring interest and insurance), depreciation (\$1.95) and taxes (\$0.41) over 2,560 hours are \$2.36 per hour.

- Operating costs—fuel (\$3.50/gallon), lube (30% of fuel) and maintenance (60% of depreciation) would average about \$4.39 per hour.
- Total costs are \$6.76 per hour.
- At its production rate of 1/4 acre/hour, cost per acre is \$27. Divide that by the yield (bushels) per acre to get cost per bushel.
- *Note:* these costs ignore labor and movement from field to field.

So why did Bob and I stick our necks out on BOAZ?

- We both want to raise grain and have played around with a variety of tools for 10 years, without success.
- We have several small fields, ranging in size from 0.25 to four acres, some so small you can’t turn a regular combine (if you could attract one).
- We don’t like GMO grains and those grown with chemicals.
- We hope to meet our own needs for baking, cereals and livestock feed.
- The economic condition of this nation is such that a useful machine is worth more than money in the bank.

Though our initial use of BOAZ has not been totally satisfying, we are optimistic. We need good stands of grain about 36-48 inches high, low weeds, patience and experience. But harvesting grain is just the tip of the iceberg. Because of the high rainfall and humidity in our area at harvest time, we must harvest grain early, with a high moisture content, but have built two simple dryers. Now we need to build a grain winnowing/cleaning device.

To see BOAZ in action, check out [www.eqmachinery.com](http://www.eqmachinery.com) for videos of the machine. BOAZ—A Chinese Mini-Combine. 🌾

*The apiary:***A journey with  
the bees****~ Fall & Winter ~**

BY TOM THEOBALD

**T**here has been a dramatic rebirth of small-scale beekeeping in the past several years.

I say rebirth, but the fact is that beekeeping never died. It may have languished for a while, but we've had a continuous chain of bees and beekeepers stretching back to the dawn of agriculture. There's little doubt that our earliest ancestors would have exploited the honey bee from the beginning for its sweet treasure and endure a painful price, and in fact the rudimentary beekeeping of 10,000 years ago may have been one of the first hints of agriculture, our first tentative steps into husbandry.

What I propose is to take readers through a year of beekeeping. I recognize that I will likely be speaking (writing?) to a varied audience, from beginners to beekeepers of long experience, and I'll do my best to offer something of value or interest to all of you. When I talked about this project with my friend Kim Flottum, editor of *Bee Culture Magazine*, his comment "Hmm, you're going to do all this in a few thousand words?" It's a tall order, but I think we will have some fun along the way.

There's an old adage in beekeep-

ing that if you ask five beekeepers the same question you will get six different answers. The details vary with the telling as to the number of beekeepers or the number of answers, but you get the idea. While you might not always get a variety of answers, the reason rests with beekeeping itself. One of the attractions to beekeeping for many of us is that it is an interesting blend of art and science; sometimes more art, sometimes more science, some of us are better at the science part, others at the art. The really good beekeepers have both sides mastered, and it can take years. Many aspects of beekeeping are open to interpretation and there may be wide variations, that's the art part, but often even the science may be controversial, as you will see in future articles.

**S**o under the five beekeepers/six answers heading, let me give you a little of my beekeeping history so you know from whence I speak. I got into beekeeping when I was 32, I'd spent the first 10 years of my working life in the corporate world and I had decided that I just couldn't spend the rest of my life inside. I wasn't sure just what it was that I was going to do next, I had a wife and a young daughter so I had to figure something out, but I had a little money set aside and was

going to just decompress for a while and see if anything turned up.

**W**ithin two months beekeeping entered the picture. We had a large garden and a colony of wasps that were nesting in one of our birdhouses that made me think of bees. I knew a little about bees, but not much. When I was a kid a neighbor had a small apple orchard and a few colonies of bees, but my involvement with bees consisted of going over to the man's orchard with a few of my little friends, picking a few green apples, pitching them at the hives then running, a picture in our little brains of an arrow of bees in hot pursuit, just like in the cartoons. In reality the bees probably didn't even notice our mischief and I've often looked back and wondered what course my life might have taken had that neighbor taken me aside and showed me the bees.

In the beginning I was just like many of the new beekeepers of today. I thought a colony or two to complement the garden would be all I wanted. While I was decompressing I could learn something new. Things quickly got out of hand.

I'm one of those people who likes to check things out before I leap, and I spent about two hours one August afternoon talking with ex-commercial



**Beekeeping is making a resurgence around the U.S.**

beekeeper Ted Johnson and his wife. Both were nearing 90, they had kept bees together in a small commercial operation for more than 50 years; Ted was a shoemaker by trade.

I came away that afternoon with two things that would change the course of my life. The first was the clear impression that those two had spent their lives doing something they loved deeply. They spoke of their days of beekeeping with an unmistakable reverence, and I suspected that there was much more to this beekeeping thing than I had imagined. The second was the name of the man who had what remained of their operation. I called him that evening, offered my help in exchange for experience and worked with him through the honey harvest. That October I bought half of his colonies, 40 I think it was, and over the next several years took over the business and made it my own. I bought 25 packages the following spring (the start of new colonies, I'll have more to say about these in future articles) and by my first fall as a beekeeper I was up to 100 colonies.

I peaked at about 200 colonies, small by commercial standards, but I reasoned that with input from other sources I could create a viable business based on the sale of honey, and now here I am 39 years later having done it. It wasn't easy. It took sacrifices and compromises by the whole family, but we did it, it took lot of

hard work and lots of risks, but it has been 39 interesting and rewarding years.

If it had bee in it, I did it. In 1975 I was one of the founders of the Boulder County Beekeepers' Association and served as their president for 30 years. I served two terms as vice president of the Colorado Beekeepers' Association, and I was the last County Bee Inspector in the State of Colorado, a position created in 1890 and finally retired in 2000.

For those of you who plan to follow along, those are my credentials. I don't have all the answers, in fact I'm still discovering some of the questions, but I've learned a few things along the way and I'll share some of what I've learned with the readers—a little science, a little art, a little history.

As I said at the beginning, there has been a significant increase in the popularity of beekeeping in the U.S., in part because of the publicity over the decline of bees. The first downturn came in the late 1980s when the parasitic varroa mite showed up in North America. The first identification was in 1987 or 1988 in Florida, but it wasn't long before it had spread across the country, I first found it here in Colorado in 1995. The varroa mite was devastating and we lost a lot of managed colonies and an estimated 90 percent of the feral colonies, those in hollow trees and the walls of buildings. We lost a lot of beekeep-

ers in those first years with varroa too. Over time we began to come to terms with the varroa mite, but the losses continued, in fact escalated, and the beekeeping industry began to recognize that the varroa mite wasn't their only problem, that there had been some major changes in agricultural technology that were having an effect on the success or failure of their bees.

It was at this point that the problem of bee losses began to get increasing public attention and one of the results has been a growing interest in small-scale beekeeping, surprisingly not coming just from rural areas, but much of it from the suburbs and small acreages surrounding the cities. When we founded the Boulder County Beekeepers in 1975 we had 12 beekeepers at the first meeting. During the early years membership hovered around 25 or 30. Today we have more than 200 members and are growing.

I suppose I've had a hand in this. I've taught parts of an eight-week beginning beekeeping class for the

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past 13 years, but I'm amazed at the explosion of interest in hobby beekeeping. Many of those newcomers don't last long unfortunately. After

a year or two of frustrations and disappointments they join the ranks of ex-beekeepers. A good portion of the rest will hang on for a few years,

and from the multitude who start, a very few are hooked. They are the beekeepers of the future and they will likely be involved with bees in one way or another for the rest of their lives—like me.

## Thinking OUTSIDE the (BEE) box

Since 1865, people have been keeping bees in “traditional” stacked boxes. The height of the Industrial Revolution in America sparked the mechanization of all kinds of things, including the beehive. The stacked box



Langstroth design placed priority on honey production and became a key component to small farm agriculture. The box has not changed much since then, but agriculture sure has. Modern agriculture now consists of massive mono crop fields requiring billions of bees to be trucked in to pollinate during the few weeks of flowering. Chemical applications supply all the nutrients for the new seeds and have eliminated the need for bee-friendly cover crops that once revitalized the soil, so these thousands of truckloads

of stacked boxed bees are having trouble finding good food in our fields. Couple that with new systemic toxins engineered into the crops called Neonicotinoids, and you have the reason for the massive bee die-off. Bees are struggling in the fields, sparking a need for urban bees and a new push to re-think beekeeping.

A new urban population wants to help bees and rediscover that ancient reverence for the bee, but not everyone can or wants to handle all the heavy lifting and work of stacked box design. It's also harder to find safe places to locate those hives in densely populated urban areas because of how many bees are disturbed during inspections. Ancient Greeks used Top Bar Hives (TBH) 2,500 years before this “traditional” box design. Today a number of small startups have started manufacturing these long, cradle-like TBH designs expressly for urban beekeeping.



Beepods.com, went a step further envisioning a new system that promotes education and a closer relationship with the colony. They teach natural “load balancing” techniques for keeping many hives healthy within a neighborhood using tools, display equipment, inspection forms and a Harvest Box for swarm catching, queen rearing and honey harvesting (storing honey bars in case the bees need them in winter). Beepods are even designed to work with stacked box hives.

Shepherding any beehive in the city, whether a stacked box or a top bar hive, can help the bee population thrive once again. Stacked box hives produce a lot of honey, are hard to work with, and need buffer space. Well-made top bar hives are safer and easier to use, contribute to bee population growth and pollination while giving medicines, education and some of the best honey because it's straight from the comb. It's all about choices and helping people think outside the box.

To learn more about natural beekeeping and Beepods, please contact us at [sales@beepods.com](mailto:sales@beepods.com) or 608-728-8233. 🐝

My objective in this series of articles is to take readers through a year with the bees, a year of beekeeping, to share some of the things I've learned along the way with experienced beekeepers, but more importantly, to share this special world with those who know little about bees but who are curious, and those who think they might like to become beekeepers themselves.

By November most of the northern states are into winter, the bees have been prepared and aside from feeding light colonies there isn't too much to do with the bees but wait and hope. For those of you who think you want to be beekeepers this is the perfect time to start and I will tell you what I tell nearly every budding beekeeper who calls me—hit the books.

Most libraries, even small ones, have a good selection of books on beekeeping. There are a lot of recent books and old standbys, there has always been a strong current of writing in beekeeping and beekeepers have documented their craft from the beginning. Read as many of these as you have time for and before too long you will begin to get a good feel for what beekeeping requires and what your responsibilities will be. You will also be able to compare all the advice that is out there and sort the good advice from the bad.



Not everyone should be a beekeeper, as fascinating and rewarding as it can be, and the best time to find that out is before you start. If you have a budding beekeeper in your life, check out some of the bee books and put one or two under the tree at Christmas, or if the budding beekeeper is you, put some of the books on your letter to Santa.

When I started beekeeping I devoured just about every book on beekeeping that I could get my hands on, but I have to admit, I haven't kept up with most of the newer books, and

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there are a lot of them. I will recommend a few of the old standards and some newer ones for you to start with.

One of my favorite books, now long out of print, is *The Joy of Beekeeping* by Richard Taylor. This is the “why” rather than the “how” of beekeeping, a thoughtful and poetic look at bees and beekeeping. It should be the first book of every beekeeper and hopefully someone will bring it back into print again.

*The Hive and the Honey Bee*, first published in 1889, updating the original book by L.L. Langstroth published in 1853. (Available free from [guenberg.org](http://guenberg.org).)

*The ABC and XYZ of Beekeeping*, first published in 1887 and updated periodically since. It is a wonderful book full of beekeeping advice both new and old and many of the

entries that haven’t been changed or rewritten are reminders of a much earlier time.

And finally, one modern one, a good one for newcomers to start with, *The Backyard Beekeeper*, by Kim Flottum. (Available from the *Countryside Bookstore*, pg. 80.)

In addition, in these days of the internet, there is a wealth of information out there—newsletters, blogs, beekeepers’ associations and bee clubs, far too numerous to list, but a little exploration will turn them up.

To the hobbyists and beginners, do your homework because in the next article I want to get down to more of the nuts and bolts—why you should be a beekeeper, why not, and what you will need to get started. I’m looking forward to the journey and hope you are too. 🐝

## Homestead business:



Stacia Guzzo

*New business takes off, thanks to bees*

BY KELLY WEILER

When Stacia and Robert Guzzo packed up their cramped Los Angeles apartment in late 2009, they had little idea of what lay ahead. In the months leading up to the move, they had started taking steps toward greater sustainability—eating seasonally and canning the surplus, becoming more proficient in sewing and handiwork, starting a tiny box of homegrown vegetables on their porch—but they were ready for more.

The couple was moving to the rural mountain town of Tehachapi, California, and was bidding good-bye to the conveniences of a big city in exchange for a more self-sufficient, hands-on way of life. In doing so,

they hoped to develop a deeper appreciation for the work of their own hands as well as the work of the people and animals around them.

The Guzzos soon settled into their new rural lifestyle—they acquired 17 chickens, found a method for protecting their vegetable boxes from the squirrels, made jelly from their own grapes, and participated in the local farmers market. But their first homesteading love affair turned out to be with bees.

“Hobby beekeeping was at the top of our list when we moved to Tehachapi,” Stacia recalls, and they certainly wasted no time diving in. By January 2010 they had ordered equipment, and by February they had ordered the bees. Their first hive was established in May and it wasn’t long before Robert looked forward to his bi-weekly inspections of “their girls,” as they called them.

Although first-year hives don’t typically yield a honey harvest, that beginner’s year was a fortuitous one and their new hive gave them almost 20 pounds of honey.

With the honey also came surplus wax, which Robert carefully drained, cleaned, and dried. Those first batches of wax would soon open some unexpected doors for the Guzzo family. Stacia melted it down, and after a bit of research developed a lip balm recipe. Before long, both friends and local shops were asking to purchase her lip balms in bulk. Stacia developed more products over time—including lotion bars, herbal salves, and natural deodorants. Her



Clay mask kit

hobby quickly turned into a thriving local bath and body business.

In November 2012, Stacia started teaching soap and lip balm making classes. “Making my own skin care is such a big part of my life now, but I never would have dreamed it could be possible just a few years ago,” she says with a smile. The idea for Handcrafted Honey Bee was born, and in January 2014, the Guzzos launched a new business selling do-it-yourself skin care kits—with the business name paying respect to “the girls” who started it all.

Today, Handcrafted Honey Bee sends DIY kits all over the country. Stacia is realizing her goal of making DIY skin care easy, fun, and accessible, and the Guzzo family has been able to share the thing that brought them to the country in the first place: the joy of creating things with their own hands. And they have the bees to thank for it. 🐝

*Handcrafted Honey Bee kits can be found at: [www.HandcraftedHoneyBee.com](http://www.HandcraftedHoneyBee.com). Stacia’s beeswax lip balms and other products can be found at: [www.TehachaBee.com](http://www.TehachaBee.com).*

Livestock health:

# Caring for small stock ORGANICALLY

BY ANDRE LEU

I am a great believer in integrating animals into all farming systems and have always kept a range of livestock on my farm, especially small stock. Current research shows higher yields in organic farms that have animals integrated into the system. Traditionally most farming systems had animals as a key part of their system such as ducks and geese with rice; sheep, goats and cattle with wheat, barley and other grains; and chickens with orchards and vegetables. This has largely been lost with industrial-scale agriculture where crops are produced without any livestock and animals are factory farmed in cruel confinement systems. These factories feed their animals with antibiotics and hormones to push fast growth, treat

the diseases with antibiotics and toxic synthetic medications, and use a range of toxic insecticides for internal and external parasites.

The scientific literature has raised serious concerns about the rise of multiple antibiotic resistant microorganisms that are causing untreatable infectious diseases for people, the effects of the various growth hormones causing endocrine problems, particularly with children and the toxicity of the insecticide residues to both the animals and the people who eat their meat, milk and eggs.

The experts in conventional farming state that it is not possible or profitable to farm animals without this concoction of synthetic poisons. However there are millions of good organic farmers around the world, including the U.S., who are rais-

ing thousands of different breeds without using these artificial toxic chemicals.

So how is it done?

## Prevention is better than cure

The most effective way to reduce the health and environmental risks from pesticides, antibiotics and growth hormones is to replace them with non-chemical methods. Organic farming is not a system of neglect. It negates the need for these synthetic chemicals by using cultural and ecological management systems as the primary control for pests, weeds, and disease, with a limited use of natural biocides of mineral, plant, and biological origin as the tools of last resort.

Where animal treatment products



Healthy soil produces healthy plants that produce healthy animals.

are used in most organic systems they are from natural sources and are permitted to be used only if they rapidly biodegrade, which means that there are no residues on the products that people consume. By using cultural and ecological methods as the primary management tools with the aims of firstly preventing pests and diseases and secondly controlling them, the use of these natural products is minimal. Research shows that where these natural biocides are used in organic systems the amounts are over 90 percent less than the synthetic pesticides used in conventional farming.

Some veterinary medicines, such as vaccines, are permitted. In the rare event where the natural systems are not working, people should have an animal treated with the appropriate medicine to ensure the humane treatment of animals. In most countries these treated animals are prohibited from being used to supply organic food. However in my experience, people with good animal husbandry systems never have to do this.

It is essential to start with the key principals. By getting these right most of the problems associated with keeping animals disappear.

### Soil health

The first fundamental principle is that healthy soil produces healthy plants that produce healthy animals. Soils that are deficient in nutrients and/or have poor structures, produce plants that are deficient in the minerals, vitamins, proteins, enzymes and antioxidants that are needed by animals. Animals that eat this deficient feed will suffer from a range of deficiencies and will be more prone to diseases and pests.

It is essential to correct nutritional mineral deficiencies, ensure good levels of soil organic matter and a high level of biodiversity in pastures, especially legumes.

There is a range of very good books on building soil health for animals. My personal favorites are the *Albrecht Papers*, and books by Jerry Brunetti and Gary Zimmer to name a few. Pat Coleby has very informative



Cleanliness is vital to livestock health.

books on how to treat animal pests and diseases by correcting nutrient deficiencies.

### Allow animals to express their natural behavior

Stressed animals are more prone to pests and diseases. Treating animals humanely is critically important to maintaining good animal health. Animals must be able to freely express their natural behavior. This means animals should be allowed to graze and forage on pastures, chickens should be allowed to scratch, forage and dust bathe; ducks and geese should be able to bathe and paddle in water; goats and sheep should be able to browse and hogs should be allowed to root up the ground and wallow. Animals should be protected from weather extremes with adequate shade and shelter in hot, cold and windy conditions. There should be adequate feed and water available when they want it. They should not be kept in overcrowded conditions where they fight, bully and hurt each other. There needs to be adequate space for the animals that are lower in the hierarchies to have safe refuges and free access to food and water. They also need to be protected from predators such as dogs, foxes, hawks, eagles, snakes etc. They should not be hit, whipped or shocked by electric prods. Training them to move into sheds, new pasture, into vehicles, etc., should be by positive reinforcement by using rewards such as their favorite treats like molasses, apples, etc.

### The correct breeds

It is important to get breeds that are adapted to the climate and conditions. Fortunately most of the common breeds seem to be adapted to a wide variety of climates, however some breeds are more resilient than others. The best way to get locally adapted breeds is to purchase them locally.

One of the most effective ways to avoid having to treat livestock for pests and diseases is to select the most resistant stock and only use them for breeding. This way you will develop animals that will thrive in your farm environment and rarely have to treat them for illness and parasites, etc. For instance, in organic farms in Australia we have bred cattle that are resistant to ticks and buffalo fly, sheep that are resistant to fly strike and dairy animals that are resistant to mastitis. We have bred poultry that are resistant to the main diseases and selected livestock that do not get adversely affected by intestinal parasites. This is an important key in ensuring healthy livestock and reducing the costs and inputs needed to care for livestock.

### Quarantine and cleanliness

Preventing pests, diseases and new weeds is another key principle. New animals should be quarantined in a dedicated area and are not introduced to the rest of the stock, until it is clear that they are free of pests, diseases and weeds. This will stop other animals from being infected and any weed seeds in their manure, hoofs and coats that germinate can be easily managed within the confines of the quarantine area.

Cleanliness is essential. Ensure that animals are not unduly exposed to their manure. Many pests and diseases are spread by manure. Good hygiene has been essential to prevent diseases in humans and it is the same with animals. For the same reasons why people ensure that our housing, water and food are not contaminated by our feces and urine, we must use the same principles with our animals. It always saddens me when I see animals in confinement systems that are treading or rolling in their manure.

Ensure that all housing, perches and yards are regularly cleaned and that there is enough clean bedding so that animals do not walk through their fresh manure and urine. Design your systems so that animals are not forced to be contaminated by their refuse. This is especially the case with hogs. They are the cleanest animals when they have enough space. They will use one corner for their manure and leave the rest of the space completely clean.

**Holistic system approach**

High density, short time periods of rotational grazing is one of the most effective ways of building biodiverse pastures, reduce weeds, break disease and pest cycles as well as improving soil quality. See books and papers by Allan Savory and others on holistic and cell grazing.

Multi species grazing is a proven way to effectively manage pastures to deal with weeds, control pests and improve soil. Cattle, horses and geese will eat mostly grass; sheep and goats



Monitoring your animals' health will nip problems in the bud.

are browsers and will eat many of the weeds. Chickens and ducks are excellent at eating the insect pests such as grasshoppers, army worms, ticks, beetle larvae, etc., as well as picking on a range of plants. Read books by Joel Salatin as an example of a highly successful system.

It is possible to teach geese, es-

pecially Chinese geese, and some breeds of ducks to eat the weeds in preference to crops by feeding the young chicks on the weeds so that they develop a taste for them in preference to the crop. They can be used in multi-species grazing systems to control weeds in pastures. Until recently, Asian farmers did this for

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Highly biodiverse pastures are preferred over single species pastures. Research is being conducted into numerous species of plants that are effective vermifuges for internal pests, correct mineral deficiencies and improve the immune and digestive systems. Examples are chicory and wormwood, however it is worth getting *Holistic Veterinary Care* by Jerry Brunetti and Hubert J. Karreman for a comprehensive list.

### Internal pests

The first rule is to start with healthy stock free of internal parasites and diseases. The key is rotational grazing, never allowing the stock to graze the ground cover to the bare soil. The eggs of most parasites and the spores of many diseases lay dormant in the soil, where they have been deposited by the manure of infected animals. The other key point in rotational grazing is to ensure that there are several months of resting to break



the lifecycles of parasites in your region to ensure an adequate rest period. It always amazes me that many people who raise animals do not understand that animals should not have to eat pasture plants next to their own manure for the same reasons we do not eat from tables that are covered with our own feces. It is important to rest the paddock with enough time to break the pest and disease cycles, by not giving them host animals to complete their lifecycles.

There are several effective natural vermifuges, and I would recommend getting good books on this. My favorite is using diatomaceous earth. This is non-toxic and comes from the silica skeletons of diatoms. The dust is like sharp broken glass for the parasites and it kills them by cutting them up. Diatomaceous earth can be easily mixed with feed, licks or drinking water and it will not harm animals. Regular dosing with it will keep animals free from these pests and break their lifecycles.

### External parasites

Breeding for resistance for ticks, flies and other external parasites is the most effective way to deal with them. However for livestock that are not resistant there are numerous ways to treat them without using toxic residual insecticides.

Allowing poultry to dust bathe in clean dry areas is very important as this is their primary method to deal with these pests. I like to add diatomaceous earth to the dust bathing areas. It will kill lice, ticks, etc. Other animals can be dusted with these. Rubbing posts that are covered with hessian, canvas or other coarse fabrics are effective for goats, sheep,

cattle and horses. My preference is to add tea tree oil (*melaleuca alternifolia*) or eucalyptus oil to the fabrics as these essential oils are effective insect repellents and soothe any itchy skin problems. (Ed. note: Tea tree oil is toxic to cats!) The livestock quickly learn to use these rubbing posts to get relief from the pests.

### Constant monitoring and mentoring

Organic farming and animal husbandry is a knowledge-based system. One of the wise old sayings in farming is, "The footsteps of the farmer are the best fertilizer." Constant monitoring of the farming system is essential to prevent problems before they occur and correct problems in the early stages if they occur. There are numerous good books, some of which have been mentioned previously, on how to manage animals organically. It's worth reading them to get a wealth of methods to implement on your property.

One of the best things a person should do is join a local organic organization to meet other producers to learn from their experiences. There is no one "correct" way to raise animals organically, however getting advice from a person who has solved the problems is one of the best ways to manage pests, diseases, reproduction, growth rates and to deliver good outcomes. Proven local experience is the best guide on how to adapt your production system to the unique conditions of your property.

*André Leu is the author of the new book, The Myth of Safe Pesticides (September 2014). He is President of International Federation of Organic Agricultural Movements (IFOAM), the world umbrella body for the organic sector. He was the Chair of the Organic Federation of Australia (OFA), the peak body for the Australian Organic sector and Chair of the Far North Que. He and his wife, Julia, own an organic tropical fruit orchard in Daintree, Queensland that supplies quality controlled fruit to local and international markets.*

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The henhouse:

# Cold temps in the coop

*Is your flock ready for winter?*

By RHONDA CRANK  
FAIRHAVEN FARM

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Here in North Louisiana, we seldom have bitterly cold winters. However, we have had snow and icy rains these past two years, starting in early December! With the coming of fall, we focus on preserving the harvest, winterizing our garden beds, double-checking our firewood supply, and all other sorts of winter preparations homesteaders have to make. So you would think I would have been prepared, right? Unfortunately, I let the cold weather sneak up on me without having my flock ready. As soon as I realized that we had not prepared them for temperatures to dip below freezing at night, I rushed to get my coop ready.

I thought I'd share these tips with you to help get your chickens ready for winter. If I missed anything, shoot me an email so that we can learn from one another. We don't deal with serious low temps, snow, or ice as a norm, so I am sure my northern friends could add more helpful tips.

The first thing you want to do is take a look at your coop. If the roof leaks, fix it. If you have problems with other critters getting in the yard or the coop, make those repairs too. Remember, your coop shouldn't be airtight, especially if you have a larger flock. Chicken manure, respiration, and body heat all leave moisture in the air. Of course, methane gas needs a way to escape, so I have ventilation in both ends of the roof. I put black garbage bags over the doors of my coop, since they are covered with rabbit wire for extra ventilation in the spring and summer.

Secondly, I make sure to put extra hay in the nesting boxes and under the roost. I put hay under the roost for two reasons: (1) It helps to block the wind

that could come through the cracks of the floor and since the manure puts off heat, I like to leave it in the coop over winter. (2) Having the hay under the roost makes it easier to clean out the waste in the spring. Since the chickens scratch through it in the early morning/late evening, air is allowed into the mixture breaking down microorganisms making it ready for spring spreading. We like all things to serve more than one purpose, right?

It's always a good idea to cull out any birds that aren't productive. By this time of the year, you've already culled extra roosters, hens that aren't laying, and any bird that doesn't meet



your standards, but there's no reason not to do a double check for those who don't pull their weight. No reason to feed an animal over winter who doesn't contribute. Better in a pot than out of pocket.

I do free range my chickens in the winter, except on the nastiest of days. Making sure that your chickens have plenty to scratch through will not only keep them healthy and productive, but also keep them entertained. I give them greens from the garden, squash from storage that is a little too far gone for us to eat, and any other kitchen scraps I can. I also put hay in the yard for them to scratch through for entertainment.

Some people don't like the idea of using lights in the winter, but the rule for us here on Fairhaven Farm is, "If it is below 32°F, we use a heat lamp."

(Ed. note: Do be careful with heat lamps – they increase the chance of fire.) I also put their water inside the coop when it is freezing outdoors. This keeps me from having to thaw their water jars every day. We don't use our tank water system in the winter because the lines freeze. I'm sure this list is not all-inclusive, since I don't have a lot of experience with snow and ice.

As farmers, homesteaders, whatever you like to call yourself, preparing our animals and farm for each season is all in a day's work. Hard work? Yes! But fun and rewarding, as you well know. If you have anything to add don't forget to e-mail. ✂

**Some thoughts from a northerner:**

- Solid doors are a necessity on all livestock buildings in the winter. A secondary wire door is fine for fair weather ventilation, but it won't do for sleet and below zero weather and bitter winds.

- Straw makes a better insulator than hay, and it's usually cheaper.

- If you want eggs, lights on a timer are a necessity in the winter. Chickens need at least 14 hours of light to produce eggs.

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## The goat barn:



# Urinary calculi in bucks

By CHERYL K. SMITH

**M**y brother-in-law called one cold winter morning to ask if I could tell him what was wrong with one of their goats. He was standing hunched up, straining and not eating or drinking. Immediately I knew that he had urinary calculi and that things looked bleak for the goat.

They took him to their vet, where they decided to have him euthanized. Although the initial treatment may be successful, in my experience, if a wether develops stones one time, he will continue to do so. Few goat owners are prepared to spend thousands of dollars keeping a wether alive, particularly if its only job is eating brush.

As I later learned, my pre-teen nephew had been responsible for watering the goats. The freezing temperatures required that buckets be refilled many times a day and he had not been diligent in doing so. It was a hard lesson.

If you keep wethers as pets or for brush-eating, be aware that some of them are prone to developing urinary stones (also called calculi). Calculi

are caused by an accumulation of minerals or other compounds that can cause trauma to the urinary tract and bladder and obstruct the flow of urine out of the body.

One reason that calculi are more common in male goats than in females is because of their anatomy—the urethra is a common site for blockage.

Several factors can cause wethers to be more prone to calculi. These include genetics, early castration, diet and lack of water. In terms of genetics, it is hard to know whether a specific wether has inherited a problem with this, because many male goats are used for meat or not registered. Most goat breeders do not keep wethers as pets and they also don't follow up on where the goats went or how they are doing. They may have been sold at auction, or re-sold several times before they develop a problem.

### Age at castration

Wethers that were castrated early are more likely to develop problems with urinary stones. When purchasing a wether as a pet or brush-eater, ask the seller when the kid was castrated. Ideally, in order to allow the

urethra to mature, it is best to wait until at least two months of age to castrate a buckling.

Although I am unaware of a similar study on goats and urinary calculi, a study done in cattle showed that although bulls and steers can both get calculi, bulls are more likely to pass a stone that would obstruct a steer's urethra. This is because the testosterone produced by the bull makes the diameter of the urethra 25% larger than that of a steer. The same is most likely true for bucks and wethers.

### Water consumption

The most important factor in preventing urinary calculi is to increase water consumption. Concentrated urine can lead to urinary stones. Keep water bowls clean and fill frequently with fresh water. During the winter, use heaters or plug-in buckets. Or give them hot water regularly throughout the day to encourage consumption. During the summer, make sure the water is in a shady spot.

Some goat owners have found it effective to give 1/3 cup apple cider vinegar diluted in a cup of water twice a day. For wethers that don't seem to be consuming enough water,

you can try adding a sugar-free drink mix to the water. This will make the water taste better, so they will drink more.

### Diet

Diet is another key to preventing urinary stones. Wethers should be fed grass hay as their main source of food, along with whatever browse they have access to where they live. Alfalfa and other legume hays have more calcium than is healthful for them—and they may develop calcium stones.

Wethers should also not be fed large quantities of grain, as it can lead to phosphate stones. I recommend not giving wethers any grain at all, to be on the safe side. Once they are grown—and even while they are growing—they can get all their nutrition from good hay and minerals.

Free-choice or frequent feeding is also considered to be a factor in limiting urinary stones, because of chemical reactions that affect urine concentration at each feeding. So

make sure your wethers have hay available, or give them small portions several times a day.

### Importance of salt

Increasing the salt concentration in the diet increases water intake, leading to more diluted urine. According to studies in Canada, free-choice loose or lick salt is not effective in preventing stones in male goats that were considered at risk for silica calculi.

They found that mixing the salt directly into the feed was the most effective means of providing it to the animals. (Of course, this is problematic if you are not feeding your wethers grain.) A friend of mine has also had success with spraying hay lightly with a salt-water solution. Another trick is to give some salted corn chips as a treat.

### Ammonium chloride

Many goat owners add ammonium chloride to the diet of bucks and wethers. It should be given at a rate of

1% of the dry matter in the diet. This reduces the pH of the urine (makes it more acidic), which makes various types of urinary stones more soluble in the urine.

I tried adding ammonium chloride to my bucks' food at one time, but they found it very distasteful and weren't interested. This is where a sweetened drink would also be helpful.

One study showed that ammonium chloride given over a long period of time reduced the mineral content in the bones of ewes. It may have the same adverse effect on a wether.

Urinary calculi affect only some goats. Be aware of your goats' health and make sure that they have a proper diet, water and salt. These steps will go a long way toward preventing urinary stones and keeping your goats alive. 🌿

*Cheryl K Smith has been raising miniature dairy goats in the coast range of Oregon since 1998. She authored Goat Health Care (2009) and Raising Goats for Dummies, available from the Countryside Bookstore, 1-800-551-5691.*

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## The goat barn:

# Goat AI

## Experiences from an artificial insemination class

BY DIANNE WILBURN

Two years ago, my son bought two Nigerian Dwarf goats. One thing led to another, and we now have seven Nigerians, two Oberhaslis, and one Navajo Churro sheep. Living in Los Alamos, New Mexico, we keep the animals on a one-third acre lot leased from Los Alamos County and surrounded by 99 other lots mainly with horses. So, yeah, I am the goat lady.

One of the Oberhaslis is mine and the other one is my son's. This past spring, I started looking for a boy-friend for these girls. I found some willing participants north of me in Colorado, about 400 miles away. Doing the math, driving to deliver the girls and then driving back to get them in my 1985 Ford F150 that gets



Speculum with Pozzi clamp.



Bill Knox, the manager.

10 miles per gallon, it doesn't take a genius to figure out that's pretty costly. So, I started reading about artificial insemination. It didn't take me long to figure out that this was something I couldn't teach myself. Learning how to vaccinate for CDT watching YouTube is one thing, but looking for signs of heat, ordering semen, dealing with liquid nitrogen, restraining a girl to do the deed, was way beyond my skill set.

My next question to Google was to see if I could find anyone to teach me. I think I envisioned myself going to some goat dairy farm during the breeding season. I don't remember the words or phrase I searched, but what to my wondering eyes should appear but the North Carolina State University Artificial Insemination

and Breeding Management Short Course. I graduated from NCSU in 1986. So, sign me up! Plus, my parents live about eight miles from campus. That's what you call a win-win.

To anyone else who has had an agricultural mid-life crisis, the next thing one has to deal with is telling people about your next goat thing. I called my husband at work and said, "Guess what I'm going to go do?" I break the news. He says, "That's our 25th wedding anniversary." Oops. Since my girlfriends think I have lost it, I didn't talk to them about my adventure. But then, one of them called wanting me to go on a road trip with her the same days of the class. I told her I was going to North Carolina, but when she pressed me to change my travel dates, I had to fess up.

Off I went. On Sunday evening we were to go to the NCSU campus to check in, receive our course materials, and meet everyone. Before the class, I guessed it would be me and Boer goat producers. Wrong. There were 28 people in the class. Although I am a talker, I didn't meet everyone, but we were quite the mix. There were four or five veterinarians taking the class to expand their knowledge to care for goats and/or adding artificial insemination services to their practice. One lady has a dairy and cheese making business. There were two ladies working in third world countries helping locals expand and improve their agricultural businesses. There were also two people from a dairy in Panama; I think they were a father and daughter, but I never found out for sure. There were a few students: a vet school student, and then a graduate and an undergraduate studying Animal Science. And, as I expected, a few Boer goat producers were in the mix. The remaining students were like me, and more in the mode of getting into goats because of kids or an empty nest syndrome. Their stories all pretty much went like this: "Well, we started with this kind of goat and then so and so gave us that kind of goat and then the kids started to show goats..." and so on.

The class was three days with mornings in a classroom on campus.



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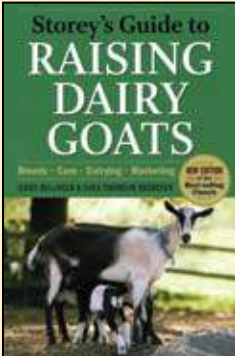


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Dissecting the "girl goat parts."

The afternoons were spent at the small animal ruminant unit a couple of miles from campus. The first day we learned all about "goatie girl" anatomy and how her hormones cycle. What I didn't understand or appreciate was that for artificial insemination, all the science and treatment options to bring girls into heat at the same time. You can go the feed additive route or work with a vet to purchase injectable hormones, the latter proving a greater success rate. In the afternoon at the farm, we had a lesson in dissection which was excellent for understanding the length of the vagina, the annular rings in the cervix that make it hazardous to get through, and then the smallness of the uterus and how you just need to get the tip just inside the uterus and not go up one of the ovaries. We divided up into four groups and each group had about seven Boer goats to practice on so we didn't stress any one doe too much. We practiced with tubular and duckbill speculums and getting a catheter tube through the cervix. The folks at NCSU have tried and tested their success rate using Posse clamps, which requires steadier nerves and hands for a first try. Dr. Char Farin, who teaches parts of the course and

organizes the event, said at the end of the first morning that at the end of the first afternoon we would feel like we couldn't do this, after the second afternoon, more confident and when we left on the third day, we would leave thinking "I can do this." I am

*I realized I could get my girls' cycles in sync, have the frozen sperm shipped overnight, and then have a two-to-three day window to use the sperm...*

glad she said that and I found it to be true.

The second morning, it was time to learn about buck anatomy, semen and semen collection from Dr. Whisnant. Then we learned about dealing with frozen semen. Now this is where I was thinking I would have to buy a liquid nitrogen tank. However, after hearing about Dr. Farin and the technicians at the farm taking semen down to Haiti for work they are doing there, I realized I could get my girls' cycles in sync, have the frozen sperm shipped overnight, and then have a two-to-three day window to use the sperm, keeping it on dry ice in a cooler. I guess my success with that one, or

failure, can be a subject for the future. We practiced our technique the second afternoon using bull semen. With a goat constrained, I figure I will need at least three people: me to insert, one to help me, and then another to be in charge of semen thaw. When I called home that night, I am sure the family was thrilled to learn they were part of the team.

On Wednesday morning Dr. Lugnbuhl from NCSU talked to us about pasture management. Living in New Mexico, I didn't know about the serious issues with worms and their developed resistance. Before the class, I had never heard about FAMACHA scoring and checking your goats' eyelids for anemia. (Google that one.) Then Dr. Nobile from North Carolina A&T talked to us about getting the girls ready for the breeding season and the work of the breeding season. He also discussed profit, which probably gave the Boer goat producers food for thought and gave people like me the thought of, "Wow! You mean some people make money at this?" Bill Knox, who manages the farm,

discussed record keeping. Now that is something I could improve. The third afternoon was time for more practice. We also had the opportunity to learn how to draw a blood sample, great for a novice like me. Then there was the opportunity to prepare a fecal sample

and then look under a microscope for eggs. They had also brought in some very pregnant ewes for us to ultrasound.

I was sad for it to end because I had such a good time. Then back home to New Mexico and time for the breeding season. After the class, I hope to improve how I manage the feeding of the goats. I will also try to do a better job of record keeping. As far as synchronizing the girls, I think I will try feed with MGA. Who knows how many hours I will spend looking for just the right buck or deciding which AI kit to purchase. Would I recommend the class? Only if you agree to take me along. 🍷



*The horse barn:*

# Vital signs

What's normal  
for your horse?

BY HANNAH TIMONEN

Whenever you suspect that your horse is sick or injured, having a knowledge of the equine vital signs can help you assess the seriousness of your horse's condition. Knowing the basics of reading vitals can aid your veterinarian in reaching a solution.

There are seven vital signs that you, as a horse owner, can check for. Become familiar with them and contact your veterinarian with any concerns if your horse seems to be exhibiting any signs of abnormalities.

## Temperature

A normal temperature in horses ranges from 99.5 to 101.5°F. On warm days, there may be slight rise in temperature, but it should still be under 102°F.

Check your horse's temperature by using a digital thermometer. Dab the tip with a lubricant, such as petroleum jelly. Insert the tip into the horse's rectum to a depth of two to three inches and hold it there until the reading is complete, usually signaled by a beep from the thermometer. If you are using a traditional mercury thermometer, hold it in for three minutes.

Read the temperature. Take note if the numbers are out of normal ranges. Less than normal temperatures can indicate hypothermia due to exposure or shock. Above normal temps may indicate heat exhaustion (particularly during hot, humid weather), infection, pain, or exertion. In both types of cases, it is always wise to contact your veterinarian.

Note: Always clean the thermometer with alcohol to reduce the spread of disease.

## Intestinal sounds

While going about your daily horse husbandry tasks, you may have heard rumblings and gurglings coming from your horse's stomach. We often take these sounds for granted, when in fact they can tell us much about our horse's digestive condition. These sounds take on greater importance especially if colic cases are suspected.

Two to four small gurgles per minute is usually the average, along

with one large rumble over two to three minutes or so. You can check by using a stethoscope and listening for at least one minute. Listen at the four different locations on your horse's flanks: One low and one high on each side. Take note that sounds may be loudest just before feeding time, and the volume of sounds will vary from horse to horse.

Lack of intestinal sounds often indicate that there is no gut movement, indicating a case of severe colic or shock. Loud or rather frequent sounds above normal range may mean that your horse is suffering from a mild colic case due to the accumulation of gas or intestinal spasms.

### Gum color

Checking the color of your horse's mucous membranes (gums) can indicate whether the blood is circulating properly throughout your horse's body.

To properly check your horse's mucus membranes, lift your horse's upper lip and observe the tissue just above the teeth. The membranes should hold a light-pink or yellow-pink color.

White colored gums can be a sign of anemia or shock. Dark gums may suggest a case of severe shock or toxemia (heart not pumping properly and/or blood pooling in the gum's blood vessels), which also brings us to the next checking point of the vital signs: Capillary refill time.



### Capillary refill time

While you're checking the gum coloration, check your horse's capillary refill time. This can be checked by raising the upper lip and firmly pressing your thumb against the gums above the teeth. Take your thumb away and count the number of seconds that it takes for the gum color to return to its normal coloring. For healthy horses, it should take no longer than three seconds.

A sluggish capillary refill time can indicate that your horse's circulation isn't functioning normally. A rapid refill time is probably fine, so long as it stays under the maximum normal range.

### Heart rate

The resting heart rate of a horse is a powerful indicator of general overall health. Heart rate can determine a number of things, such as fitness level, or severe health concerns such as shock, poisoning, and hypothermia.

Depending on your horse's fitness level, 28 to 44 beats per minute is a normal average. To check the heart rate, take a stethoscope and place it against your horse's chest under the left elbow. In 15 seconds, count the number of lub-dubs and multiply by four to determine the number of beats per minute.

### Digital pulse

Checking for a pulse is another way to determine whether your horse

is experiencing a disruption of blood flow or inflammation in a hoof. To find a pulse, place three fingers on the inside of the horse's fetlock joint, while resting your thumb on the outside of the joint. Apply gentle pressure and slide your fingers around until you have located a small cord-like structure slip under your fingers. This is the digital artery.

A strong pulse may indicate an abnormality. The more pulse, the stronger the possibility of there being an inflammation of the hoof, such as in laminitis cases. If there is a weak pulse, it's probably normal.

### Respiration

An elevated respiratory rate can be caused by numerous reasons: pain, shock, lung problems, or heat exhaustion. Nervousness and heavy exercise can bring it on, while a lower than normal rate can be caused by shock, hypothermia, good physical condition, or drug effects.

The normal range is 10 to 18 breaths per minute, and you can check by counting the number of breaths taken in a 30 second period. Do this by observing either the flaring of the nostrils or by watching the rise and fall of the horse's chest. Multiply by two to determine the breaths per minute.

### A word about recordkeeping

In addition to keeping a close watch on you horse's health, it is also wise to keep a record of your horse's health history. Keep a notebook or dry-erase board in your tack or feed room for each of your horses and jot down key notes about when your horse has been given vaccinations and when they're due next, any medications the horse is currently being given, deworming schedule, farrier care, feed, and more. Also keep a log of any injuries or illnesses your horse may have developed, when they occurred, and how long it took to heal.

Also keep records such as Coggins papers and health certificates on hand in case of emergency or evacuation. 🐾

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***The horse barn:***

# Hoof care ~ as he ages

BY BRYAN FARCUS MA,CJF  
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Here's a question—how old is *old* when it comes to a horse? It was recently reported that an Irish Draught horse, named *Shayne*, residing at a horse sanctuary near Essex, England passed away at the age of 51. Also, often cited but unconfirmed by the *Guinness Book of World Records*, as the world's oldest horse is a Welsh/ Arab gelding named *Badger* who resided near Pembrokeshire, Wales, reaching the age of 51 until his death in 2004. In addition, widely believed by many but remaining unrecognized by the *Guinness Book* is the oldest horse to have ever graced this earth, a gelding by the name of *Old Billy*. *Old Billy* was said to have foaled in Lancashire, England, and was used as a British barge horse. Apparently, he lived to the age of 62 before his death in 1822.

Whether the legend of *Old Billy* is true or not, one thing is for certain, we are hearing more stories of our domesticated horses living well into their 30s.

Traditionally, it has been a common practice of veterinary medicine to use the condition of a horse's teeth as a standard indicator of his age. As horse owners, we usually don't get all that concerned about our aging equine friend unless we notice that he may have difficulty eating or has lost too much weight. However, a thorough health exam by your vet may reveal other subtle, but equally important, signs of aging. For instance, his feet can offer many clues. As he ages, hoof growth will slow. Generally, I have observed that many horses past the age of 20 tend to show a noticeable decline in their normal rate of hoof growth, which can be equal to extending their re-trimming interval by approximately two weeks. Of course, there are some horses that are subject to certain preexisting conditions, such as chronic *laminitis*, *navicular syndrome*, or *osteoarthritis* that will contradict this theory



After the age of 20, horses normally have a lower rate of hoof growth.

and may need to be revisited by a farrier more frequently. As for the outward appearance of his hooves, many aging horses will develop an exaggerated hoof conformation. Conformations such as *heel contraction*, *underrun heels*, *club footedness*, or *medial/lateral hoof flaring* will become more noticeable and perhaps develop into a cause for lameness if not addressed earlier in his life.

### The golden years, comfort is the key

Like us, the better care our horses receive while young, the better the odds for having a higher quality of life, while aging. One of the main issues older horses will likely experience is hoof discomfort. As he ages, what he was once tolerant of, may now become a main cause of pain. Most commonly, is the issue of extreme body weight. For a much younger, stoic horse carrying

an additional 70-100 pounds may not seem to bother him, but as he ages that same amount of weight gain can now place undo stress on his feet, resulting in a variety of lameness issues.

Geriatric horses will require special care for both nutritional and hoof health. Their digestive tract is not as efficient as it once was, along with the bones, joints and hooves not being as resilient. A better balanced diet, reasonable and routine exercise, along with routine hoof care is critical for keeping your horse healthy and comfortable—as he ages.

### References & resources

- [www.aap.org](http://www.aap.org) , American Association of Equine Practitioners
- [www.bayerequineconnection.com](http://www.bayerequineconnection.com), Bayer Animal Health
- [news.bbc.co.uk](http://news.bbc.co.uk) , BBC News , January 29, 2004
- [Farrierfriendly@hotmail.com](mailto:Farrierfriendly@hotmail.com) 🌿



# HORSES ON THE MESA

By **KARIN DENEKE**  
COLORADO

PHOTOS BY **CHUCK REEL**

A band of horses was milling in her front yard when I drove up. I noticed the ground below their hooves was pulverized — a sign of constant activity. A strong wind lifted clouds of dry soil into the air and ruffled the heavy winter coats of these wild creatures. They were hungry, waiting for a handful of hay.

A woman emerged from the two-story cabin, dressed warmly to ward off the frigid air of this overcast January day. A bay mare with her foal, edged forward to greet the human figure — the rest of the group followed cautiously. “This mare foaled right here in my yard late last spring,” she explained, as we walked towards a weather beaten tramp shed, located a few minutes from her cabin. Stored in one corner of the shed, sat a meager supply of hay — protected by a barricade and a gate. “I am waiting for donations to be delivered,” she offered, while cutting the strings of one of the bales, and pitching slices of hay amid the hungry four-legged crowd.

Her name is Judy Barnes, a former California gal — who told me she had been around horses all her life — the

domestic kind that is. Not until she relocated to Taos, New Mexico, did Judy become aware of the hardship of the wild horses roaming the high desert of Colorado and New Mexico.

Her opportunity to make a difference soon became reality, when she found a simple off-grid homestead — high on a wind blown mesa in South Central Colorado not far from the New Mexico state line. “I adopted five wild horses when I moved here eight years ago. One of the mares was over 35 years old — and bred,” Judy recalled. “I named her Esperanza, I lost her to old age, two years later.”

Esperanza seemed a fitting name

for this wild creature, a descendent of the mounts brought to the South West by the Spanish Conquistadors around the year 1500. Escaped horses soon multiplied, formed individual bands, and began roaming the wide open spaces. Over the decades, pioneers arrived, large land grants were established, eventually farmers and ranchers fenced in their properties, thus encroaching on the habitat of these wild creatures.

With horses milling around us, we loaded the remaining square bales into the rear of Judy’s battered pickup, and secured the open end of the vehicle with bungie cords. The tail



**Judy Barnes** tosses flakes of hay to hungry wild horses in South Central Colorado.

gate was missing. "It fell off the other day, I'm waiting on parts," she simply explained. And off we went over rutted dirt roads curving through what appeared a never-ending mesa, where sage and rabbit brush dominated the landscape. All around us — and way in the distance — sparkled the snow covered peaks of the Sangre de Cristo, the La Garita and the San Juan ranges. "This country grows on you, I would not want to live anywhere else," Judy observed.

Judy's mission, a self-appointed labor of love, repeated several times a week during the winter months, when the mesa lies dormant—is to distribute hand-outs from her donated supply of hay to the hungry mustangs. She estimated a population of 150 head surviving on the mesa altogether.

We traveled the back roads for several hours, not once passing another vehicle, always on the look-out for individual bands of horses. We focused on arroyos or scarcely populated stands of pinyons and junipers, places where these wild creatures may have taken refuge from the wind. Judy knew her feeding spots. Most of the time, after stopping her pick-up, mustangs would appear out of nowhere, following each other one-by-one, until they crowded dangerously close to the vehicle. Judy would hand me a stick with a plastic bag tied to one end. The wind would fill the bag and create a rustling sound, making enough noise to discourage eager horses from trampling us, as we attempted to scatter flakes of hay along the lonely road sides.

More than once, we had trouble finding individual bands, even though Judy insisted that this particular area was one of her usual feeding spots. As a last resort she would blow the truck's horn. After a few minutes of waiting we would be able to identify way in the distance, shapes of large bodies heading towards us. At one time we were parked in the middle of an old airstrip, a landing site for small planes, now seldom used by nearby ranchers and land owners.

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appropriately named—Wild Horse Mesa, a scarcely populated desert community of 75 square-miles. Groundwater is almost non-existent, and so are stock ponds and creeks. The elevation here fluctuates between 7,000 to 9,000 feet.

“During the winter months, horses eat snow to make up for the lack of water,” Judy explained. “But once the dry season hits, they cross a busy highway to drink from a small reservoir. Their large bodies require 10 to 12 gallons daily. We have lost more than 100 horses during the last five summers to traffic accidents,” Judy sadly pointed out. Just recently she was able to convince the Colorado Department of Transportation (CDOT) to install flashing warning signs.

A small water tank below her cabin serves as a poor substitute for a stock pond. Since she has no well, she has to hire someone to truck water for her household needs, and that of the horses. Life on the mesa has its challenges for man and beast. Judy’s cabin is off the electric grid. A few solar panels power her house. A wood stove is the main source of heat. Serious shopping is hours away.

Wild horses compete for forage with large herds of elk during the winter months, and it is slim pickings. “One winter,” Judy recalled, “I scattered slices of hay along a road side I considered one of my usual feeding areas. I did not wait for the horses to show up and discovered later on, that elk had found the hay before the horses arrived.” Elk herds often include several hundred head. Once the snow melts in the high

country, these herds head for higher elevations and greener pastures, but the horses remain on the dry mesa.

Judy has a dream—a dream that has been slow in coming. She started a foundation seven years ago, called the Spirit of the Wild Horse. She is asking the public for donations of food to view the mustangs in their natural habitat for a fee. All funds collected are earmarked toward projects to benefit the wild horses. At this



*Above:* A turbine and solar panels power the off-grid cabin. Lack of forage and water make life difficult for the wild horses.



point it is still a struggle. Future plans include a stock pond on the mesa to keep the horses watered during the summer months.

Unfortunately, lack of forage and water are not the only hardship these beautiful creatures are facing on Wild Horse Mesa. The mustangs do not fall under the protection of the Wild Free-Roaming Horses and Burros Act signed into law by Congress in 1971. This legislation established Wild Horse Management Areas in 10 West-

ern States on public land overseen by the Bureau of Land Management (BLM). The state of Colorado has four such areas. However, Wild Horse Mesa and the surrounding land in Costilla County is privately owned. Wild horses belong to the owners of the land they are roaming on. During the past few years a number of these bands have been captured by ranchers and hauled to slaughter houses. A sad ending for such proud mustangs. 🌿



# An introduction to herding

*Some dogs take to it better than others*

By JUDITH TOTH BIGHAM

**A** young Border collie looks up at this handler, his brown eyes filled with expectation and excitement. The handler and dog walk through a gate into a small, indoor arena. Suddenly the young dog sees them – sheep! Instinctively his eyes “lock” onto the wary animals pressed against the back wall of the arena. His lean, mostly-black body quivers in anticipation as he slowly sinks into a crouch. He is entranced by what he sees before him – prey animals – and they are *his*....

Although I have been a stockdog (herding) trainer for more than 20 years, I never cease to be awed, as well as humbled, when witnessing that moment of “surrender to the instinct” in a herding dog being exposed to livestock for the first time. It is a moment of recognition and reaction to an ages-old survival mechanism – the instinct to fight or flee (the livestock), or the impulse to chase, capture, and kill prey (the dog).

Herding is the calm, confident control and efficient movement of livestock. According to *Webster’s New World Dictionary* (Fourth edition; 2003), *instinct* is “an inborn tendency to behave in a characteristic of a species.” *Herding instinct* then is a dog’s inborn tendency to calmly, confidently control and efficiently move livestock. The instinct to herd evolved from the predator instinct,

which could be defined as the inborn tendency to chase, capture, kill, and consume prey in order to survive. Through selective breeding, the “kill and consume” components of the predator instinct have been, for the most part, successfully subdued. It is the “chase” and “capture” components of the instinct that are modified through targeted training to become the behavior known as herding.

According to the information posted on their website, The American Kennel Club currently lists 25 breeds in its Herding Group. However, not every herding breed dog will herd. Dogs that are “hard wired” to control the movement of livestock (prey animals) possess and demonstrate the following qualities: a strong desire to work; the ability to stay focused on the job; self-confidence; natural balance, which is the dog being in the right place at the right time

to keep the livestock under control and moving in the right direction; and perhaps most importantly, a “biddable” temperament, that is, the willingness to work with and for the handler.

When someone calls or emails me, interested in having their dog evaluated for the instinct to herd, my first question is, “Has your dog ever been around livestock?” More often than not, the answer to that question is, “No.”

Dogs are introduced to livestock (usually sheep) in a small, 48' x 52' indoor arena. The handler, the dog (leashed), and I enter the arena together. One of the sheep is captured with a shepherd’s crook and restrained while the handler brings the dog up to the rear end of the animal (less alarming for both the dog and the sheep). The dog is allowed (encouraged, if necessary) to sniff and “examine” the sheep for as long as he wants to. Usually, however, after a moment or two, the dog steps away from the sheep and looks around as if to say, “Okay. What’s next?” Then, the actual evaluation of instinct begins. The sheep being restrained is released to rejoin its fellow flock members. The leash is removed from the dog’s collar and the dog is allowed/encouraged to approach the small flock of three or four sheep.

Depending on the intensity, energy level, excitement or predatory drive of the dog, I would use either a light six-foot-long bamboo pole or “rattle paddle” (a plastic, paddle-shaped device filled with small hard plastic pellets attached to a four-foot handle) to guide the dog’s approach to the sheep. Either tool can be used, judiciously, to keep an intense, overly-excited dog moving away from and around the flock, at a safe distance as opposed to rushing in at the sheep, chasing them and singling one sheep from the flock or biting unnecessarily. Because the herding instinct is basically a modification of the predator instinct, a talented confident dog *will* bite to defend against attack by aggressive livestock (especially cattle),

or as a means of gaining control of unruly livestock. The bite should *discipline*, but not damage the livestock. Abusive, indiscriminate biting of livestock is never acceptable.

During an introduction to herding/evaluation of instinct, I am attempting to determine the following: The dog's level of interest and intensity (is he focused on the sheep or distracted by what's going on around him?); his herding style (Does he want to fetch the sheep to his handler or drive them away? Does he work fast and close to the sheep, or slowly and farther away from them? Does he bark a lot, or work silently?); and finally, the dog's preferred "flank" (Is he more comfortable moving to his right or to his left when going around the flock?)

Occasionally a dog will display fear, apprehension, or lack of interest when introduced to livestock. If a dog is genuinely afraid of the sheep (especially if the dog is young), I will use ducks (smaller and less likely to be aggressive) to evaluate the dog's herding instinct. If the dog is *still* fearful, a re-evaluation at a later date is recommended. Apprehension results from a lack of confidence. The dog *wants* to control the sheep, but doubts his ability to do so. This type of dog needs enthusiastic encouragement and confident guidance from the handler, to ensure



**"How long does it take to train a dog to herd?" The answer ... depends on each dog and handler.**

a positive experience. For the dog that lacks interest in the sheep, the handler is encouraged to interact with the animals by patting them or pushing them around with his/her hands while making "happy" sounds – whistling, "chirping," or calling the dog's name. Usually this "odd" behavior will arouse the dog's interest and he will come near to investigate. If the dog's focus turns to the sheep and he attempts to control them, in some way the handler or I can facilitate movement of the sheep,

which hopefully will hold the dog's attention long enough to accomplish the evaluation.

After several minutes of facilitating the dog's movement of the sheep around the arena safely and successfully, the dog is stopped and removed from the area. This break allows the dog to rest and recover both physically and psychologically, from the demanding work of controlling and moving livestock. During the break I discuss my observations of the dog's performance with the dog's handler, and answer any questions they might have, such as, "How long does it take to train a dog to herd?" The answer is because herding is a "cumulative experience" activity and learned by doing, that depends on each dog and handler. The handler may express concerns such as, will the sheep try to bite the dog? (No, biting is not a defense mechanism used by sheep.) When the dog is sufficiently recovered, he is taken back into the arena and allowed to work the sheep for a short time in order to positively reinforce the experience. Ideally when the introduction herding/evaluation of instinct is completed, both the dog and the handler will be psychologically satisfied.

Herding livestock is, first and



**When evaluating a herding dog, there is a lot to consider about his demeanor. Whether he is aggressive or timid is just the tip of the iceberg.**



**Most stockmen (and women) will admit to a deep devotion between human and canine.**

foremost, an agricultural activity. Herding dogs could be considered “tools of the trade,” although any honest stockperson will admit to a deeply devoted relationship with his/her canine co-workers. Ever since humankind transitioned from a nomadic existence to an agrarian-based society, animals that could help us survive and thrive (sheep, goats, cattle and poultry) have been selected for domestication. Herding dogs evolved as a result of our need to manage and move those domesticated animals. As a stockdog trainer, I have had the privilege and pleasure of working with many responsible, caring dog owners eager to give their herding-breed dog(s) the opportunity to do what they were originally bred to do – calmly, confidently control and efficiently move livestock. Helping a curious handler and eager, but inexperienced dog discover and develop the instinct-driven behavior that is herding creates an opportunity for the handler and dog to forge a mutually beneficial relationship based on shared trust and respect, which is vitally important for success in any human-dog activity. The dog’s willingness to work with and for the handler to accomplish a task whether competition in an obedience ring, tracking a lost child, hunting rabbits or herding a flock of sheep can lead to the kind of unique relationship that has existed and endured between dogs and humankind since they first locked eyes so many centuries ago. 🌿

# Living with PREDATORS

By SHIRLEY KELLY  
GLADE PARK, COLORADO

The cunning coyote is perhaps the one animal that has endured the most wrath of humans. Some people curse their existence; some Native American tribal folklore positions them to be the smartest animal on earth.

Coyotes are extremely adaptable animals and rapidly adjust to changing conditions. In the past, wildlife managers have found the coyote population can actually expand rather than decline in response to eradication attempts. As a result, a variety of lethal and non-lethal control methods are used to manage the population.



The coyotes are comfortable in the country, mountains, and in cities, as long as there is appropriate shelter and food. As a result, people must be aware of their presence and take precautions to avoid conflict with them.

If you live in areas where coyotes have been seen, protect your

pets and your chickens, young calves and sheep; coyotes will also kill cats and dogs. Do not allow your pets to roam, especially at night. Make sure your yard is appropriately fenced with a six-foot fence, or, better yet, keep your dogs and cats in at night.

Don’t leave pet food outside, this invites wildlife into the yard and problems may result. Keep your garbage in a storage facility or in a tightly sealed container.



The mountain lion is called by more names than any other mammal—cougar, puma, panther, or just plain lion. The Rocky Mountains’ largest cat, adult mountain lions are more than six feet long and weigh 130 pounds or more. Active year round, the lion’s staple diet is deer although it will kill dogs, sheep and cattle. The mountain lions hunt by stealth and will likely kill their prey by breaking their neck. The cat gorges on the carcass until it can eat no more. A deer covers the remains with leaves or conifer needles, and then fasts for a few days, digesting and resting.

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If you meet a mountain lion stay calm. Talk calmly and firmly to it. Move slowly and back away. Do not run. Raise your arms to appear larger. If the lion behaves aggressively, throw stones, branches or whatever you can get your hands on. Do not crouch down or turn your back. Fight back if the lion attacks you. Lions have been driven away by prey that fights back. Human encounters with mountain lions have increased in recent years, as human settlements have encroached on lion habitat.

Now the bear. Today bears are sharing space with a growing population. Curious, intelligent and very resourceful, black bears will explore all possible food sources. If they find food near homes, campgrounds or vehicles, or communities—especially beehives and bird feeders—they will come back for more. Bears that become aggressive in their pursuit of an easy meal must often be destroyed. They are trapped and ear tagged the first time and are moved to an isolated area in the mountains. If they return a second time they are destroyed. Every time we're forced to kill a bear, it's not just the bear that loses. We all lose a little piece of the wilderness that makes the Rockies so special. Keep your garbage in a sealed container, keep pet food inside, and your domestic animals

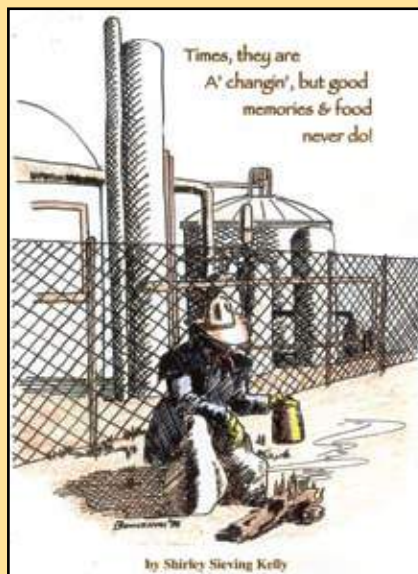


close at hand.

Last, but not least, there are smaller critters that can be just as worrisome. Skunks and raccoons are very partial to dog and cat food and trashcans. Keep items in a trashcan with a tie down the lid. The Division of Wildlife has humane traps they usually loan out. Make sure to cover the cages before you trap a skunk. Skunks can spray a distance of 15 feet when scared. If you or your dog does get sprayed, it's time for a shower. Mix a bottle of hydrogen peroxide, ¼ cup vinegar and a teaspoon of dish soap and start scrubbing! 🦨

For more information contact your Division of Wildlife in your area, they have useful booklets on living with predators.

I would like to thank Mike Porras for the information and photos.



**Shirley's book: *Times they are a' changin', but good memories and food never do!*, contains stories and recipes from her time on a chuckwagon and living in the West. It's available from Gladewoman1@juno.com or call 970-243-6391, \$15 plus \$2 shipping and handling. This would be great for a gift.**

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# THE DECIDERS

*Raw milk laws exist to protect the public*

By JERRI COOK  
COUNTRYSIDE STAFF

On August 7, 2014, the Fourth District Court of Appeals for the State of Wisconsin disappointed raw milk proponents when it held that a pair of raw milk operations were nothing more than a sham. The ruling upset raw milk advocates in Wisconsin, but there was something in the ruling that almost everyone missed, and it has national implications. Buried in dicta, the Wisconsin Appeals Court stated that it has the authority to determine if an individual has a right to choose what they consume. The court said because the producers were operating without a license, it wasn't "necessary to determine whether a person has a right to consume raw milk." There it is. The Fourth District Court of Appeals in Wisconsin believes it has the right to determine if there is a right to eat what you want. They just didn't need to do it *this time*. The truth is that a state or federal court can decide the issue, and so can a state legislature or the United States

Congress. There are plenty of people standing between you and what may or may not be your right to consume the food you choose, let alone the food you produce yourself.

While commercial processing and selling of dog meat is illegal in all 50 states, consumption has only been criminalized in a handful of states. You have no right to consume dog meat in California, New York or New Jersey. The legislatures of those states have made it a crime. For most Westerners, that's a relief, but if you're in favor of drinking raw milk, it's a huge problem. One of the many arguments offered to advance the idea of a right to consume raw milk is the idea that it's part of the culture of rural America. Similarly, in many Asian cultures, dog meat is a recognized staple. Dog meat is also consumed in some American Indian cultures as well. The legislatures of the states that criminalize the consumption of dog meat were not persuaded by the cultural argument. Raw milk proponents should take note. Arguing that there is some cultural or traditional basis on which

the right to consume or produce raw milk is based is likely to fail at the legislative level.

A federal court also rejected the notion that there is a cultural right to consume traditional foods. California took the lead in banning the process of "finning" sharks. Finning involves cutting off a shark's fin, and then releasing the maimed animal back into the ocean to die a slow, painful death. Shark fin is a cultural staple in many of the Asian communities which call California home. A challenge to the law was brought in a federal district court in California based on the fact that the anti-finning legislation impacted Asians more than any other group. The court flat-out rejected the argument. "People of Chinese origin or culture undoubtedly overwhelmingly comprise the market for shark fin. However, a law is not unconstitutional simply because it has a racially disparate impact." So, there it is. In California, you do not have a right to eat food deemed inhumanely harvested by the State legislature, even if doing so is an integral part of your

culture. There is no right to choose which food you consume, but California law does allow the sale of raw milk in grocery stores.

While federal law prohibits the transportation of raw milk across state lines, there is no out-and-out criminalization of the consumption of raw milk itself at the federal level—yet. On July 31, 2014, Representative Blake Farenthold of Texas introduced the Justice Attributed to Wounded Sharks (JAWS) Act. The purpose of the Act is to cut off foreign aid to countries that don't prohibit the practice of finning and the consumption of shark fins obtained by finning. Even if you favor this sort of regulation, keep one thing in mind. Because of the way it's written, the passage of this Bill would for the first time in history criminalize the consumption of a food. You would have no right to choose otherwise. Should that occur on a federal level, there would be no right to choose at the state level, because the U.S. Constitution provides that federal law trumps state law every time.

Meanwhile, back in Wisconsin, a district court sits at the ready, waiting for the case that will allow them to determine if there is a right to choose the foods you consume. Ironically, it is because of the actions of one of the Plaintiffs involved in the ruling on August 7, 2014, that a Wisconsin court is likely to find that there is not a fundamental right to consume raw milk. In 2009, Mark and Petra Zinniker lost their dairy license after 35 people were sickened from raw milk from their farm. In essence, the Zinnikers want the court to find that people have a right to choose to eat food that they know may seriously harm or kill them. It's not going to fly in any court anywhere. State and federal courts have consistently upheld legislative bans on consumption of all kinds of substances because of their harmful effects. There is no individual right to choose to consume certain plants because of their effects. You can-

not use prescription drugs without the required documentation from your healthcare provider. There is no precedent for what the Zinnikers appear to be asking. When raw milk producers fail to take steps to ensure public safety, no court anywhere in the land is going to find that an individual has the right to consume that milk regardless of the risks. Not only is the "fundamental right to consume raw milk" a weak argument, it's a giant waste of time and resources

*...the Zinnikers want the court to find that people have a right to choose to eat food that they know may seriously harm or kill them. It's not going to fly in any court anywhere.*

that could backfire spectacularly. If a court in Wisconsin should hold that there is no express right to consume raw milk, other states will soon follow. And if you're thinking that the United States Supreme Court would surely get involved, think again.

The Supreme Court's jurisdiction is limited by the Constitution. The Supreme Court can only hear cases arising under subject matter jurisdiction or federal question jurisdiction. For the court to have subject matter jurisdiction, there must be a dispute between citizens of different states or between a citizen of a state and a foreign country. Because the federal government prohibits the interstate transportation of raw milk, there can be no dispute between citizens from differing states. The other kind of jurisdiction, federal question jurisdiction, requires that there be a question that stems from a constitutional right. There is no constitutional right to consume raw milk, or anything else for that matter. Under the Tenth Amendment of the Constitution, any rights not specifically granted to the federal government fall first to the States to decide, then to the people. It is almost a certainty that the issue

will never make it to the Supreme Court of the United States. It's up to the States and the people to decide.

Instead of demanding that a court grant them the right to consume raw milk, advocates might want to find a way to work within the system to build a reasonable regulatory scheme for raw milk and other non-processed foods. It's hard to argue against regulation when 35 people were sickened because of someone's poor handling of raw milk that was to be consumed by the public. Obviously, someone needs to be supervising the process. In California, raw milk can be sold as long as there is a warning either on display or on the bottle if sold from the place of production. Additionally, raw milk for consumption must not have greater than 10 coliform bacteria/mL and not greater

than 15,000 bacteria/mL. While the anti-regulation crowd will no doubt decry the California requirements as burdensome government intrusions, raw milk producers like the McAfee family, owners of Organic Pastures outside of Fresno, haven't had any problems following the rules while turning a handsome profit. In fact, while the demand for shark fin soup is on the decline, the demand for raw milk in California is rising. This is the best case for working within the system to establish and nurture a market for raw milk and other non-processed foods or farm-processed foods.

In the end, asking a court or legislature to grant us the right to consume the food of our choice is dead-end strategy. The better course is for raw-milk advocates to engage state agencies to find a way to regulate the industry so that local governments can fulfill their duty to protect consumers, and at the same time ensure a fair and reasonable regulatory scheme that would give raw milk producers a way to achieve their goals. The two are not mutually exclusive—unless raw-milk advocates decide they are. ♣

*The garden:*

BY MARY KATHRYN DUNSTON

The joys of gardening are what bring us back to the toils of weeding and insect bites, dirty nails and waiting. The anticipation in winter of planning our crops and the double anticipation of spring while patiently watching for that unfurling tip of an asparagus frond or the pea green tip of that legume to emerge, anchors that joy that grows in gardeners.

And then there's watering, that necessary aspect of growing a garden that we design our day around. We ponder, "Should I water in the morning before work, or in the evening when I'm tired?" "It's supposed to rain today, but what if it doesn't?" Or, "I better water before the sun gets too hot." Rainfall, no rainfall, irrigation investment, time investment, the cost of city water or the level of well water all play a part in how often or how long one can water. There must be an easier way to do this. There is! There is an easy and "new" way of watering that is over 2,000 years old, clay pot irrigation!

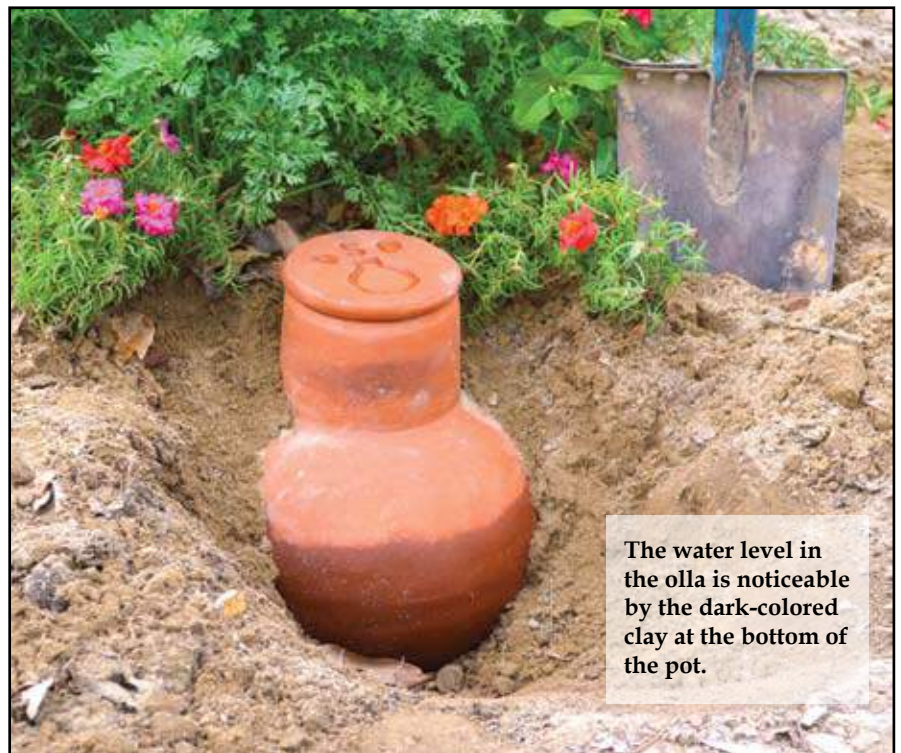
Over 2,000 years ago when Google didn't have the word "hose" in its data bank, ancient peoples from China to South America were bury-

ing porous clay pots in their gardens and next to their saplings. The bulbous clay pot, known as an olla (oi-yü), would have a neck on it which would be visible just above ground level. The opening at the neck allowed the gardener to add water into the pot, or olla, as the olla emptied. This was ingenious because the water in the olla was pulled out by the thirsty roots of the surrounding plants. Soil moisture tension was at work — not an ancient word, but that is what was happening none-the-less. Every plant got water as it needed it. No water was wasted and no plant

was over- or under-watered. Ingenious! As you have no doubt figured out, ollas are still used around the world today, but in our country, the concept is just seeping out.

People are learning that ollas are easy to install. Dig a hole and put the olla in it. Backfill. Okay, that was easy. Adding water to the olla is quick. Lift the lid off, put your hose in, wait 30 seconds or so, put the lid back on. If you get bored in those 30 seconds, bend over and pull what few weeds are around the olla. There won't be many since ollas keep the water below the soil surface, discouraging weed growth. Planting around the

## WATER LIKE THE ANCIENTS DID IT WORKS!



The water level in the olla is noticeable by the dark-colored clay at the bottom of the pot.



Clay pots (ollas) have been used to irrigate plants for thousands of years. A two-gallon sized olla, for example, will water a three-foot circle area (above) around the pot. Another cool fact—if it rains a lot, the olla will absorb some of the excess water—a double bonus!



olla is just like planting anywhere. Ollas work in ground, in raised beds and in containers. People are using them in everything from a water trough to a truck bed. How far out the water seeps from the olla depends on the olla size and soil type. A larger olla, say two gallons, will water an 18-inch radius in most garden soils. That's a three-foot circle watered with one olla, about the area of a 4' x 4' raised bed. It will need filling every three to five days. Fill the olla on Saturday and then check again on Tuesday. The time you saved not hand watering can be spent, well, doing what ever you want! Ollas not only save time,

they save water. Using an olla can save up to 70 percent in water use, due to the low evaporation rate and the zero run off rate. Using water so wisely saves you money and puts less stress on a water source. Not bad for a piece of organic clay. But there's more! Because ollas are porous, they work in two directions. When water is on the *outside* of an olla, as when it rains and rains and rains, by gravity, some water will seep back *into* the olla. This decreases the splitting of tomatoes, melons, etc. The olla needs to be partially empty for this to work best, since the excess ground water needs someplace to



How surprised would you be if you were sitting at a stop light and in front of you was a truck whose bed was full of greens? I'm not talking about bushels of harvested beans or kale, or yard debris piled high, I'm talking about living, growing, flowering greens, and reds, and yellows and purples, and greens. That's lots of greens! I'm talking about a garden growing in the bed of a truck...yes, that is Truck Farming and a mother-daughter team in Texas is making Truck Farming very popular. Marilyn and Donelle Simmons of Texas have a purpose; to Educate, Empower and Encourage. They are garden coaches and educators and a Truck Farm is one of their venues. They use ollas for easy watering. Donelle said, "The olla's pot is amazing, the truck farm has flourished beyond our imagination. I think every truck farmer should have one and every gardener who is working in a small space. It is the best gardening tool we have." Visit them at [www.farmgirlstx.com](http://www.farmgirlstx.com) to see what WOW (Women On Wheels) can do!

"Truck Farming" is taken literally with WOW gardens in a truck bed.



go. It is nice to know, however, that the time invested in setting up this ancient watering system is never wasted, rain or no rain. As Randall Isherwood, owner of Garden Outposts Nursery in Columbia, South Carolina, put it, "Last year (2013) we had a deluge of rain every week, tomatoes were splitting all over the state. My tomato plants that I had installed with ollas averted this splitting issue 100% of the time, in all types of locations in ground, containers and raised beds." Even if 100% isn't a guaranteed success rate, Mr. Isherwood is not far off the norm. In addition, the root base of plants around ollas is larger and happier since they have water consistently, and can be fertilized, by adding a liquid fertilizer in the olla. Finally, in our modern times, we have some added bonuses those ancients couldn't have dreamed about. Ollas do not need electricity and have no plastic residue. They are environmentally safe across the board. A modern responsibility we gardeners take seriously!

So, this winter, when you're huddled next to the fire and poring over your spring seed catalogs, think clay pot irrigation, the most efficient watering system known. Google olla to learn more or to find them at your local nursery. 🌱



Mary Kathryn Dunston is an avid gardener who teaches about Clay Pot Irrigation for Dripping Springs Ollas.

For more information, call 804-695-7978 EST or visit [www.DrippingSpringsOllas.com](http://www.DrippingSpringsOllas.com).

## The garden:



# I dig potatoes

BY NANCY PIERSON FARRIS

**W**hat can be red, white, or blue, provides healthy carbohydrates, and grows underground?

In my area, it's known as the "Irish potato." In the 17th century, the potato became a main food source in Ireland. In the 19th century, the potato crop was destroyed by blight, creating a famine during which thousands starved to death in Ireland, and many emigrated to America.

In 21st century America, people consume potatoes as fries, chips, or instant mashed. Those who have never tasted a freshly dug potato, haven't experienced true potato flavor.

The potato depends on long days and warm temperatures to make a good crop. However, the plants don't thrive on intense summer heat. In my location, at the upper edge of coastal South Carolina, summer days average five degrees hotter than locations along the coast. On those hot, humid days, potato plants wilt and turn yellow. I must plant potatoes early so they can mature before the brutal heat arrives.

We begin well before planting time by digging a fairly deep trench into which we spread compost. Experts recommend doing this as early as the previous fall, to allow the compost adequate time to rot. Fresh manure may exacerbate problems with scab on potatoes.

For many years, we failed to realize the importance of pH. According to USDA, potatoes prefer 5.0 to 5.5 pH. Too much wood ash or lime can make the soil too alkaline and crop yields will be reduced. Too much pine or oak mulch raises the pH and the potatoes will be small and poor in quality. In our area, which is undergirded by limestone, the pH of the soil can be lowered simply by irrigating with the ground water from our well. We use mulch that acidifies the soil: pine straw and oak leaf mulch are readily available to us.

We start planting potatoes about a month before our last frost. If we do get a light frost after the potatoes start to come through the ground, we leave the blackened tips, because the plants will almost always send up more sprouts.

Traditionally, small potatoes left from the previous year were used for seed. They usually have sprouts by



**With the proper soil pH, Nancy can harvest some nice sized potatoes.** *Photo by Don Farris.*

early spring. I still do this, although experts advise against it, citing the possibility of disease organisms in the old potatoes. I also buy seed potatoes every spring—about three pounds for a 50-foot row. Red or white normally refers to skin color, though Mountain Rose produces red flesh.

I cut the seed potatoes into pieces about the size of a hen's egg, taking care not to break off any sprouts, and I make sure I have at least two or three "eyes" on each piece. After cutting, I spread the pieces in a single layer on a tray or a shallow cardboard box, and set them on my screened porch in a lighted spot, but not in direct sunlight. I let them dry for a couple of days. Some people dust the pieces with fungicide before planting.

For those who haven't prepared a furrow with compost, USDA recommends about 3/4 pound of 5-10-5 fertilizer for a 50-foot row. Simply make a six-inch deep furrow and sprinkle in the fertilizer. I would cover that with about an inch of soil, then lay down the seed potatoes.

We loosen soil in our prepared furrow and place the pieces of potato about 12-15 inches apart and cover with about three inches of soil. After the potatoes have sprouted and show good growth, we hill more soil up around them to ensure that tubers will not push up

through to the surface; sunlight will turn them green and may cause bitterness.

About six or eight weeks after plants start to grow, tubers begin to form underground. The USDA says, “contrary to much common opinion, development of tubers does not depend on flowering.” I would not argue with the experts, but in my experience, flowers usually signal that tubers are forming. This is exciting, because from that point, I know I can “grabble” a few tender new potatoes for lunch. Cooked with early green peas and seasoned with a bit of butter and cream, this makes a meal that is a suitable reward for a hard working gardener. When I harvest these little potatoes, I take care digging around each plant, so as not to break off smaller tubers—and I only remove one little potato from each plant, leaving plenty to mature for our main crop.

During the growing season, potatoes need little attention unless insect pests invade. If leaves start to curl and growth seems to slow, look for aphids. They are small, flat, soft discs with legs. The peach aphid is green and overwinters on peach trees. In Northern climes, buckthorn aphids overwinter on buckthorn and may attack potatoes. That aphid may be yellow, green, or black. The pink and green potato aphid overwinters on roses. A strong spray from a garden hose will usually dislodge aphids. In my garden, ladybugs arrive in time to clean up aphids from early spring crops.

The worst pest for me has been the Colorado potato beetle. This voracious insect is yellow with black decor,

nearly a half-inch long and it attacks potato plantings anywhere in the United States. I watch my plantings carefully because if the beetles come, I must take swift action to prevent losing the crop. There are chemical sprays, but I don't like to put toxic materials into my garden and chance hurting bees and birds.

A thick mulch may prevent beetles from attacking. At the Rodale Experimental Farms, a one-foot layer of straw mulch under the plants prevented the beetles from climbing out of the ground and up the stems of potato plants.

When is it time to harvest? We want those potatoes to get as large as possible, but we don't want them damaged by underground critters. According to Clemson experts, fire ants do not eat vegetables. However, we *have* seen fire ants on potatoes—perhaps they are seeking moisture? Whatever their purpose, they damage the crop. We check regularly and if we find potatoes with tiny holes, or potatoes with bite marks that indicate mice or voles are coming to dinner, we claim our underground crop immediately. Some years, we harvest because the plants are wilting and turning yellow. That may happen because of too much or too little rain, or because of insect attacks. In any case, if the plants start to deteriorate, we harvest the potatoes.

I have never grown All Blue potatoes, which have blue flesh. Maybe I will try a few plants next spring. Combining All Blue with Mountain Rose would make a really impressive potato salad for Independence Day! 🍌

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*The garden:*

# Building ECO-FRIENDLY community gardens

BY ANITA B. STONE  
NORTH CAROLINA

Gardening is a favorite hobby of people of all ages, including retirees. Reportedly, by 2030, one out of five Americans will be age 65 or over. By the same evaluation, today's average farmer is 68 years old, opening a demand for a younger crop of farmers. Fortunately a plethora of homesteaders exist, both young and old, who grow their own food and feed their families as well as sell their crops at market. But not everyone can be evaluated as part of a group. One of the most severe economic situations addresses the need to feed the hungry. Some people, such as military veterans, are returning to the land to take up the part of their life that was put on hold to serve and protect the rest of us. But a wide gap remains between growers, homesteaders and those not capable of working or working for low wages, often referred to as the working poor. As a result, many community gardens have sprung up across the country. This is a positive step for the environment, for families, school children and communities. These gardens provide food and nutrition, assist in land and water conservation and can be low-cost — especially if you use recycled materials.

In a project to create a community garden in what is known as “the desert” of Wake County, North Carolina, we formed a working relationship with the Zebulon Branch of Wake Technical Community College to serve both a rural and urban community. When initiating a community garden, the first step involved deciding on a location, then a plot size, measuring the area and drawing a design on paper as to what will be re-



*Above: The growing community garden. Left: Laying out pallets to mark the garden.*

quired, including all measurements.

Our garden began on a grassy plot in May 2014 on the side area of Eastern Wake Technical Community College in Zebulon, and measured 20' x 30'. We made good use of a pencil for marking lengths, widths and cutting areas. Once the design was on paper, we gathered a number of used wooden pallets and set our goal at using one dozen of them, which were free of charge. Then we assembled workspace and tools, using two- and three-inch nails, depending what would be required. A nail gun was helpful. We also needed a screwdriver, crowbar and a claw-type hammer. A hacksaw or electric saw was added to the required tools along with pliers to pull out any nails

from the pallets. Once organized, we took the pallets apart using a hammer and crowbar, and then separated all the planks into piles. We measured and cut a load of pallet planks to the size we wanted. Then, we used four planks per side with enough wood to nail to each end and constructed a box or a raised bed. Next, we began to assemble the planks and lined them up perpendicular to each other and hammered them together with three-inch nails, making sure to line the nails up to the most solid part of the wood on the thin side. We used a minimum of three nails for these, one on each side and in the middle. Once construction was completed, we laid landscape fabric inside each box. Another unique and free item we used was burlap, which we received from a coffee company. We lined up the burlap on top of the fabric and then covered with planting soil. We used a few burlap bags to plant seed



Pallets were disassembled and used as tomato trellises.



potatoes, which grew extremely well when hung at the end of one of the beds with an open end so we could see when harvest time became apparent.

Over a two-month period we built and planted continuously. Because we got a late start on planting spring and summer crops, we were thankful for the bed of crookneck squash, sweet banana peppers, yellow pole beans, cucumbers along climbing vines and seed potatoes that grew well enough to harvest. The melons, tomatoes and okra crop exceeded our expectations as well as two each of Black Beauty and Ichiban eggplants in containers. One of the students made a simple ratatouille, using tomatoes, eggplant and peppers, showing the class how easy it is to survive on simple crops. We were able to donate several pounds of produce to the food bank in town. Our herbs consist of globe basil, Thai basil, oregano, sweet mint, thyme, dill, lemon sage and parsley. Last month we extended the area to 25' x 36' and will probably keep growing. After we harvested several of the crops we planted carrots, rutabaga, beets, spinach, collards, turnips, cabbage, kale, lettuce, chard, bok choy, and winter squash, which we hope will grow in abundance. In order to replicate the produce and to have sufficient funds we plan to offer the crops to restaurants that will



The community garden includes raised beds for easier access.

use them in cooking presentations to customers, especially the homegrown varieties of heirloom tomatoes, green, yellow and red peppers, jalapeno peppers and sweet banana peppers.

To get more of the community involved, we had an open house on the college campus and invited town residents and top officials to view and discuss the future of the garden, including benefits to citizens and the community. Local homesteaders were invited to spend time at the garden, communicating and offering their expertise. The networking turned into affirmative action between gardeners, planters, farmers and agriculturalists. Ideas were presented and shared by homesteaders to enhance production of crops so we can increase produce and offer free food and educate more families. So we offered interactive classes in community gardening, presenting both morning and evening instruction, including several facets of planning, planting, growing and harvesting for sustainability. Structural and archi-



More versions of raised beds.

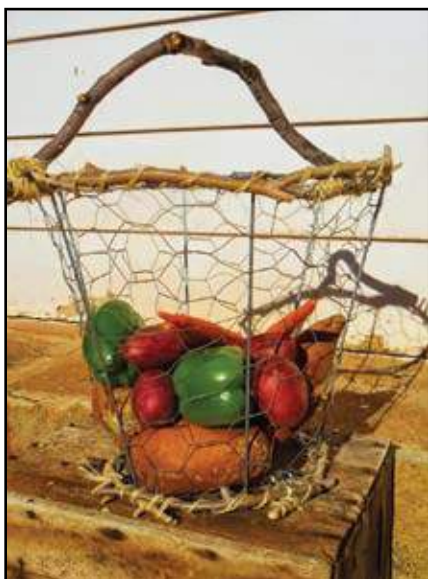


tectural plans were taught to those interested in promoting green space, sustainability and getting the most bang for your buck enthusiasts.

As time passed, a number of additional considerations became apparent. A community garden must accommodate everyone's needs and must be designed with paths and ramps to accommodate children, senior citizens and those with disabilities. So we created pathways three feet wide between low and raised beds to allow space for wheelchairs. A five-foot width permits a wheelchair turning radius and a seven-foot width allows two wheelchairs to pass. We made certain that paths were firm and smooth with a texture that minimized slipping or tripping. Through the use of cedar chips, which were donated, and landscape fabric, the paths became safer. Horse manure, also donated served as top-notch mulch. We bartered for a large plastic container to use as a rain barrel, which now sits on top of concrete blocks and currently provides sufficient water for the garden. For future fruit production, we planted an apple and two peach trees on either side of the garden.

Providing benches or picnic tables also provided areas for gardeners, visitors and volunteers to safely sit, preferably in the shade. By contrast, children under six may be offered the opportunity to play in a sandbox near a shady spot. Some children may wish to grow crops where parents and grandparents supervise. Once children are invited to the garden, it is always fun to let them help design a garden spot.

We look forward to enlarging the garden and offering classes from beginner to advanced, which will teach everyone how to keep their families healthy by planting and eating food grown with their own hands and in their own backyards. Our long-term goal is to increase production and plots to other parts of the county, including the college community who will oversee any future projects in the realm of sustainability, an eco-friendly environment and green space to the fullest use. 🌱



## Make a basket from a recycled lamp shade

By JILL

CRICKETSONGFARM.BLOGSPOT.COM

I always try to recycle everything I can. We are even going to cancel our weekly garbage pick-up. We generally only have one little plastic sack (like you bring your groceries home in) full of garbage a week. I think I will just sneak it over into the neighbor's can (after I ask for permission of course). Anyway, back to the project.



Gather your supplies:

1. A sturdy welded wire lamp shade, cover removed. Make certain the center support is flush with the bottom ring.

2. Jute twine  
3. Scissors  
4. Wire cutters  
5. Old chicken wire. We use the smallest gauge available, this will help keep the smaller vegetables in the basket—or use a hardware cloth or window screen if desired.

6. A cordless, or regular hand-saw. Cut green branches, limbs, or twigs, to form around the edges and to make a sturdy handle.



Attach the chicken wire (wish I had smaller wire) around the larger edge first. There will be a little excess wire as you near the smaller diameter bottom. Just work it in, over-lap the wire under the basket and attach to the center supports.



Using the jute twine wrap a twig around the edge. When choosing the sticks to use, look for a natural curve in the branch. I used limbs from a tree we just felled in the garden area.



The branches need to be green and pliable.

Attach a sturdy branch for a handle. I caught the twine between two limb nodules for better support.

I also placed a couple of twigs around the bottom; sticks cut to the right length could also be placed on the sides attached to the vertical lamp shade wire.

Make several of these to go in your root cellar or basement to store squash, potatoes, and other vegetables that need good air circulation.

For my next basket I will try wrapping a frame with grape vines, or split willow, maybe even long strands of bindweed!

Note: As the twigs dry, you will probably need to tighten the jute wrappings. 🌿



## The garden:

# The great army worm war

## Life in the woods is rarely quiet

By JERRI COOK  
COUNTRYSIDE STAFF

Preparations for another winter are ramping up here on the edge of the Chequamegon National Forest in northern Wisconsin, and everyone is hoping that we won't have to go through a deep chill as brutal as the last one. The so-called Polar Vortex brought consequences that are still being felt across the nation. Gardens lagged behind and so did canning and preserving. Yields on crops were down. The domestic animal kill-off caused by the constant sub-zero blast was a driving factor behind the spike in the price of beef and dairy over the summer.

Last winter was also hard on area wildlife here in North Central Wisconsin. What deer there are were thin all summer, and this year's fawns were small and fewer in number. We didn't hear the sharp cries of coyotes in the swamp at all this year. Not once. That wouldn't be altogether odd if the wolves were around. There have been years where a pack of wolves will move in and run off the coyotes. Then their long, deeper howls echo from the swamp, replacing the yipping of the coyotes. This year, the swamp was silent at night, except for the chorus of tree frogs and crickets. There were plenty of them to go around despite the Polar Vortex. And this year, their singing heralded a great invasion of army worms. So began the war.

### All is not quiet on the northern front

It looked like a Hitchcock movie around here last summer, with hordes of gray tree frogs hopping about like

they owned the place — which clearly they didn't, as the trail of squashed frogs along the main road to town illustrated. How did these creatures thrive in spite of a deadly winter that thinned the population of so many other species?

As it turns out, gray tree frogs produce something akin to a natural antifreeze that permits them to survive to -21 degrees. The glycerol produced by gray tree frogs allows them to live even when 40% of their body fluids have frozen. Ice crystals will not form in some of the gray frog's cells, and they can easily recover from a harsh winter. Even so, there seemed to be an awful lot of them around this year. Probably because there was a noticeable lack of their natural predators in the area.

While local sportsmen and the Department of Natural Resources here in Wisconsin are lamenting the effects of the Polar Vortex on the various game populations, other wild animals have also been appreciably affected. Skunk, opossum, raccoon, and snake populations were thinned out by the harsh winter. Comparatively speaking, the tree frogs came out on top, giving them something to sing about.

While I usually enjoy listening to the rhythms of the frog song flowing from the surrounding woods and wetlands, it was far louder than normal this summer, and went on into the wee hours of the morning sometimes. Folks here were forced to shut their windows and turn the fan on higher to escape the cacophony.

### Outflanked

When the sun starts to set, the crickets are the first to announce the

arriving dusk. Usually, we see and hear black field crickets in north central Wisconsin, with the occasional katydid hanging around for good measure. Last summer, however, we seemed to have more black crickets than usual, and you couldn't set foot off the porch without setting off a mass of hopping katydids. While adult tree frogs can survive in a harsh winter environment, it is the eggs of crickets and katydids that overwinter well, even in the most extreme conditions. It's no surprise then that we were overrun with leaf-noshing crickets who sang heartily about their collective feast every evening.



As with the tree frogs, one of the reasons for the increased population of

the crickets was the kill-off of most of their natural predators in the area. Wasps, spiders, ants, birds, and praying mantis are all voracious consumers of crickets, but they're not as good at winter survival. However, another predator is — the tree frog. Which explains the size of the tree frogs last summer. They were huge. Someone even suggested maybe they were big enough to catch and eat. Although, no one around here knew for sure what the best way to catch them was, nor did anyone know how to prepare frog once it was caught. Nevertheless, I'm considering reading up on the subject over the winter... just in case. You might as well use what you have handy — even if it is a well-fed tree frog.

### The great army worm invasion

I was up at dawn one morning,

for no particular reason, and as the first breaths of sunrise stirred on the early morning breeze, I noticed something glistening with dew in a few of our trees. There were webs of some sort in three of our five young apple trees. I was immediately concerned. After the Polar Vortex subsided, I was sure most of the young trees were lost. When they came back to life, albeit slower than usual, I felt blessed. Now, my trees were under attack by something.

It took only moments to determine that army worms had taken up residence in our young apple trees, but it wasn't just our trees. A walk down the gravel road confirmed that all of our neighbors were having issues with the invaders. They weren't just confined to trees. The worms had spun their web-like nests in hayfields as well as throughout the adjoining wetland. They were everywhere.

Army worms are a type of caterpillar that defoliates trees and plants, and in a hurry. They lay their eggs nestled in the tender leaves of plants, and as they do so they leave behind a silky trail. When these silky trails become large enough to be seen from the window of your home or from the road as you walk by, you're under attack. Fight back.

My internet search for ways to destroy the pests proved frustrating. One site suggested that attracting natural predators like wasps and beetles will normally control army worm outbreaks. But because of the Polar Vortex, our area saw a steep decline in the populations of those insects this year. You can't attract what's not there. Some sites suggested pesticides, and others instructed readers to hand-pick the worms and their eggs on a regular basis in order to control them. I had no intention of controlling them. I wanted to defeat them.


Not liking what I was reading on the internet, I decided to fall back to a useful substance we all have around—vinegar. I filled a spray bottle with white vinegar, went out to the apple trees and doused each of the worm webs with straight vinegar. There was no wind that day,

and it was a hot 80 degrees. When I went out the next morning to survey the kill, I saw exactly what straight vinegar would do to army worms. It didn't even slow them down. That's right. Not only did they survive vinegar dousing, the web was bigger than it had been the day before. Defeat.

That's when I called for more fire power—literally. I had my husband grab the handheld propane torch and take a stroll around the property. Problem solved. The torch is adjustable, which allowed him to control the heat and direct the flame only to the area of the affected branches, minimizing damage to the trees. Of the five trees that were treated with the torch, only one saw a re-infestation. The torch came out again, and the army worms were in full retreat. While our neighbors' trees and fields were still covered in silken webs, ours remained clear. We've decided to permanently adopt our scorched worm policy.

### Operation polar front

As we prepare again to go head-long into winter, we're hoping for the best, but preparing for the worst. Some forecasters believe that El Nino will save us from another battle with the brutal forces of the north. But at least one meteorologist has reservations. Mark Torregrossa, a Michigan meteorologist, doesn't think there will be any relief this winter. He has no confidence at all that an El Nino will bring a milder winter. In fact, he makes this dire prediction, "we could be in for another nasty winter." If he's right, the battle against invading insects will no doubt continue next growing season, as plants weakened by yet another hard winter will be attacked by invading hoards whose natural predators were thinned out by brutal temperatures. It might be prudent to grab a couple of handheld propane torches over the next few months, because the battle against army worms and other invasive insects will likely rage on again next season. This is one fight you want to be prepared for. ❄️

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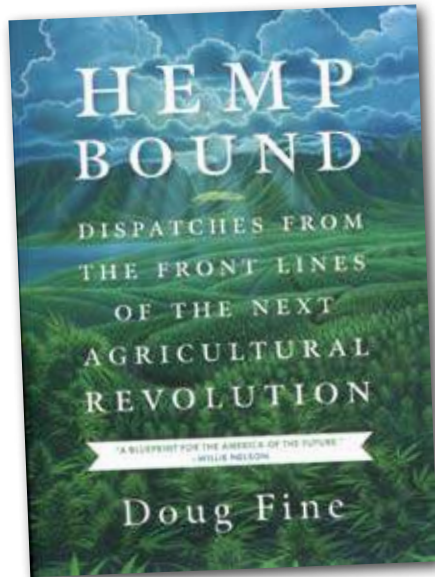



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## Book review:



# Hemp Bound

## Dispatches from the Front Lines of the Next Agricultural Revolution

By NATHAN GRIFFITH

This soft cover book of 152 pages (plus 31 pages of introductory text) deals with the long overdue reemergence of an ancient, once-common U.S. farm crop: Hemp. With lots of interviews of science experts, farmers and a few politicians in the U.S., Canada and Europe, it outlines hemp's many useful traits, showing it should immediately be employed to:

Renew worn-out and drought-stricken farmland with its first-rate organic matter accumulation.

Suppress weeds currently in full possession of that worn-out land by ultra fast, tall growth, shading out the ground level.

Grow a high-protein seed crop that provides oil for cooking, crunchy snack treats, motor fuel, hog feed and for raw material to make high-strength polymers.

Yield high volumes of carbonaceous material for use in "hempcrete"

a strong, synthetic building stone, composed of burnt limestone and hemp dust from the hemp's *shiv* or *hurds* — the woody leavings after harvesting the raw fiber or *bast*.

Produce renewable, strong, long-lasting paper and textile fibers in great volume at relatively low cost.

Give relief to dry skin in cosmetic and remedial creams and ointments.

And much more, plus make good money while doing it all.

The book's message is the planet is in dire need of benefits easily yielded by *industrial* hemp. Yet for more than seven decades, farmers have been denied the opportunity to grow this useful plant — a crop raised by Thomas Jefferson and many other early Americans — in essence by bureaucratic and political expediency.

Does this book go into this in much depth? Not really. It's more a celebration of America's "on-the-verge" relegalization of hemp-growing and the crop's useful attributes.

The author is a good enough writer, in fact he calls himself a "cannabis journalist," and that's just what he is. Or perhaps a "cannabis cheerleader" is more apt, or even a "cannabis Mary Sunshine."

He thinks \$250 an acre per year is an alluring profit, and maybe it is for today's low-margin row-crops, where 1,000 acres is barely out of the "hobby farm" category.

And the book is dead-on about the need to grow *something* in plains and prairies where dust-bowl conditions now prevail. If only there were a method for telling, early in the year, if it's going to be another dry one.

That's important, because hemp must be planted early enough for its harvest endgame of retting and scutching to be viable. Come to think of it, I don't recall the essential step of scutching ever being mentioned in the book, though its costly "big farm" equivalent, *decorticating*, was. Both terms mean the breaking up of the outside layer of the mature hemp plant after it has lain for a few weeks to rot enough (retting) to free its long fiber strands, which are known as bast.

### The plant

How well does the book describe the hemp plant itself? Not very well.

So I'll fill the holes: Hemp is an annual plant in the mulberry family, *Moraceae*, related to nettle-family fiber plants like ramie that compete against it in world markets. Hemp's rigid, fluted stalk can attain heights of 15 feet under favorable U.S. conditions, even taller in Indochina. If not crowded, stalks can get up to an inch in diameter, but in fiber production spacings, rarely more than half that. It grows best in temperatures between 60°F and 80°F in high humidity, needing a frost-free period of 120 days for fiber and 150 days for seed to ripen. Cool, moist fall or winter weather are favorable for retting. Deep clay-loam soils with lots of organic matter make the best growth. It used to yield best on better corn lands in the Midwest. Yields are estimated at about 150 pounds of fiber per acre, per foot of

stalk height, if the stand was good. A good stand is about 160 to 200 stalks per square yard for fiber, and about 80 to 120 stalks for seed. Time of seeding, same as oats; but really, textile hemp should be sown so it'll be cut 120 days after planting. That way, its harvest time will arrive when days start to get cool and moist in autumn. In some Deep South areas, textile hemp can be grown as a winter crop to cut while still cool and moist in spring. Seed hemp needs longer to make a crop, about 150 days plus dry-down time for threshing. The fresh seed weighs 44 pounds per bushel.

The book *Hemp Bound* does intimate that a good seed yield is 800 pounds (and up) per acre. That would yield around 300 gallons of oil, according to the book.

(Incidentally, the author refers to Kentucky as "Deep South," but I used the term in its traditional sense to mean south of Tennessee.)

### Hemp culture

Does the book divulge info on how to grow or process the crop? Some. I'll fill in a few missing details:

The soil in hemp's heyday was readied by plowing during winter or early spring with thorough disking and harrowing before planting, same as for an oat or early spring wheat planting. As fertilizer, the usual method was to just spread cottonseed meal at the rate of 1,000 pounds per acre. High cost of cottonseed meal now dictates 130 pounds of urea (46-0-0), plus 100 pounds of triple superphosphate (0-46-0) be used instead. Or, cowpeas can be alternated every other year, as was done long ago to leave the land fertile enough for good hemp yields.

For textile crops, seed was sown in special hemp-sized grain drills. Or (more commonly) about a bushel an acre was broadcast (in *Hemp Bound*, interviewee Grant Dyck says 26 to 60 pounds). Uniform strewing of the seed is important, so stems will be nearly alike in size. When ready to cut (again, determined by its age), the plants used to be cut by hand, like hand-shocked corn, or with a self-rake reaper, bundles being

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handled for retting according to seasonal conditions. I'll skip details on retting, as it's no longer "culture" at that point.

For a seed crop, two to three quarts of seed sows an acre—in rows about three-and-a-half to four feet apart. Once sprouted, it's thinned to eight to 15 inches apart in the row. In the old days, folks used to go through it before the pollen got shed, chopping out all male plants but the biggest, leaving them about four feet apart both ways. After pollination, *all* male plants were chopped out, their stalks left as mulch. When fully ripe, the seed-bearing (female) stalks were cut and placed in armload-sized shocks until dry enough for threshing.

None of the above info was given in the book except the seeding rates. But despite that, there's still a fair amount of growing advice, especially now that you know the foregoing details.

### The biz vs. Political spin

Does the book lay out insights from the experts interviewed as to how one might get into the hemp business, or processing or promotion industries, encouraging new potential entrepreneurs in the crop?

Not much. But it doesn't seem necessary to its overall focus.

The book is on target that the biggest hemp problem in the U.S. is that "industrial hemp" and "drugie hemp" (marijuana) are the same plant. Looking at them, one can't see any difference. This led to the de facto outlawing of hemp-growing in order to prevent so-called potheads from "getting high." In the first half of the book, this subject is lightheartedly waived. Then amusingly, the author repeatedly expresses shock that hemp's implicit foes (conservatives and/or Republicans) are who's leading the fight to relegalize hemp growing:

**"I hung up the phone wondering, What does it mean that I seem to be agreeing with a lot of Republicans on drug policy lately?"** (p. 32)

**"At this point in our interview, I wondered aloud how a onetime member of his college campus**

**Republicans club came to hemp as a major feedstock player for his regional energy plan?"** (p. 56)

**"I'd found myself in yet another place where the prevailing opinion about where President Obama was born has no bearing on the opinion on hemp."** (p. 121)

Interestingly, the book also fawns over and subtly glosses leftist politicians who give lip support to hemp (while doing nothing to really fix the situation):

**"California passed a terrific bit of industrial cannabis legislation in 2011 with bipartisan and local law enforcement support—inexplicably vetoed by Governor Jerry Brown."** [p. xxv, my emphasis]

**"President Obama ...wore a ... hemp scarf on a campaign stop in 2012. He knows the deal."** (p. 136)

**"The Kentucky legislature overwhelmingly passed a hemp cultivation ordinance on March 26, 2013, which the governor allowed to become law without signing."** (p. 26—of course, that governor is a Democrat.)

Those quotes are but three of many that might be cited. Still, the book isn't politically charged. In fact, it's not *anything* charged. When I finally got to the first epilogue (there are two) all that apparent political muddying of the main subject cleared up, as the author revealed he'd been a congressional intern, and which side of the aisle. That fact also explained his possibly unintended veiling of which political party historically fights hemp growing: The party that's always been the "prohibition" party: Democrats. Now I don't want to make this review political, but for the record, the 18th Amendment outlawing booze was ratified January 29, 1919, when Democrats controlled both the U.S. Senate and, united with the Socialist and Progressive parties, the House of Representatives.

In those days, America still followed the Constitution, so a ban on alcohol or anything else required a Constitutional amendment. But by the 1930s, President Franklin Roosevelt (Democrat) got hemp banned by the stroke of a bureaucrat's pen, without even a direct vote

on it in Congress, much less states' ratification.

You see, when Roosevelt made good on his campaign pledge to repeal the 18th Amendment (Prohibition) he wouldn't dare put the "revenueurs" out of a job: His greatly expanded federal work force was his biggest voting bloc! He reassigned them over to his new "Marihuana Tax Act," which incidentally was passed by both Democratic Party-controlled houses of Congress.

In nearly all mention of these subjects by Mr. Fine in *Hemp Bound*, his party's hemp antagonists remain unnamed, while incredulity is rife as *conservatives* push to relegalize hemp production.

Aside from the book's needless political quirks, it also harbors an annoying excess of odd redundancy:

Five helpful repeats, starting in the initial "Author's Note" and going through page 16, reveal hemp grows wild in Nebraska ditches (repeated later in the book too, in case the reader missed it, or their short term memory is a bit "smoky," so to speak). It's a good point, but like others in the book, over-made.

The book frequently refreshes the fact that the author raises goats in New Mexico—which I think is great, but it almost seemed it was so oft-cited to help folks lacking in short-term memory (like all the regular hemp-smokers I've known).

Recurring reminders in the first half of the book that the crop under consideration is *industrial* hemp—with tetrahydrocannabinol (THC) content below 0.3 percent and thus non-intoxicating. This ought not be confused with *psychoactive* hemp (often above 20 percent THC). Yet the second half of the book morphs the war on hemp oddly into "the drug war," which the author deduces must be stopped, so hemp can be relegalized as an industrial crop. I already agreed with relegalization on constitutional grounds, hopeful he might make a utilitarian case against the drug war. Alas, he didn't.

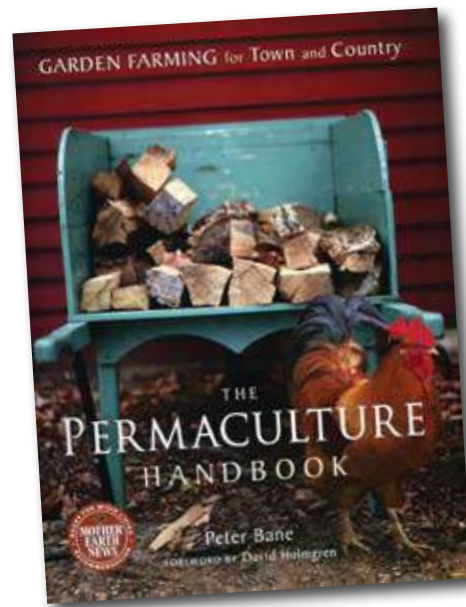
The book is entertaining, though I can't for the life of me see who would *benefit* by reading it. The author's jolly

style and upbeat outlook can be just plain fun, regardless that he can't tell the difference between "flout" and "flaunt" and seems unaware of little things like a "C-note" being a \$100 bill, not a \$1 bill. I suspect it'd be child's play to grow a few "pot" plants for recreational use amid a field of hemp and never be hounded by drug police. In all candor, I've regretted family members' perpetual adolescence from smoking the stuff until they were in their 50s. Yet I still think banning it was a tyrannical abuse of constitutional power. (The ones who quit after decades of use are now "growing up" nicely, five and six years off the weed.) Perhaps penalties for accidents and crimes committed while intoxicated ought not be "let off," but raised: Intentional loss of one's faculties makes ensuing negligence premeditated. Our society punishes its many law-abiders in futile hopes to *prevent* abuse by the few, a plan always fraught with injustice and that rarely works.

The book in its roundabout way also makes that case, maybe unintentionally. Anyone who shares the author's obvious enthusiasm for hemp growing and use, will love *Hemp Bound*, with its many conversation starters and "crack-me-up" one liners. The book has easy-navigating end notes (not the nasty chapter-by-chapter kind that make you need two bookmarks). It also has a Resources section with enough useful web sites and e-mails to alone be worth the book's price of \$14.95 to anyone seeking shortcuts to getting better informed. There's one solitary print book among the Resources, a foreign-published history of industrial hemp. Despite its brevity, *Hemp Bound* even has an index. Don't mindlessly fight against the U.S. hemp business though, until you've read this book. Knowing its valuable info may save you from making a fool of yourself in conversation someday.

*Hemp Bound*, by Doug Fine, ISBN 978-1-60358-543-9 is available from: Chelsea Green Publishing, 85 North Main St., Suite 120, White River Junction, VT 05001; 802-295-6300; [www.ChelseaGreen.com](http://www.ChelseaGreen.com).

**Book review:**



**The Permaculture Handbook**  
*Garden Farming for Town and Country*

BY EVA GRIFFITH

After reading this hefty tome (over 450 pages in large format) from cover to cover, I knew I would need some help staying on track. So I decided to take a question-and-answer approach to reviewing it. That way maybe I can condense the book's contents (and my comments) enough not to get sidetracked by the big quantities of pages and topics.

**What is permaculture?**

"Permaculture is a philosophy of working with rather than working against nature; of protracted and thoughtful observation rather than protracted and thoughtless labor; and of looking at plants and animals in all their functions, rather than treating any area as a single-product system." (Wikipedia.com)

Thus it was defined by Bill Mollison, who, while living in Australia and teaching university classes in ecology and wildlife biology in the 1970s, became acutely aware of the waste and violation of the environment: Soil, water, air, natural resources, etc. With likeminded students he formed a following and set out to correct the ills that the industrial world had created.

And that is how "Permaculture" (permanent culture) was conceived.

**What is the book about?**

Author Peter Bane, harboring sentiments similar to Mollison's but with a focus on the United States, resolved to travel the world to find a solution.

He devotes a liberal part of this book describing the bucolic life of post-Soviet Russia and the idyllic gardening systems of Nepal, Cuba, Mexico, as well as other comparably developed countries whose examples are intended to inspire us to grow food naturally and be able to feed ourselves, plus nearby towns and cities.

By using the methods of permaculture that the author's exemplar countries practice, we would be mindful of the environment, not relying on the problematic use of fossil fuel and on monoculture, like the big U.S. farmers (raising crops or livestock) are doing.

Likewise, technologies dependent on standard energy sources ought to be avoided if our communities are to survive:

"Technologies that require large amounts of energy are inherently *entropic*, that is they are wasteful and dissipative. Usually they have many complicated parts or are produced

and made effective by complicated processes. Therefore, they are prone to fail catastrophically and are hard to repair. They also leave a large trail of 'externalities' or unintended consequences. Absent cheap fossil energy, they are costly and thus available only to a few, therefore they are unjust and undemocratic." (p. 37)

Only a very small minority of America's working class represents large-scale production, which the author thinks is unacceptable. "0.3 percent of Americans derive their primary income from farming," Mr. Bane says, so it's essential in his view to look for an ideal situation where everyone has an equal and fair chance "to return to the land" and create a new society.

The best way to return to the land, he suggests, would be to find a piece of land near the city, in town, or in the suburbs (p. 57). That way if you needed to supplement your "garden farm income," he advises, you could use your bicycle for transportation and in one swoop also deprive the despised corporatists of their undeserved profits.

But what to look for in a piece of land? First of all, we have to realize that real estate in a town or suburbia (not to speak of a *city*) is not going to be cheap. So the book gives some excellent suggestions for those potential buyers who plan to maximize

their land's utility.

Get yourself a notebook and a pen to write down everything about every potential property you see.

Always ask yourself if the location of the land will benefit your home business.

Note sunrise and sunset as a guide for whether you'll be able to position



planted trees and/or garden.

Which way does the wind blow — will it need wind breaks?

Observe the type of soil in different areas of the property by studying the variety of vegetation.

Note available water sources: Well, spring, pond, creek, cistern, etc. (important for domestic use, livestock, soil, irrigation, energy).

What are the rain and snowfall amounts?

What about road condition and access to important destinations?

Can you *afford* it?

The book advises consideration of places that have been abandoned, neglected, foreclosures, etc., especially if near some woods, as a potential purchase.

Mr. Bane's archetypical plot of land would be about one-third acre, which he contends would provide food for one person for one year. The itemized table includes: Milk, meat, vegetables, fruits, eggs, cereals, potatoes and more, totaling 1,750 pounds of food.

If the plan seems a little too ambitious to produce all that food, well, that's because, as is suggested, the permaculturalist can graze his or her goat(s) on somebody else's place or let their hog(s) forage in the woods for acorns or "clean up" the orchard.

But if there are no woods or or-

chards nearby, the next best thing to do is to keep the livestock confined. "Trinidad hogs are confined and their manure is collected in troughs..." to supply natural fertilizer.

The next sizes up, the Mini-Farm (2.5 to 8.0 acres) and Green-Acres (8.0 to 25 acres) may require some machinery, and maybe an outside labor force to help with the work on the garden farm. Volunteers, friends, interns or even workers through State or Federal Farm Workers programs may be the best option.

There are many topics covered in this book. Here are just a few at random:

- What soil is; how to

keep it alive.

- Disposing of refuse or waste of almost any kind.

- Improving the lay of the land by terracing, trenching, etc.

- Plants, crops, seeds, orchards, trees, etc.

- Living with wildlife.

- Reservoirs of water.

- Culture and community.

- Animals for the garden farm.

And much more...

The information on keeping some kinds of livestock was in my opinion sadly incomplete. The next statement holds at least the germ of an explanation:

"Engaging with animals requires us to be present to our carnality in ways that simple gardening does not. The keeping of animals involves either denying them as a group any sexual expression, or accepting the inevitability of surplus offspring, especially males, and of the sacrifices this requires.... Some species observe our peculiar monogamous customs, but most, especially among our domesticated animals, do not. If you are squeamish about sexual politics, confine yourself to a few geese: They mate in pairs and for life. Otherwise, enjoy the vicarious amusement of overseeing various harems or of regulating the access of one or a few pampered males to several or many females. (p. 263)

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Livestock *breeding* requires more skill than just livestock *keeping*. Oh, and speaking of geese: They "...are excellent weeders for such crops as strawberries and potatoes." In our 30-plus years of keeping them, we witnessed on many occasions geese preferring fruit, tubers or root vegetables of every kind—if given the chance—to grazing weeds or clover. Also, to fatten a goose to harvest plumpness requires large amounts of corn. But the book says, "If you raise meat, do not feed it on grain; let it fatten on grass or bugs." (p. 407)

The book randomly emphasizes some cropping possibilities over others. For example, I was surprised that chickens, the most popular U.S. poultry, are described only generically, without naming any breed by name. On the other hand, 20 breeds of ducks were named with detailed characteristics.

Likewise, there was some information on how to raise turkeys, guinea fowl, pigeons, rabbits, guinea pigs, goats and llamas. To bees though, 11 pages were devoted, mostly to listing all the bee forage plants in the mainland U.S.

The book's section on Markets and Outreach was uniquely beneficial: To sell any product, one must reach a buyer and that means a marketing plan must be developed. "The best market is the simplest...your front gate," aptly points out the author. "The next best is a wealthy market." To justify high prices to the wealthy

buyers, he advises making the *packaging* attractive and offer premium, unusual or hard-to-get items. To attract eager buyers, a business sign or a display that intentionally *catches the eye* and that *informs*, works best.

Other ways are outlined for reaching buyers without going to a market. One is Community Supported Agriculture (CSA). The other is online sales.

Small producers might also join forces and approach local stores, the book suggests, then discusses how to do it.

### What does this book promise?

Since "the industrial economy is beginning a long, slow spiral of devolution," Mr. Bane counsels it's good to start practicing permaculture to create communities where husbandry, resources, trades, labor, housing, etc. could be shared. As the communities grow in popularity, the towns will join with the cities and eventually, coast with coast. That will make it possible to "thrive from resources of the land," where "guerrilla gardening uses land we do not own or control to create food and other resources unbeknownst to authorities, landlords and absentee owners." (p. 390) The people of the Amazon did it (by planting foods and medicines all along extensive travel ways in expansive territories), so we can too, says the book.

Even so, "garden farming guarantees no one a living, but if enough of us undertake it, we may collectively create a new commonwealth that can vouchsafe dignity and freedom from want to all of us." (p. 429)

### Who will enjoy reading this book?

I think the book's most fitting appeal is to financially secure, white collar professionals. They'd be the ones most able to afford real estate large enough to farm—er, I mean *garden farm*—in suburbs, towns, even cities and...*pay the taxes on it*.

To make a transition to permaculture philosophy, as presented, is no trifle. Four case studies were put forth as actual examples of groups of

people practicing permaculture: They got my attention.

At least one person in each case study was described as teaching permaculture design and/or offering consulting services on their properties or in some institution(s) while their vision of permaculture was still in development. This gave me the impression that maybe the business of ideology promotion pays off better than its actual dirt work.

Though the content of the book may titillate some people by awakening in them the primordial instinct of closeness to nature, it may be a turn-off to others: The book is peppered throughout with, shall we say, political preachiness. It's dismissive for example, in just about every mention, of America's obvious economic and social lead in the world, with comments like "we have our privileges because of some extraordinary good luck in historical and geopolitical lotteries." This attitude ignores the causes of the widespread squalor and inequity that plague the very nations the book upholds as models to emulate. It even says we've been "waylaid" into being an empire! And of course, "that empire is ending," adding "North Americans are morally deserving of no more material prosperity than the poorest African villagers." (p. 429)

On the whole though, the book is about husbanding and caring about our environment. Of course, individuals who owned their own land, have done it throughout the ages. If those owners were to neglect the rules of nature, they'd be the first to suffer. But then, COUNTRYSIDE readers already know that.

### Where to buy this book

The Permaculture Handbook by Peter Bane is part of a collection called "Books to Build a New Society," published by New Society Publishers, ISBN 978-0-86571-666-7. This book with illustrations is 466 pages, has three appendices, endnotes and an index. It's 8.25 by 10.75 inches in size. With a cover price of \$44.95; it's available at the following web sites: NewSociety.com and Amazon.com.

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### *Food as medicine*

# A cure for every ill

BY SHIRLEY BENSEN  
WISCONSIN

Since I was a child I have heard people (mostly older folks) say, "There has never been an illness without a natural cure. We just have to find it." As I get older I realize how true this is.

This is something we should all be interested in but especially those who are looking for a more independent lifestyle. A natural cure that is both inexpensive and readily available, one that would give no nasty side effects like some of the modern drugs would be a godsend. What did the ancient Greek physician say? It went something like, "Let your food be your medicine and your medicine be your food."

I recall my grandmother telling about the letter she had received from her sister in 1903 telling them her son was dying. He had severe dysentery and doctors could do nothing for him. That night after chores were done Grandma walked down the road to the home of the local midwife. She wanted to ask if there was anything that would help her nephew. This little old lady also had a lot of weird cures and many called her a witch doctor. She told Grandma to make a tea of the tiny white blackberry roots and give it to him a few sips at a time every hour or so. Grandma said they went out that night with the kerosene lantern and dug some roots. If you have ever used a kerosene lantern you will realize what a job this was. The lantern gives very little light and casts a huge shadow. Grandpa hitched up the team while she cleaned and packaged the roots and wrote the instructions. He took the package to the depot and gave it to the conductor of the midnight train with the caution to guard it well, as it was a matter of life or death. She had written "IMPORTANT MEDICAL" on the outside.

The following week they received another letter from her sister. She said the local postmaster had delivered the package himself as he knew how sick their son was. They had begun giving the tea as soon as it arrived. It took both of them because he was so weak he could not sit up. Toward morning he opened his eyes and said, "Ma, I'm hungry." His health improved rapidly and he lived to a ripe old age.

Just this week my granddaughter called. Her little boy had dysentery and could not go back to daycare until cured. I told her to try blackberry juice and he went back to daycare the next morning.



To me, cranberries have always been the miracle berry. They are the best protection and early cure for bladder and urinary infections. Eating cranberries a couple of times a week is as important as an apple a day. Today I read in a medical magazine how important they really are. According to the article, if you have to go to the hospital for any reason you should smuggle in a bottle of cranberry juice and drink it while you are there. Apparently a new study has shown that the cranberry gives the rest of the body the same protection as it does the urinary tract and the virus cannot cling and grow there. It helps protect against the new super bug people are catching in hospitals. This virus is nearly incurable and resistant to modern drugs, and many people are dying from it.

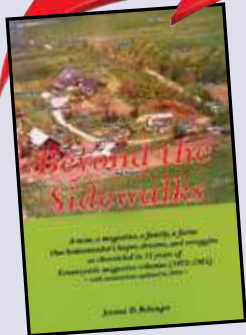
There has been very little research done on the medicinal value of our foods and beverages. For some reason we are more willing to reach out to the artificial and scientific research than what is right under our nose. Science has come up with some wonderful drugs to help us live a long life, but unfortunately many of them come with side effects, some mild and some of them severe. There are natural cures all around you free for the picking, but they take careful study and consideration of your personal condition. You will find it well worth the effort and when you do find a natural cure that works be sure to write it down and pass it on to your family and friends. Given time it will become a normal reaction to check your pantry before you go to the pharmacy. ✨

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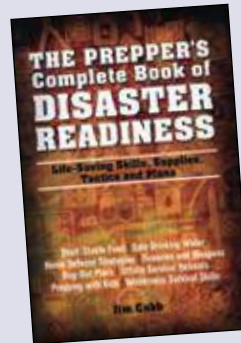


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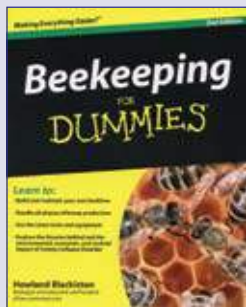


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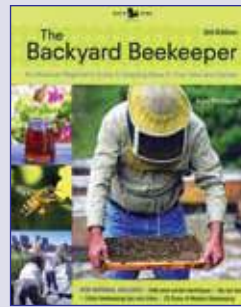
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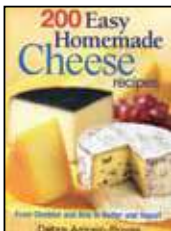


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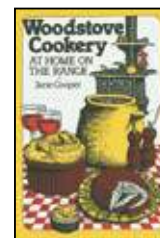


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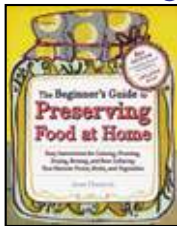


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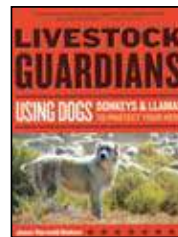
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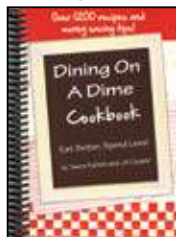
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## The homestead kitchen:



# Fish dishes that I pine for

By HABEEB SALLOUM  
CANADA

I have always enjoyed and cooked fish dishes. Even before I knew their health attributes I looked upon fish, one of humankind's very important foods, as a treasured item. For me, tasty and mouth-watering in whatever way it is prepared fish adds color, flavor and attractiveness to any meal.

Not only is fish a delicious food, but it also contains excellent nutritive properties. It contains about 20% protein and small amounts of calcium, iodine, iron, magnesium, phosphorous, potassium and sodium. In addition, fish is a good source of vitamins A, B, D and E, and is almost carbohydrate and fat free—making it popular as a low-fat fare. Fish's omega oils are good for the immune system and help to prevent arthritis and headaches. In 2003, research at Harvard University established that eating fish only once a month can actually reduce one's risk of stroke.

Fish can be preserved by being canned, dried, frozen, salted, smoked or marinated. However, all types of fish are at their epitome of taste when eaten fresh, spoiling quickly when not cooked at once. Hence if not to be used immediately, fish should be kept frozen. The modern method of blast freezing preserves the flesh so

well that decomposition is barely detectable.

A cook can always tell if a fish is fresh or frozen soon after capture by the brightness of the eyes and the firmness of the flesh. To preserve its fresh taste, if frozen, fish should be thawed slowly in cold water then cooked right away.

From the many fish dishes that I have prepared, the following are a few of the ones, a good number Middle Eastern, that I often pine for.

### Fried Fish - Samak Maqli

Serves about 4

Served with lemon slices and tartar sauce or garlic sauce and French fries it is one of my favorite dishes.

2 pounds grouper fillet  
2 tablespoons lemon juice  
1 1/2 teaspoons salt  
1 teaspoon garlic powder  
1/2 teaspoon pepper  
1/2 teaspoon powdered ginger  
1/2 teaspoon cumin  
1/2 teaspoon ground coriander seeds  
flour

Cut fish into 1/2 inch thick slices and set aside.

Combine remaining ingredients, except flour, then rub fish slices with this mixture and allow to marinate for 30 minutes.

Roll fish slices in flour then deep-

fry until golden brown—about 10 minutes, turning over once. Drain on paper towels then serve hot.

### Grilled Fish Kebab

Serves about 4

If the grouper is fresh, this dish is divine. Serve with lemon slices and cooked rice or French fries.

2 tablespoons lemon juice  
4 cloves garlic, crushed  
1 teaspoon salt  
1/2 teaspoon cumin  
1/2 teaspoon ground coriander seeds  
1/4 teaspoon powdered ginger  
1/4 teaspoon cinnamon  
1/8 teaspoon nutmeg  
1/8 teaspoon cloves  
1/8 teaspoon cayenne  
2 pounds grouper fillet, cut into 1-inch squares

Combine lemon juice with garlic, salt and all the spices, then place fish cubes in a bowl and pour the spice mixture over the fish. Mix well then allow to marinate for 1 hour. Place fish cubes on skewers and barbecue, turning them a few times or grill in oven until done—from 10 to 12 minutes in oven—barbecuing takes less time.

### Oven Cooked Fillets

Serves 2

Grouper is my favorite fish, espe-

cially when it is fresh.

- 4 cloves garlic, crushed
- 2 tablespoons olive oil
- 2 tablespoons soy sauce
- 2 tablespoons finely chopped coriander leaves
- 1 tablespoon fresh grated ginger
- 1/2 teaspoon pepper
- 1 pound of fish fillet preferably firm flesh fish such as salmon, grouper, etc.

Combine all ingredients except fillet then coat fillet and marinate for 2 hours. Bake uncovered in its marinade in a 350°F preheated oven for 20 minutes then serve while hot.

### Fish Cakes

Serves about 6

These tasty fish cakes found in the United Arab Emirates are also popular in other Arab Gulf countries. They can be served as snacks or, along with a salad, as a delicious entrée.

- 2 pounds fillet of grouper or similar firm flesh fish
- 1 large onion, finely chopped
- 1 cup bread fine bread crumbs
- 1/2 cup chopped fresh coriander leaves
- 2 eggs, beaten
- 4 cloves garlic, crushed
- 2 tablespoons lemon juice
- 2 teaspoons baking powder
- 1 teaspoon salt
- 1 teaspoon garam masala
- 1 teaspoon turmeric
- 1 teaspoon cumin
- 1/2 teaspoon pepper
- Oil for frying

Place all ingredients except oil in a food processor and process into thick dough. Form into small cakes and set aside.

Heat oil 1 to 2 inches deep in a saucepan; deep fry cakes until they turn golden brown. Serve hot. However, they are also delicious when eaten cold.

### Fish and Burghul Patties

Makes about 48 small patties

Called fish kubba in the Greater Syria area in the Middle East, its land of origin, these patties are great when served as an appetizer or for a snack.

1 cup fine burghul, soaked for 10 minutes in warm water, then thoroughly drained by pressing out the water through a fine strainer

- 1 pound cod or similar fish fillet, cut into pieces
- 1 medium onion, chopped
- 4 cloves garlic, crushed
- 3 tablespoons flour
- 1 1/2 teaspoons salt
- 1 teaspoon pepper
- 1/2 teaspoon allspice
- 1/2 teaspoon cinnamon
- 1/4 teaspoon nutmeg
- 1/8 teaspoon cayenne
- Oil for frying

Place all ingredients except oil in a food processor, then process into firm paste. Form into small patties about 1 1/2 inch in diameter, then set aside.

Heat 1 inch deep oil in a frying pan, then fry patties over medium heat, turning them over a few times until they turn golden brown. Drain on paper towels then serve.

### Stuffed Grouper

Serves about 6

If grouper is not available, salmon makes a good substitute.

- 1 whole grouper (3 to 4 pounds), fins and tail clipped then thoroughly washed
- 6 cloves garlic, crushed
- 1/2 cup lemon juice
- 2 teaspoons salt
- 1 teaspoon pepper
- 2 onions, thinly sliced
- 1 cup finely chopped fresh coriander
- 3 medium tomatoes, finely chopped
- 2 medium sweet red peppers, seeded and finely chopped
- 2 teaspoons garam masala
- 1/4 teaspoon cardamom
- 1/2 cup olive oil

Rub fish inside and outside with half of the garlic, 2 tablespoons of the lemon juice, and half of the salt and half the pepper then set aside.

In a bowl, combine onions, coriander, tomatoes, sweet peppers, garam masala and cardamom as well as the remaining garlic, salt and pepper.

In a blender, blend remaining lemon juice with the oil until fluffy. Pour half of this into the mixture in

bowl and stir.

Spoon into a greased baking pan a third of the bowl mixture; stuff the fish with another third of the mixture then place in baking pan. Spoon the remaining mixture over top then pour the remaining lemon/oil mixture. Cover with foil and bake at 350°F for 40 minutes. Uncover and remove any vegetables still on top of fish then place under broiler and broil for 5 minutes or until fish begins to brown. Serve with sauce and vegetables.

### Steamed

### Cantonese-style Fish

Serves 4

This delicious dish is healthy and low in fat. I have never forgotten its taste since the first time that I ate it in a Chinese restaurant in Regina, Saskatchewan.

- 2 to 3 pounds salmon or similar fish steaks rubbed with 1 1/2 teaspoons salt
- 2 tablespoons finely grated fresh ginger
- 4 tablespoons chopped green onion
- 1 small red sweet pepper, seeded and cut into thin strips
- 4 tablespoons light soy sauce
- 2 tablespoons peanut oil
- 3 teaspoons sesame oil
- 2 tablespoons chopped fresh coriander leaves

Place fish in the perforated upper part of a double boiler then set aside.

Fill the lower part of double boiler with water and bring to a boil over high heat. Fit the upper part with the fish on top then spread ginger over the fish.

Allow to steam over high heat for 10 to 15 minutes. It is done when the fish begins to flake slightly but still remains moist.

Remove the steamed fish and place on a platter. Spread the green onions and red pepper slices over top then drizzle over with the soy sauce.

Heat the peanut and sesame oils in a small saucepan until they begin to smoke then immediately pour them over the fish. Spread coriander

over top and immediately serve with cooked rice.

## Salmon Teriyaki

Serves 6 to 8

This Japanese dish can be served with teriyaki or a similar type of sauce.

**3 pounds salmon fillet, cut into serving pieces**

**3/4 cup soy sauce**

**3/4 cup golden brown sugar**

**1/4 cup orange juice**

**4 tablespoons lemon juice**

**6 cloves garlic, crushed**

**1 tablespoon finely grated fresh ginger**

**1 teaspoon pepper**

**1 teaspoon dry mustard**

Place fillets in a casserole and set aside.

Make a marinade by combining remaining ingredients. Pour over fillets and allow to marinate for about 5 hours, turning them over a number of times. Remove salmon steaks from marinade and wrap with aluminum

foil. Grill for about 10 minutes, turning over once or until fish flakes when pressed with a fork. Serve with cooked rice and teriyaki sauce.

## Colombian Seafood Stew

Serves 8

Quick to cook, this stew makes a perfect delicious meal for the whole family.

**4 tablespoons butter**

**1 large red bell pepper, seeded and finely chopped**

**1 large onion, finely chopped**

**4 cloves garlic, crushed**

**1 small hot pepper, seeded and finely chopped**

**1 medium grated carrot**

**2 cups coconut milk**

**1 pound uncooked shrimp**

**1 pound scallops, fresh or frozen**

**1 pound tuna or halibut fillet, cut into 1-inch pieces**

**1/4 cup white grape juice**

**2 tablespoons tomato paste, dissolved in 1 cup water**

**1 1/2 teaspoons salt**

**1 teaspoon pepper**

**1 teaspoon paprika**

**2 tablespoons chopped fresh coriander**

Melt the butter in a large saucepan then sauté over medium heat the red pepper, onion, garlic, hot pepper and carrot for 10 minutes, stirring occasionally. Add remaining ingredients, except the coriander leaves, and bring to boil. Cover and cook over medium/low heat for 20 minutes then garnish with the coriander leaves and serve hot along with cooked rice.

## Fish Stew - Yassa

Serves about 6

Yassa is a famous dish that is popular throughout West Africa. Cubed beef, lamb, mutton or chicken may be substituted for the fish. However, when using meat the dish will need to cook a bit longer for the meat to become tender.

**2 pounds of firm fish steaks such as tilapia or perch**

**4 medium onions, thinly sliced**

**1 small hot pepper, seeded and finely chopped**

**4 tablespoons lemon juice**

**2 teaspoons Dijon mustard**

**1 1/2 teaspoons salt**

**1 teaspoon pepper**

**1/2 cup olive or peanut oil**

**2 cups chopped cabbage**

**2 cups carrots, diced into 1/4-inch cubes**

Place fish steaks, onion, hot pepper, lemon juice, mustard, salt, pepper and 4 tablespoons of the oil in a Pyrex or glass utensil then thoroughly mix. Refrigerate and marinate overnight. Remove fish steaks and spread on a tray. Reserve marinade.

Fry, grill or broil steaks for 3 minutes on each side. Set aside.

Heat the remainder of the oil, over medium heat, in a saucepan.

Remove onions from the marinade and place in the saucepan then sauté over medium heat for 5 minutes. Add the marinade, cabbage, carrots and the fish steaks to the onions. Reduce heat to low and simmer covered for 40 minutes or until vegetables are cooked, adding a little more oil if needed. Serve with cooked rice or couscous. 🌿

**About the author:** Habeeb Salloum is a Canadian author who grew up in Saskatchewan, joined the RCAF during the Second World War, and then worked for the Canadian Department of National Revenue for 36 years. For the last 30 years he has been a full-time freelance writer and author specializing in food, history and travel. Besides seven books and 20 chapters in books, he has had hundreds of articles about culture, food, travel, history and homesteading in western Canada appear in such publications as the *Toronto Star*, the *Globe and Mail*, the *Western Producer*, *Contemporary Review*, *Forever Young*, *Vegetarian Journal* and *Saveur*.

His published books include: *From the Lands of Figs and Olives: Over 300 Delicious and Unusual Recipes from the Middle East and North Africa* (Interlink Publishing, 1996); *Journeys Back to Arab Spain* (The Middle East Studies Center, 1994); *Arabic Contributions to the English Vocabulary* (Librairie du Liban, 1996); *Classic Vegetarian Cooking From the Middle East and North Africa* (Interlink Publishing, 2000); *Arab Cooking On A Saskatchewan Homestead: Recipes And Recollections* (CPRC, University of Regina, 2005) – winner of the Cuisine Canada and The University of Guelph's Silver Canadian Culinary Book Awards in 2006, *Bison Delights* (CPRC, University of Regina, 2010) and *The Arabian Nights Cookbook* (Tuttle Publishing, 2010). His most recent books, co-authored with Leila Salloum Elias and Muna Salloum, are *Scheherazade's Feasts: Foods of the Medieval Arab World* (University of Pennsylvania Press, 2013); and *Sweet Delights from A Thousand and One Nights: The Story of Traditional Arab Sweets* (I.B. Tauris, London, UK, 2013).

Habeeb was awarded the 2013 Saskatchewan Tourism Travel Media Award by the Saskatchewan Tourism on April 10, 2014 for his literary work on travel, tourism and the culinary arts of that province.

*The homestead kitchen:*



BY WANDA CLARK  
PANTRY STUFFERS, LLC

Thanksgiving and Christmas trigger my most vivid childhood memories. I have memories of a few special toys, but most of my memories are of the special times with friends and family, followed by the aroma and taste of the holiday meals. I remember as a teenager being drafted into the special meal preparations. What started out as fun began to feel more like punishment – hours and hours of peeling and chopping onions, celery, white potatoes, sweet potatoes, carrots, bell peppers, apples, pineapples, cheese, etc.

The house would be filled with a cornucopia of aromas of food and spices. As the preparations continued, a mountain of bowls, dishes, utensils, pots and pans grew in the kitchen sink, which had to be washed, dried, and put away before the meal was served because another mountain of dishes would soon follow after the meal was finished.

It wasn't until I got older that I realized that my mom, aunts, and grandmother were not in any of my holiday memories of board games, stories, and play time – they were busy preparing the meal, cleaning up afterward, then collapsing from exhaustion when the meal was com-

plete. As a mom and grandmother, I want to change tradition and be part of the fellowship memories of my family and friends and not be forever remembered as “Crabby Grandma” from trying to follow the steps of those before me. But, while going out to a restaurant might seem like the logical option, I don't want to give up having my home filled with the home-cooked aromas and tastes that are part of our holiday traditions.

As the co-owner of Pantry Stuffers, LLC, I have spent many hours creating and testing mixes using freeze-dried, powdered, and dehydrated food products. Following yet another Thanksgiving crash and burn cycle, I had an “aha” moment. I could use my “prepping” skills – along with freeze-dried, powdered, and dehydrated products, to “prep” part of my holiday meal and buy me back precious fellowship time with my family and friends.

You can do the same thing. Basically, you take your favorite holiday recipes, and convert as much of the recipe as you can to a “powdered” mix. The mix can be packaged weeks or months ahead of time and can save you hours of precious preparation and clean-up time for your holiday meal. Here are a few of the recipes from my holiday collection.

**Sweet and Savory  
Sweet Potatoes**

6 servings

I love to take advantage of the root vegetables in the fall and winter. I usually make the traditional southern version of sweet potato casserole with lots of brown sugar, pecans, and marshmallows, but we're trying to eat healthier these days...

Mix:

- 1/2 cup Honey Powder\*
- 1/4 cup Butter Powder\*
- 1/2 cup Brown Sugar
- 2 tablespoons Orange Juice Powder\*
- 1 teaspoon rosemary
- 1 teaspoon salt
- 1/2 teaspoon black pepper

1-3 days before the meal:

Peel and dice 4 cups of sweet potatoes and store in freezer bag in refrigerator.

Day of meal:

Preheat the oven to 350°F. Grease a 9" x11" baking dish.

In a mixing bowl, add the mix, 1 cup water, and 1 tablespoon oil (I use coconut oil pre-heated to liquid, but you can use whatever oil you like). Stir well, then toss in the diced sweet potatoes.

Place sweet potatoes with all of the mix in the baking dish. Cover with aluminum foil, and bake for 1 hour or until the potatoes are done. Stir and serve.

**Versatile Herbed Pasta**

6 servings

This has been a great mix for me both during and immediately following the holidays. We have several family gatherings within a few days and this makes a “fresh” dish with whatever I have available.

Mix:

- 1/2 cup Butter Powder\*
- 2 teaspoons garlic powder
- 2 teaspoons onion powder
- 1 teaspoon dried basil
- 1/2 teaspoon dried thyme
- 1/2 teaspoon dried marjoram
- 1/2 teaspoon ground savory
- 2 teaspoon dried parsley

**1 teaspoon salt**  
**1/2 teaspoon black pepper**

*Day of meal:*

Cook 1–8 oz. package of pasta of your choice according to package directions. Drain the cooked pasta, reserving ½ cup of water.

Mix the pasta water, 1 tablespoon of oil and the mix. Stir well.

Pour mixture over pasta and toss well. Serve as is, or try one of the following serving options.

*Serving options:*

- Add 1 cup diced tomatoes
- Add 2 tablespoons diced black olives, and top with grated Parmesan cheese
- Add 1 cup diced turkey or ham
- Add 1–4 oz. jar of mushrooms, drained

### Orange-Ginger Carrots

*Serves 4–6*

We love carrots and this recipe fills the house with rich orange-ginger aromas. You can use diced carrots for this recipe, but using whole baby carrots make this a very quick fix.

*Mix:*

**1/2 teaspoon dried orange peel**  
**2 tablespoons Orange Juice Powder\***  
**1 tablespoon Butter Powder\***  
**1 tablespoon Honey Powder\***  
**¼ cup brown sugar**  
**1 teaspoon ground ginger**  
**1/2 teaspoon salt**  
**1/4 teaspoon black pepper**

*Day of meal:*

In a medium saucepan, bring 1 1/2 cups water to a boil. Slowly add the mix, and stir until powders are dissolved.

Add 1 lb. of baby carrots, reduce heat, and simmer for 35 to 45 minutes or until carrots are tender and glazed.

### Carrot Orzo

*4–6 servings*

This is a delicious and beautiful side to any holiday table. To save more time, use the food processor to chop the carrots.



Sweet and Savory Sweet Potatoes

*Mix:*

**1/4 cup Dehydrated Chicken Stock\*\***  
**1/2 cup Butter Powder\***  
**1/4 cup dehydrated minced onions**  
**2 cups uncooked Orzo pasta**  
**1 tablespoon dehydrated minced garlic**

**2 teaspoon salt**

**1 teaspoon pepper**

**1 tablespoon dried chives**

**1 teaspoon thyme**

**1/4 cup Burgundy Wine Powder\***

**2 teaspoon Vinegar Powder\***

*1–3 days before the meal:*

Dice 2 cups of carrots and store in freezer bag in refrigerator.

*Day of meal:*

Add 2 cups of diced carrots and 6 cups water to a medium saucepan. Bring to a rolling boil, and boil for 5 minutes. Add mix, and return to a boil. Lower heat and cook for 25–30 minutes or until the liquid is absorbed.

Stir in 1 cup grated Parmesan cheese before serving.

### Apple Brussel Sprouts

*Serves 6*

This delicious version of Brussels sprouts will make your guests think you spent hours preparing.

*Mix:*

**1/2 cup Freeze Dried Bacon\***  
**1 cup dried apple slices, diced**  
**1 tablespoon dried shallots**  
**1 teaspoon dehydrated minced garlic**  
**1/4 cup Chablis Wine Powder\***  
**1 tablespoon Powdered Chicken Stock\***

**1 teaspoon salt**  
**1/2 teaspoon pepper**

*One day before meal:*

Halve 1 ½ lbs. of fresh Brussels sprouts, then cut into shreds. Put shredded Brussels sprouts in freezer bag and store in refrigerator.

*Day of meal:*

In a large skillet heat 3 tablespoons of oil. Add 2 cups of water and contents of mix. Stir until all powders fully dissolved. Simmer for 5 minutes. Add shredded Brussels sprouts and simmer for 20 minutes more.

Delicious as is, but may also be served topped with Parmesan cheese.

### Herbed Potato Dumpling

*6 Servings*

This mix is a pantry staple for wintertime dinners. These dumplings can be added to any broth or stew. Making a stew of leftover chopped turkey, turkey gravy, carrots, onions, and mushrooms, and water is a quick and easy meal when you add these dumplings.

*Mix:*

**2 cups potato flour**  
**1 teaspoon salt**  
**1 teaspoon baking soda**  
**2 teaspoon baking powder**  
**1 teaspoon thyme**  
**1 teaspoon parsley**  
**1 teaspoon oregano**  
**1/4 cup Butter Powder\***  
**1/2 cup powdered milk**

*Day of meal:*

Place the mix in a medium-size bowl. Slowly add 2 cups water and 1 tablespoon oil, stirring to incorporate the liquid to the mix. Drop by rounded tablespoons into simmering soup, or stew. Cover and cook for 15 minutes. 🍴

\* Mixes available from pantry. [stuffers@gmail.com](mailto:stuffers@gmail.com).

\*\*Note: Dehydrated Chicken Stock does not contain salt. If you use chicken bouillon, make adjustments for added salt.

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## The homestead kitchen:

# There's no end to zucchini... recipes!

Laura Shirk  
Missouri

### Zucchini Pineapple

4 qts. zucchini, grated or diced, seeds removed  
1 ½ cups lemon juice, bottled  
1 - 46 oz. can unsweetened pineapple juice  
3 cups sugar  
Pineapple flavoring, if desired

Place all ingredients in 8 qt. kettle, mix thoroughly and simmer for 20 minutes, stirring frequently. Process 20 minutes for pints, 25 minutes for quarts in boiling water bath or 5 lbs. pressure for 1 minute.

As a dessert, we use 2 qts. of the juice, add 2 qts. water, 1 cup sugar, 1 package Kool-Aid (your choice of flavor). Bring to a boil and add 1 cup Clear Jel® or pre-mix mixed with water. Add and stir until thickened, add one box Jell-O (same flavor as

Kool-Aid—we like orange, grape, cherry and lime). We get the Clear Jel® at Amish or bulk food stores. It's for thickening, almost like cornstarch. This can also be canned.

### Zucchini Fudge Cake

4 eggs  
2 ½ cups sugar  
2 teaspoons vanilla  
¾ cup butter, softened  
3 cups all purpose flour  
½ cup unsweetened cocoa  
2 teaspoons baking powder  
1 teaspoon baking soda  
¾ teaspoon salt  
1 cup buttermilk  
3 cups coarsely shredded, unpeeled zucchini  
1 cup chopped walnuts

Beat eggs until fluffy; gradually add sugar, beating until mixture is thick and lemon-colored. Beat in vanilla and butter. In a separate bowl,

combine flour, cocoa, baking powder, baking soda and salt. Stir half of dry ingredients into egg mixture; add buttermilk and mix. Mix in remaining flour mixture; beat until smooth. Fold in zucchini and walnuts. Divide batter in round greased and floured pans. Bake at 350°F for 25-30 minutes until top springs back when gently pressed. Cool in pans 10 minutes, remove to wire racks and cool completely before frosting.

### Chocolate Frosting

1 cup butter, softened  
2 lbs. confectioners sugar  
½ cup unsweetened cocoa  
1 tablespoon vanilla  
½ cup milk  
Mix all ingredients until creamy.

### Zucchini Sausage Casserole

¼ lb. mild bulk sausage  
¼ cup chopped onion  
4-5 cups zucchini, peeled and diced  
½ cup cracker crumbs  
1 egg, beaten  
1 cup cheddar cheese, shredded (plus some for topping)  
¼ teaspoon salt  
¼ teaspoon oregano  
Dash of garlic salt  
Dash of pepper

Brown meat with onion, drain. Add zucchini, cracker crumbs, egg, cheese and spices. Place in a greased 2 qt. baking dish and bake at 350°F for 45 minutes or until zucchini is tender. Top with a little cheese near end of baking time.

### Zucchini Quiche

3 cups zucchini, shredded  
1 cup Bisquick or flour  
½ cup onion, chopped  
½ teaspoon oregano  
Dash of garlic powder  
½ cup cooking oil

Beat eggs slightly, add rest of ingredients and mix. Pour into buttered 9-inch cake pan. Bake at 350°F 45 - 50 minutes or until golden brown. 🌿

## Grandma Strong's Possum

SUBMITTED BY BERNICE PEPLAWSKI  
ARKANSAS

Here is a "hard times" recipe from the hills of Arkansas from the grandson of the woman who raised and cooked the following:

- Skin and clean possum
- Put in a large pot and boil with one hot pepper pod and salt.
- After boiling for 1 to 1 ½ hours, remove possum and place in roaster.
- Add about 1 tablespoon lard. Add a little water. Cook in the oven until the meat starts to brown.
- Put flour in a pie pan and parch in oven. Watch closely until it turns light brown. Stir with a fork.
- Make a gravy by putting the flour in the liquid in roaster and stir until thick.
- Clean and peel 4 or 5 sweet potatoes, quarter and place around meat. Cook until potatoes are done.

*Grandma Strong raised the possum on their farm in Arkansas. Grandson Carmine A. Stahl is retired and living in central Ohio. 🌿*



The Cozy Quilters of Thomasville, Alabama.

*Country neighbors:*

# Quilting & community service share a common thread



*The work of the Cozy Quilters combines artistry and dedication to helping others.*

By CAROLYN DRINKARD

Quilting is deeply woven into the fabric of the American way of life. Whether telling a story, preserving a moment from the past, expressing a deep emotion, or commenting on social issues, a quilt can preserve special moments in our lives. This was certainly evident recently at the Thomasville Civic Center as the age-old artistry of quilting took center stage at the annual Hometown Celebration. The Cozy Quilters paid tribute to their popular craft with over 110 exhibits that showcased the talent and ingenuity of their artistic members.

The simplicity of quilting attracts both young and old, as seen in the large crowds that attended the exhibit. Marie Slade coordinated the event, which featured quilts, wall hangings, crocheted and knitted items, and a baby boutique. Each exhibit featured personal information about the quilt and its maker.

Vintage quilts, art quilts, and original quilts hung among the cherished antiques in the Safford Room of the Civic Center. At the entrance was a "Thomasville" quilt, created by Runelle Reid. Framed in

the Thomasville colors of maroon and gray were photographs of people and events that had impacted Reid's life. This was a popular exhibit, as guests knew many of the people in the pictures. Wanting to preserve dresser scarves and doilies that her mother had lovingly embroidered and used in their home, Marie Slade designed a quilt that framed the heirloom pieces, preserving them for antiquity. Diane Fendley shared some heirloom quilts made by her family members. Diane's mother-in-law, Fay Fendley, had made all of Diane's maternity tops when she was expecting her son.

Years later, "Miss Fay" took the tops and made Diane a quilt called "Umbrella Ladies." Diane also displayed a quilt made by her great aunt, Alice Cassity. Mrs. Cassity had once worked at Solomon Brothers Shirt Factory. The company, which closed years ago, would give scraps to its employees, so Mrs. Cassity took



Marie Slade



Jenny Davidson crocheted many beautiful pieces, such as a creche and dolls.





Mrs. Fay Fendley (right) took the maternity tops worn by her daughter-in-law, Diane Fendley (left) and made an "Umbrella Ladies" quilt.

some of the old shirt-factory scraps and made a Star quilt, a priceless memento for her family. Jenny Davidson displayed incredible crocheted items, such as a crèche and some colorful dolls. She also displayed a state quilt that her aunt had started in 1970. Five family members had worked on the quilt before Jenny finished it this year.

The Cozy Quilters are well known throughout South Alabama not only for their beautiful creations but also their charitable and community service activities. The guild started in 2004 when Debbie McClure pondered the idea of opening a quilt store in Thomasville. When things didn't work out, she started a quilting club instead. At first, the club had only five members, but this soon changed. The club now has over 56 members, not only from Clarke County, but also from five surrounding counties. The City of Thomasville originally gave the group one meeting room, located in the old Thomasville Elementary School building. Now, the group has grown so much that they need two rooms.

The goal of the Cozy Quilters has always been to serve and educate the community through quilting. Their "community" now spans five counties. When the group decided to make adult bibs, wheelchair caddies, and lap robes for nursing home and assisted-living residents, they supplied enough for all the patients in the Thomasville, Jackson, and Camden facilities. Another project found them making baby quilts, blankets, bibs, stuffed toys, and diaper bags



Marie Slade, Ramona Kelley, and Runelle Reid worked on the "Thomasville Quilt."

for the ALPHA Pregnancy Center in Jackson. After receiving a \$300 grant from the American Quilt Association, they made baby items for the Grove Hill Hospital. They have also created pillowcases for the Children's Advocacy Center in Grove Hill. When one member visited the local Dialysis Center and realized that patients did not have pillows to support their arms, the CQ's made both pillows and pillowcases for each client. After over 50 defective electric blankets were donated to the Thomasville Healthcare and Rehab Center, the club lovingly removed all the electrical wiring and made coverlets for each resident.

The CQ's have donated quilts to fundraising efforts and at Christmas, the group has also worked with the Clarke County Department of Human Resources to fill boxes with lap robes and personal hygiene items for seniors. Amazingly, individuals have donated the materials and supplies for most of these projects.

The *Quilts of Valor* project, for the families of fallen soldiers, has been one of their most inspirational activities. When Thomasville native, Drew Knight and three other Coast Guard members were killed in a helicopter crash in Mobile Bay, the Quilters created a special quilt honoring Knight and presented it to his parents. At their show in June, this quilt was displayed in a moving, patriotic setting. It was possibly the most photographed exhibit in the show.

Like the quilting bees of old, the gatherings of the Cozy Quilters promote a sense of community and fellowship. "Our meetings are on-going



The Cozy Quilters made a quilt for the Quilts of Valor project honoring Drew Knight. It was probably the most photographed quilt in the show.

learning opportunities," explained McClure. "We meet every 1st and 3rd Tuesday and have a demonstration of the 'block-of-the-month.' Each member teaches the others. Also, we have a planning committee that meets on Mondays to make the project kits to take to our meetings. Each member takes a kit and completes that project." The group also visits other quilt shows and enjoys something they call, *Shop Hopping*. Occasionally, they will have a Friday night "Midnight Madness" or a Saturday "All Day Quilting."

The quilters' way may seem out-of-step with our fast-paced technological world, but in fact, the art is thriving. Quilters have embraced the Internet in ways unheard of in the past. With a keystroke, modern quilters can share patterns, designs, techniques, tutorials, and videos, creating a faster way to communicate and share their art. Some Cozy Quilters use the EQ programs to design their own quilts, comfortably working with their iPads and smartphones. The Cozy Quilters also have their own Facebook page.

Quilting is indeed woven into our American way of life. It embraces many genres, takes many forms, and gives artists a canvas to show how differently each of us see, feel, and interpret things. Ask any Cozy Quilter why they love quilting, and you'll get a different answer from each one. But they all can agree on one thing: quilting provides a respite from the noisiness of their lives. Like any other artist, the quilters seek the elation of stitching a thing of beauty that brings joy to others! ❁

Country neighbor.



# Back to pints

## And thoughts on previous reader topics

By **LOWELL MORGAN**  
TENNESSEE

I got a lot of enjoyment out of the March/April 2014 issue, especially Jeffery Goss' "Big Deal." He was so right. Through the last 35 years I've watched gardeners run after any seed variety that some novice gardener wrote an article about. I don't cater much to some miracle variety that some university comes up with. I respect academia as I was in it up to my neck at one time, but I trust my wife Rita and whatever variety she says is best for our area and us. After years and thousand of canned jars of fruit and vegetables using as many as six canners and children helping (two being filled, two cooking and two cooling), she's all the "know how" we need. I don't even know the names of some of the varieties we use every year. We've picked up seed from a lot of folks through the years; rejected a few, and kept what we liked. We didn't try to have a lot of different varieties, just a few good ones.

The article by Bernis Ingvaldson also caught my attention. WOOFing is such a good thinking. I know we have been blessed through the years from these folks. I think we had our first one in 1994. A young man, Wesley Martin, from Vermont, sent to us from Sterling College to live with us for a (school term) quarter. He was getting college credit for his stay and had to write a paper every week. He was from a one-child family, so you can just imagine

what an experience it was for him. Our children have fond memories of Wesley. From his last letter, he's married with children, living on his own homestead in the North East. If my memory serves me right, we've had folks from Argentina, South Africa, France, Germany, Canada and many states.

We've only had one bad experience. The rest have been wonderful. Our homeschooled children learned a lot from them all. It has been a good experience for us.

The article by Dan Fink was really well done. Not much you could disagree with if you've been in solar very long. Just straight forward facts. We have 11 solar powered homes here on the farm, everything from a one-room cabin to a 4,000 sq. ft. two-story home. I think maybe he was a little bit too hard on deep cycle marine batteries. We've had really good service from ours. The ones we purchase have a three-year guarantee, but we've never had to return any that I remember. Usually they last from seven to 10 years. They cost about \$100 each, but as Dan said, we use propane or kerosene refrigeration. For the larger systems we do use L-16s. One of our sons-in-law is a solar power guru as far as we are concerned. Folks in our area depend on him a lot. He has built some large systems and they really work well. He has taught us all how to take better care of our systems.

We're back to pints. It seems strange after so many years of canning quarts, to watch Rita putting

everything in pints. I had refused to plant a garden this year, it's just me and mama now. The children are all in their own homes. Esther is the only one not married, but he has met a girl from Virginia (a whole 'nother COUNTRYSIDE match!) and seems to be moving toward a wedding. Her family spent the July 4<sup>th</sup> week with us, checking us out I suppose. Anyway, we really like them. (I do digress!)

Anyway, we need to empty some of our cellar before we put more in there. I thought she wouldn't be canning all summer if we didn't have a garden. Now she's taking the daughters-in-law and grandchildren to pick blackberries, peaches, plums, blueberries—whatever is ready. She came in last night with seven gallons of blueberries and started canning them. I took her by the hand to the cellar, turned on the light and asked "Just where are you going to put 50 more pint jars?" She just laughed and said, "I know, but we had a really great time!" When she finished telling me about the day's special happening, I realized the berries were just a byproduct of the day with grandchildren.

We hated to miss the COUNTRYSIDE gathering in Indiana this year, but we had out-of-town visitors. We've gone several times through the years and always enjoyed the casualness of the gathering. Each year Chuck and Virginia Gerner stop by on their way home to Mississippi, spending the night and bringing us up to date on the folks and demonstrations that were there. ❁

**We wish you all a splendid holiday season!**

~ The COUNTRYSIDE staff

# Capture Your Countryside... and share it with us!

COUNTRYSIDE is proud to present an on-going photo contest. Send us photos from your homestead—livestock, grandchildren, garden, barn, etc.—and we may share it with COUNTRYSIDE readers! Each issue's "Featured Photo" will receive a FREE COUNTRYSIDE t-shirt!

E-mail your photo(s) as jpeg attachment(s) to [friend@countysidemag.com](mailto:friend@countysidemag.com) with "Capture Your Countryside" in the subject line, be sure to include your name, mailing address, phone number and a brief description. Or mail photo(s), including your name, mailing address, phone number and a brief description, to "Capture Your Countryside," 145 Industrial Drive, Medford, WI 54451.

*Any photos received will become the property of Countryside Publications and can be used at anytime. Countryside Publications retains the right to publish and/or reproduce any and all photos submitted in future issues or publicity, with or without mention of source.*

## Featured Photo



My daughter teaching my son the finer points of whistling with a blade of grass. — Anne Sohacki, Kentucky

I kept hearing mysterious banging noises but I didn't pay much attention to them. I heard the noise again and as I open the door this is what I see — Ricky. He is an ancient mule (between 25 and 30 years old) that I inherited from a coworker last fall. Guess I need to put up a gate on the deck! — Dee Taylor, Idaho





My two-year-old Boston Terrier comforts a newborn baby goat in front of the wood stove. I brought the goat inside to recover from single digit temperatures when it's mother couldn't take care of it. — *Kathy LeFeore, Nevada*

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This spring, having just completed my first full year as a new beekeeper, my original honeybee colony decided to swarm on Memorial Day weekend—to a neighbor's cherry tree. I was proud to have captured my first honeybee swarm, returning them to their own backyard! — *Cynthia E. Field, Rhode Island*

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My granddaughter Jillian, picking apples this fall. — *George Gomoll, Illinois*

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Even thinking about going out to the barn to chase a mouse is exhausting! Queen Elizabeth (Lizzie) in her "getting ready" mode. — *Steve Rizzo, New York*

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My egg source: chicken tractor built and given to me, with two hens included, by my son. I move it around every day or so in my back meadow. — *Kay Hunter, Indiana*

# Poor Will's COUNTRYSIDE Almanack for Late Autumn & Early Winter

By W. L. FELKER

If you are afflicted with melancholy at this season, go to the swamp and see the brave spears of skunk cabbage buds already advanced toward a new year.... See those green cabbage buds lifting the dry leaves in that watery and muddy place.... They see over the brown of winter's hill. They see another summer ahead.  
— Henry David Thoreau

## The Ephemeris for November & December The Sun's Progress

**November 2:** Daylight Savings Time ends at 2:00 a.m. Set clocks back an hour.

**November 22:** The sun enters Sagittarius.

**December 5, 2014 – January 8, 2015:** Sun Standing Still Time; During this period, the sun's declination remains at its lowest point of the year.

**December 21:** The sun enters Capricorn. Winter Solstice at 6:03 p.m. (EST)

**December 24:** The sun begins its ascent toward June today, shifting from a declination of 23 degrees and 26 minutes to 23 degrees and 25 minutes. This day is the first day of the Season of the Rising Sun, a period which divides the year into two equal halves and which lasts until the sun stops at its highest point above the horizon between June 19 and 23 and then begins to fall back towards

winter solstice on June 24.

## The phases of the Toad Migration Moon & the Sandhill Crane Migration Moon & the Marauding Mouse Moon

As toads and frogs complete their autumn trek to find safe harbor from the cold, sandhill cranes move south. And when the cranes end their migration to the warmer areas of the country, early winter settles across North America. That is when mice, having escaped the cold by entering your house, often emerge on colder evenings to explore your silverware drawers and pantry.

### November:

3: The moon is at perigee, its position closest to Earth.

6: The Toad Migration Moon is full at 5:23 p.m.

14: The moon enters its final quarter at 10:16 a.m.

15: The moon is at apogee, its position farthest from earth.

22: The Sandhill Crane Migration Moon is new at 7:32 a.m.

27: The moon is at perigee

29: The moon enters its second quarter at 5:06 a.m.

### December:

6: The moon is full at 7:27 a.m.

14: The moon enters its final quarter at 7:51 a.m.

21: The Marauding Mouse Moon is new at 8:36 p.m.

28: The moon enters its second quarter at 1:31 p.m.

### The Stars

The sky in late autumn and early winter dawn is the same as April's in the evening sky: Orion setting, Leo overhead, Hercules rising in the east, Cygnus in the northeast, Libra in the southeast, the Milky Way along the northern horizon.

### The Shooting Stars

**November 17–18:** The Leonids (in Leo): The waning moon should not obscure the meteors with its light.

**December 13–14:** The Geminids (in Gemini): The rising moon may

interfere with meteor watching.

**December 17–25:** The Ursids (near the Little Dipper): The dark moon will favor viewing of these shooting stars as Christmas approaches.

### The Planets

Venus reappears as the evening star on December 5, low in the southwest in Sagittarius. Mars continues as an evening star, moving retrograde once again and visible in Capricorn (behind Mars) after sundown. Still in Leo, Jupiter rises after midnight, moving into the western half of the sky by sunrise. After disappearing in mid-November, Saturn reappears in the morning in late December in Libra, low in the southeast before sunup.

## A Calendar Of Holidays And Special Occasions For Farmers, Ranchers And Homesteaders

**November 3:** Ashura

**November 7:** Ecuadorian Independence Day

**November 27:** Thanksgiving Day

**December 17–24:** Hanukkah

**December 25:** Christmas

## The Almanack Daybook November

**1:** Fishing and hunting should be most successful if scheduled as the barometer is falling one to three days before the arrival of the weather systems that arrive near the following dates: November 2, 6, 11, 16, 20, 24 and 28. Fish and hunt at midday when the moon is new. Fish and hunt in the afternoon and evening when the moon is in its first quarter. Be out at night when the moon is full and in its third quarter. Be in the woods or on the water in the morning when the moon is in its fourth quarter.

**2:** If strong storms occur this month, weather patterns suggest that they will happen during the following periods: November 2–5, 14–16 and November 21–27. This year, full moon on November 6 and new moon on November 22 increase the likelihood of a late hurricane com-

ing ashore along the East Coast or a powerful, snow-bearing cold wave moving across the Plains.

Daylight Savings Time ends today at 2:00 a.m. Be ready for animals and family members to be out-of-sorts because of the change in their schedule. Try eating and feeding up to an hour earlier in order to soften the transition.

**3:** Perigee today and full moon on the 6<sup>th</sup> will probably make the first week of November a turbulent one.

**4:** November's average temperatures fall at the rate of approximately one degree every two days in most of the nation. Average wind speed increases to its winter level throughout the year's 11th month, and it will remain relatively high until early May.

**5:** Transplant perennials, shrubs and trees. Cut your wood, fit storm windows, gather wildflowers for winter bouquets, and harvest corn and soybeans before late autumn rains begin.

**6:** Beginning at this time of month, the average percentage of daily sunlight drops quickly, and the wind blows a little harder, rising to its winter levels.

**7:** The workday begins to shrink more quickly, losing about two minutes every 24 hours.

**8:** Today through the end of the month is the normal rutting period for whitetail deer in the central part of the country.

**10:** Throughout this second week of late Fall, the canopy of leaves continues to shed, revealing the high branches as well as the skeleton of the undergrowth. Deer, squirrels, turkeys and crows should be easier to spot in the daytime, opossums and raccoons at night.

**11:** Along the 40<sup>th</sup> Parallel, a dramatic increase in the number of freezing predawn temperatures starts near this date.

**14:** The moon enters its weak final quarter today, making the week ahead an excellent lunar time for completing harvest and cleaning up the garden.

**23:** The dark moon will lie overhead during the middle of the day,



favoring daytime hunting for squirrels and rabbits. Since the moon will be below the country near midnight, raccoons and opossums could be moving more at that time.

**22:** The Sandhill Crane Migration Moon is new today, favorable for planting garlic and greens across the South, for digging in the last of the tulips and daffodils in the nation's midsection, and for starting bedding plants for spring everywhere.

**24:** After today, the percentage of cloudy days almost doubles over the average for the rest of November; even in the South, cloudy days begin to increase the likelihood for seasonal affective disorders and contribute to complications with harvest.

**25:** Average low temperatures fall below freezing in almost all of the northern and central states.

**26:** The increased rate of the arrival of weather systems toward the end of November ordinarily means more clouds and precipitation, and also may mean more animal activity.

**27:** Today is Thanksgiving Day — the same day as lunar perigee (when the moon is closest to Earth). Expect cold and storms, especially since tomorrow typically brings one of the most dangerous weather systems of the month.

**28:** The final high-pressure system of November generally arrives around the 28<sup>th</sup>, preceded by rain or

snow three years out of four. Clouds dominate the sky, and travel conditions are uncertain.

**29:** The moon enters its second quarter, its weakest position, favoring work with livestock, pets, friends and family. The weak moon is also recommended for surgery and dental work on livestock and people.

### December

**1:** Fish, game, livestock and people tend to feed more and are more active as the barometer is falling one to three days before the arrival of the weather systems that arrive near the following dates: December 2, 8, 15, 20, 25 and 29. Severe weather is most likely to occur during the following periods: December 1-3, 24-26, 31-January 1 is probable that full moon on December 6 will intensify the arrival of Early Winter. New moon on December 28 will bring stronger-than-average storms to the United States as Deep Winter approaches.

**3:** From now on, average lows almost always fall below freezing in northern states.

**4:** This week's full moon will lie overhead in the middle of the night, contributing to the chances of success for finding and bagging raccoons, skunks and 'possums. If you are waiting for deer in your stand, you may find that activity picks up as the moon passes below the United States about noon. Squirrels and groundhogs could also be most active then, and fish will be reaching the warmer shallows if the sun is shining.

**6:** By the 6<sup>th</sup>, the wind shifts to the south and the skies darken in anticipation of the first major high of early winter. Today's full moon is likely to mark the arrival of that season with heavy precipitation.

**7:** The coming week is a pivotal period during which the night lengthens by only three minutes (instead of four) along the 40<sup>th</sup> Parallel, the first sign of the breakdown of winter — even before it begins.

**13:** Assaulted by the cold as well as by solar position, leaves of the honeysuckle fall quickly, revealing even more of the undergrowth and improving the chances for finding game.

**15:** The first significant bout of below-zero temperatures in weather history occurs after the mid-December cold front, and double-digit below-zero temperatures enter the realm of possibility in over half the states. The strength of the December 15<sup>th</sup> high-pressure system is also associated with higher-than-average precipitation both before and after its arrival.

**16:** Soil temperatures have often fallen into the mid 30s throughout the lower Midwest.

**19:** Between this week and January 3, normal average temperatures drop one degree every four days instead of one degree every three, signaling a slight slowdown in the chilling of most American farms and gardens. Soon the averages become steady; on January 28 they start to climb toward summer.

**20:** The December 20<sup>th</sup> high-pressure wave is the first of two “white-Christmas” fronts. Travel is typically favored after the arrival of this front but before the general meteorological disturbances of the 24<sup>th</sup>.

**21 :** New moon today is expected to intensify the Christmas cold front. Taking advantage of the dark moon, get your bedding plants planted under lights with gentle radiant heat

provided below the flats. Root grape vine cuttings, too

**22:** The period of winter stability is setting in. In most states, average high temperatures fluctuate only about two to three degrees between December 21 and the approach of early spring in the third week of February.

**27:** Along the Gulf of Mexico, the sun is already shortening the dormancy of trees and shrubs, hurrying the gestation of spring.

**29:** Precipitation and relatively mild conditions often occur before the last front of the calendar year. After this weather system moves to the east, however, the chill of middle winter grips the nation for the next 6 to 12 weeks.

### Lunar Feeding Patterns For People & Beasts

Best hunting and fishing should occur with the moon above the earth. The second-best time occurs with the moon below the earth.

#### Date: Above; Below

##### November:

1 -6: Evenings; Mornings  
7 - 14: Midnight to Dawn; Afternoons  
15 - 22: Mornings; Evenings  
23 - 30: Afternoons; Midnight to Dawn

##### December:

1 - 6 : Evenings; Mornings  
7 - 14: Midnight to Dawn; Afternoons  
15 - 21: Mornings; Evenings  
22 - 28: Afternoons; Midnight to Dawn  
29 - 31: Evenings; Mornings

### Winners of the September-October Sckrambler Sweepstakes

A total of 54 readers solved the last puzzle, and a prize of \$5 was promised to 2nd, the 21st, the 42nd, the 62nd, the 100th or the 150th person to return the correct unscrambled words before my deadline. Michelle Mejia from San Antonio, Texas was the 2<sup>nd</sup> correct respondent; Susan Fickling from Ahwahnee, California was the 21<sup>st</sup>, and Glen Burkholder from Leola, Pennsylvania was the 42<sup>nd</sup>. *And this time, the winners received an extra 50 cents for finding the typos!*

### Answers to the September- October Sckrambler

TAR: RAT  
AEAH: HARE (AEAH was a typo)  
VEABRE: BEAVER  
MOTRAM: MARMOT  
SERTHMA: HAMSTER  
RODO SEMOU: DOOR MOUSE (typo: should be DORMOUSE)  
UIEANGA GIP: GUINEA PIG (typo: extra “a”)  
LMMNGEI: LEMMING  
LOVE: VOLE  
AIRPREI DGO: PRAIRIE DOG  
BBRATI: RABBIT  
RRIUQLES: SQUIRREL  
LDFIE SEMOU: FIELD MOUSE  
ROPCUPENI: PORCUPINE  
CHHCNLLIIA: CHINCHILLA  
PHOGRE: GOPHER  
KUMNHCP: CHIPMUNK  
TTOONCLAIT: COTTONTAIL  
REWH: SHREW  
SKRATUM: MUSKRAT

### The November-December Sckrambler: Rhymes with...

If you are the 4<sup>th</sup>, 44<sup>th</sup> or 74<sup>th</sup> person to return your correct Sckrambler solutions by my deadline to Poor Will, P.O. Box 431, Yellow Springs, OH 45387, you will win \$5. If you happen to find a typo, you may simply skip that word without penalty — and you will receive a 50-cent bonus if you win.

AIESL  
LSIE  
MESLI  
HIWEL  
ELYGAR  
LEIB  
MIEL  
LESTI  
EILW  
EFIL  
EILN  
LEHIAW  
ELIUQ (not a typo)  
ELIP  
TLIE  
XIELE  
FILDEE  
IRHATSLYE  
ELILAB  
ELIAX (not a typo)

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### Next time:

- Plants to dress up your winter garden
- Flea control on the homestead
- Prepare for lambing & kidding season
- Tips for growing great squash
- How a chance encounter resulted in an elite organic farm business

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**NO PURCHASE REQUIRED**

**NO PURCHASE REQUIRED**

# FREE

**3-1/2" SUPER BRIGHT NINE LED ALUMINUM FLASHLIGHT**

ITEM 69052/69111  
Item 69111 shown



**\$6.99**  
VALUE

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**NO PURCHASE REQUIRED**

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**PITTSBURGH 6 PIECE SCREWDRIVER SET**

ITEM 47770/61313  
Item 47770 shown



**\$4.99**  
VALUE

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**NO PURCHASE REQUIRED**

# FREE

**PITTSBURGH 1" x 25 FT. TAPE MEASURE**

ITEM 69080 69030/69031  
Item 69080 shown



**\$6.99**  
VALUE

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- Hot Bike Magazine

**1/2" INDUSTRIAL QUALITY SUPER HIGH TORQUE IMPACT WRENCH**

• 700 ft. lbs. Max. Torque

LOT NO. 68424



**SAVE \$55**  
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REG. PRICE \$129.99

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**PITTSBURGH AUTOMOTIVE**

**RAPID PUMP® 3 TON HEAVY DUTY STEEL FLOOR JACK**

• Weighs 74 lbs.

LOT NO. 68048/69227/62116



**SAVE \$85**  
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**20 TON SHOP PRESS**

• Pair of Arbor Plates included

LOT NO. 32879/60603



**SAVE \$150**  
**\$149.99**  
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LOT NO. 67681/69395

**56", 11 DRAWER INDUSTRIAL ROLLER CABINET**

Item 67681 shown

• Weighs 441 lbs.  
• 3458 lb. Capacity



**SAVE \$500**  
**\$699.99**  
REG. PRICE \$1199.99

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**SUPER COUPON!**

**HaulMaster**

**TRIPLE BALL TRAILER HITCH**

LOT NO. 94141 69874 61320 61912 61914



**SAVE 66%**  
**\$19.99**  
REG. PRICE \$59.99

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**SUPER COUPON!**

**CENTRALPNEUMATIC 3 GALLON, 100 PSI OILLESS PANCAKE AIR COMPRESSOR**

LOT NO. 95275 60637/69486/61615

Item 95275 shown



**SAVE 50%**  
**\$39.99**  
REG. PRICE \$79.99

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**SUPER COUPON!**

**NEW**

**900 PEAK/ 800 RUNNING WATTS 2 HP (63 CC) GAS GENERATOR**

Item 69381 shown

LOT NO. 66619 60338/69381



**SAVE \$80**  
**\$99.99**  
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# Countryside's Breeder's Directory

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See details on page 105.

## Alpacas/Llamas

### Georgia

PEARSON POND RANCH & LLAMA CO., 242 Llama Lane, Ellijay, GA 30540. <www.pearsonpond.com> Over 150 llamas to choose from—Traditional—Surries.

### Missouri

WEGENER FARMS LLC, Dawn Wegener, 3659 Rock Creek Valley Rd., High Ridge, MO 63049. 636-376-2324. <dawnquitmeyer@gmail.com> <www.wegenerfarms.com> Llamas: Champion breeding stock, herdsire, bred & open females, gelded males. Top Quality fiber, calm temperament, all GORGEOUS! Boarding available.

### Ohio

LOFTY PINE ALPACA & LLAMA RANCH, 2882 Cty. Rd. 62, Lindsey, OH 43442. 419-665-2697. <loftypine@yahoo.com> Alpacas & llamas starting at \$300. Pet, 4H, Guard, breeding, show.

### Wisconsin

DREAM CHASER FARM ALPACAS, Ann & Maurice McKercher, 8106 S. Dedham Rd., Foxboro, WI 54836. 715-399-8527. Cell: 218-348-4823. <amckercher56@yahoo.com> <www.alpacanation.com/dreamchaserfarm.aspx> Quality fiber and breeding stock for sale. \$400 and up.

## Bullfrogs

### Idaho

RANARANCH BULLFROGS, PO Box 1043, Twin Falls, ID 83303-1043. 208-734-0699. <phrogpharmer@aol.com> American Bullfrogs (*Rana catesbeiana*). Deep soothing music on your pond. Purpose bred bullfrogs—healthy, hardy and prolific. Free info sheet.

## Cattle

### Kansas

LA DORADA, Elizabeth Lundgren, D.V.M., 22484 W. 239 St., Spring Hill, KS 66083. <watusi@aol.com> <www.ladorada.com> Ankole-Watusi cattle.

UNDERHILL FARMS, Lynn & Karen Kaufman, 187 21st Ave., Moundridge, KS 67107. 620-345-8415. <info@underhillfarms.com> <www.underhillfarms.com> Belgian Blue Cattle.

### Nebraska

REGISTERED BRITISH WHITE PARK CATTLE, Walter & Nancy Bohaty, 1371 42nd Rd., Bellwood, NE 68624. 402-367-4741. <nbohaty@gmail.com> <www.britishcattle.com> Production sale 4-11-15.

### Ohio

RIVERVIEW FARM, Fannie Thoman, Crown City, OH 740-256-1724. Miniature Jerseys—semen available. Also miniature horses. <www.miniaturejerseys.com>

### Oregon

WHISPERING HILLS FARM, Joe Schallberger, DVM, PhD & Sue Schallberger, DVM, 6515 Kurtz Rd., Dallas, OR 97338. 503-704-2408. <whisperinghillfarm@gmail.com> <www.whisperinghillfarm.com> Heritage Polled Shorthorns. Fast growing grass-fed Shorthorn genetics. Also Suffolk sheep.

### Texas

AAVALON FARM, Sharon & George Adams, 1059 AnCR 468, Palestine, TX 75803. 903-549-2036. <aavalonfarm@hughes.net> <www.aavalonfarm.com> Belted Galloways. Semen available. Visitors welcome.

## Dogs

### Illinois

GRANDVIEWACRES, Dennis & Laura Gray, 14014 State Line Rd., Durand, IL 61024. 815-248-9012 & Cell/TXT: 815-988-6867. <smallfarmer2008@hotmail.com> Great Pyrenees LGD's, St. Croix, Suffolk, Dorper/Katadin sheep & Boer, Kiko, Nubian goats. Purebred puppies—weaned or EXPERIENCED. Parents protect our livestock from predators and RAPTORS. Raised with, Lambs, Goats, Poultry, more; NOT human socialized. Our losses reduced to ZERO with these dogs.

### Oklahoma

AMERICAN WORKING FARM COLLIE ASSOCIATION—A national performance registry. Tish Toren. 920-883-7430. <craftysherpherdess@gmail.com> <www.farmcollie.com> Multipurpose Farm Dogs: English & Australian Shepherds, Standard & Border Collies, Shetland Sheepdogs and Kelpies.

### Tennessee

CASTLEROCK'S SPECIAL ASSISTING CANINES, Giant Schnauzer & Swedish Vallhund herding, livestock guardian, service dogs. Cindy Choate, Memphis, Tennessee. 901-553-9401. <castlerock003@yahoo.com> <http://castlerockspecialassistingcanines.homestead.com>

### West Virginia

TIMBERS CROSS FARM, Sue Doohan, HC 75 Box 32, Strange Creek, WV 25063. 304-765-5453. Maremma/Pyrenees Crossbred. Neutered & vaccinated. Sold as working pairs only. Started pairs \$500 / Experienced pairs \$700. Pups available occasionally, \$150 each. Buyback guaranteed.

## Equine

### Ohio

STRASSERHUTEN FARMS, Robert & Corinne Strasser, 4318 Hatrick Rd., Rootstown, OH 44272-9770. 330-325-1373. <rstrasser@neo.rr.com> <www.strasserhutenfarms.com> Irish Dexter cattle, miniature donkeys. Grass-fed freezer beef for sale.

## Game Birds

### Minnesota

OAKWOOD GAME FARM, INC., PO Box 274, Princeton, MN 55371. 800-328-6647. <oakwoodgamefarm.com> We sell day-old pheasant and chukar partridge chicks and eggs. Ask about our new smaller quantities on eggs and chicks.

### Wisconsin

PURELY POULTRY, PO Box 466, Fremont, WI 54940. 800-216-9917. <Chicks@PurelyPoultry.com> <www.PurelyPoultry.com> Indian Red Junglefowl, Guineas, Peacocks. Ducks: Mandarin, Ringed Teal, Whistling Ducks, Wood Ducks, Mallard Ducks. Swans: White Mute, Australian Black, Trumpeter, Whooper, Black Necked. Quail: Northern Bobwhite, Jumbo Bobwhite, Texas A & M, Valley, Gambel, Blue Scale, Mountain, Meams. Partridge: Chukar, Hungarian. Ringneck Pheasants: Chinese, Jumbo, Kansas, Manchurian Cross, Melanistic Mutant. Ornamental Pheasants: Red Golden, Yellow Golden, Blue Eared, Brown Eared, Lady Amherst, Silver, Timminicks Tragopans. Wild Turkeys: Eastern and Merriams.

## Goats

### California

AMBER WAVES Pygmy Goats. Ship Worldwide.

951-736-1076. <debbie@amberwaves.info> Text Only 951-444-0074. Amber Waves offers the largest selection of registered pygmy goats available anywhere. We are the premier exporter of pygmy goats worldwide. Whether you are looking to add a family pet or a whole herd we can help. Customers include Hollywood Elite and International Dignitaries. Visitors always welcome by appointment. Herd testing negative for CAE, CL and Johnes. Why is this important to you? Ask.

HYONAHILL, Ruth McCormick, 24900 Skyland Rd., Los Gatos, CA 95033. 408-353-1017. <ruthmcc@flash.net> Registered Oberhasli dairy goats. Beautiful, quiet, delicious milk. Send for color brochure.

TALL-TAIL'S, Dorothy Lovato, 4181 Leon Dr., Clayton, CA 94517. 925-672-3097. <dilovato@aircloud.net> Oberhasli & Saanen. Buck service.

### Iowa

D & E DAIRY GOATS, 2977 Linn Buchanan Rd., Coggon, IA 52218. 319-350-5819. <ranch@iowatelecom.net> Alpine, Saanen & LaMancha. Selling 200 head annually.

### Massachusetts

MENDING WALL FARM, Ed & Judy Lowe, PO Box 722, Assonet, MA 02702. 508-644-5088. <mendingwall@meganet.net> <www.mendingwallfarm.homestead.com> Nigerian Dwarf, Tennessee Fainting.

### Minnesota

WHISPERING WILDWOOD FARM, Patricia Schramm, Embarrass, Minnesota. 218-410-4358. <schramm1937@gmail.com> Nubians.

### Pennsylvania

GOATSVILLE ACRES, Marilyn Ryan, 15 Carbondale Rd., Waymart, PA 18472. 570-488-5369. <mlryan@echoes.net> <www.goatsville.com> Purebred Mini Nubians.

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### California

The USA Herd—American KuneKune Pigs, Jim & Lori Enright, PO Box 16, Jurupa Valley, CA 91752. 951-505-5230. <theusahard@gmail.com>

## Hogs

### Arizona

THE ROCKING ROBIN RANCH, Prescott, Arizona. 928-925-6886. <www.kunekunepig.com> Registered: Heritage KuneKune pigs many lines & colors, mini Jersey cattle.

### Arkansas

FARMERS HEREFORD HOGS, Thomas Hardin, 13776 E. Hwy 56, Ash Flat, AR 72513. 870-219-6285. Registered Hereford hogs.

### Missouri

CROWLEY'S RIDGE MINIATURE FARM, David Stoltzfus, 32169 Co. Rd. 337, Advance, MO 63730. 573-421-2365. KuneKune pigs. Quality breeding stock available.

**Nebraska**

MEADOWLARK FARM, Larry Rauert, 4767 N. Quandt Rd., Grand Island, NE 68801. 308-381-1518. <meadowlarkfarm@lycos.com> Registered Hereford hogs. Boars, gilts, feeder pigs, multi-bloodlines.

**Pennsylvania**

WHITE BISON FARM, Dave & Jodi Cronauer, 394 Russet Rd., Patton, PA 16668. 814-674-2330. <apache\_jc@yahoo.com> <www.whitebisonfarm.com> Idaho Pasture Pigs, KuneKune Pigs, American Bison, Gypsy Vanner Horses.

**Large Black Pigs**

**Kansas**

UNDERHILL FARMS, Lynn & Karen Kaufman, 167 21st Ave., Moundridge, KS 67107. 620-345-8415. <info@underhillfarms.com> <www.underhillfarms.com> Large Black hogs.

**Michigan**

HORTON FARMS, Robert & Christine Horton, 11650 Remick Rd., Blanchard, MI 49310. 889-561-2386. Large Black Hogs. Taking orders for breeding pairs.

**Miniature Cattle**

**Colorado**

TWO SHOES RANCH, Registered Miniature Herefords. Bill & Dona Shue, 696 Co. Rd. 22, Craig, CO 81625. 970-824-0105. 2shoesranch@gmail.com http://2shoesranch.com Grass-Fed, Quality Genetics, More Meat, Less Feed.

**Pennsylvania**

WELSH MOUNTAIN FARM, Amos T. Ebersol, 590 Red Hill Rd., Narvon, PA 17555. 717-768-3652. Mini Jersey Cattle.

**Miniature Livestock**

**Alabama**

LNL MINIFARM, Levon & Lynn Sargent, 663 Hulse Rd., Henagar, AL 35978. 256-657-6545 <www.lnlminifarm.com> <lnlsargent@farmerstel.com> ADGA Nigerian Dwarf Goats, AGHA Guinea Hogs, KuneKune crosses, AMJA Jersey, crossbred mini beef cattle & Babydoll Southdown Sheep.

**Miniature Pigs**

**Arizona**

GOLDEN-RULE FARM, Sabrina Spiers, 7525 Jerryberry Dr., Flagstaff, AZ 86004. 928-600-1409. <GoldenRuleFarmAZ@gmail.com> <GRFkunekpigs.us> Kunekune pigs.

THE ROCKING ROBIN RANCH, Prescott, Arizona. 928-925-6886. <www.kunekunepig.com> Registered: Heritage KuneKune pigs many lines & colors, mini jersey cattle.

**California**

DOLCE VITARA RANCH & CATTLE CO., Charli McCord, 2545 Corbett Creek Rd., Cathays Valley, CA 95306. 209-410-8916. <charlimcc@gmail.com> Kunekune Pigs. Also: Miniature Hereford Cattle, Miniature Mediterranean Donkeys.

TANGLEWOOD RANCH, Dave & Laura Simmons, Grass Valley, California. 530-271-2023, Dave cell: 530-802-6445, Laura cell: 818-489-2525. <tanglewoodranch@aol.com> <www.tanglewoodranch.com> KuneKunes pigs & Dexter cattle.

**Texas**

RUNNING CREEK RANCH, Sulphur Springs, Texas. 724-822-7453. <sales@runningcreekranchnb.com>

<www.runningcreekranchnb.com> Breeding & selling quality KuneKune Pigs. AKBA Registered.

**Poultry**

**California**

METZER FARMS, 26000C Old Stage Rd., Gonzales, CA 93926. Year-round hatching. Nationwide shipping. Free catalog now, 800-424-7755. <www.metzerfarms.com> Ducklings: Pekin, Rouen, Khaki Campbell, Golden 300 Egg Layer, Blue Swedish, Buff, Cayuga, Mallard, Welsh Harlequin, White Crested & Runners (Black, Chocolate, Blue, Fawn & White) Goslings: Embden, White Chinese, Brown Chinese, Toulouse, Dewlap Toulouse, African, Canada, Buff, Tufted Buff, Sebastopol, Pilgrim, Crested Roman, Ringneck pheasants, French Pearl guineas, Wild turkeys.

**Illinois**

CHICKEN SCRATCH POULTRY, Larry & Angela McEwen, RR3 Box 44, McLeansboro, IL 62859. 618-643-5602. <larry\_angle@chickenscratchpoultry.com> <www.chickenscratchpoultry.com> Coronation Sussex, Light Sussex, Lavender Orpington, Chocolate Orpington, Jubilee Orpington, Black Copper Marans, Blue Copper Marans, Blue Laced Red Wyandotte, Welsummers, Blue Ameraucana, Black Ameraucana, Rumpless Araucana, Olive Egger.

**Iowa**

COUNTY LINE HATCHERY, 2977 Linn Buchanan Rd., Coggon, IA 52216. 319-350-9130. <www.countylinehatchery.com> Rare and fancy peafowl, guineas, chickens, ducks, turkeys, geese, bantams and more. Featuring Showgirls & Silkies. Most economical and diverse poultry assortment available.

**Minnesota**

JOHNSON'S WATERFOWL, 36882 160th Ave. NE, Middle River, MN 56737. 218-222-3556. <www.johnsonswaterfowl.com> Grey, Buff & White Africans, Grey Pomeranian geese, Rouen, Silver Appleyard, Pekin, White & Black Crested, Saxony, Black & Blue Magpies, Penciled, White, Blue, Black, Grey (Mallard), and Emory Penciled Runners, White, Grey, Snowy, Black, Blue Billed & Pastel Call ducklings. Free brochure.

URCH/TURNLUND POULTRY, 2142 NW 47 Ave., Owatonna, MN 55060-1071. 507-451-8782. Large fowl: Wyandottes: White, Golden Laced, Buff, Black, Silver Penciled, Partridge, & Columbian; Mottled Java, Black Java, S.C. Rhode Island Red, R.C. Rhode Island

Red, Black Giant, White Giant, Dominiques, Buckeyes and Rhode Island White, Dark Brahma, Cochins: Black, Blue, White, Buff & Partridge; Black Langshan, White Langshan. S.C. Leghorns: Buff, Black, Dark Brown, Silver & White; R.C. Leghorns: Light Brown, Black & White; White Faced Black Spanish, R.C. Mottled Ancona, Black Astralop, White Crested Black Polish, Bearded and Non-Bearded Silver, Golden and Buff Laced Polish, Crevecoeur, La Fleche, Salmon Faverolle, Welsummers, Silver Campine, Golden Campine, Lakenvelder, Silver Penciled Hamburg, Golden Penciled Hamburg, Bearded White Polish, Golden Spangled Hamburg, Black Sumatra, Black Breasted Red Cubalays, White Frizzle, Red Naked Neck, Sultan, Black Ameraucana, Silver Duckwing Ameraucana, Silver Phoenix, Bantam: Black Old English, Modern Games: Brown Red, Birchen, Red Pyle and Black Breasted Red, Silver Penciled Rock, Red Naked Neck, White Naked Neck, S.C. Rhode Island Red, S.C. Leghorns: White, Dark Brown, Light Brown; S.C. Mottled Ancona, R.C. Rhode Island Red, Quail Belgium, R.C. White Leghorn, White Crested Black Polish, Bearded White, Bearded Golden Polish, Bearded Buff Laced Polish, Wheaton Ameraucana, White Crested Blue Polish, Buckeye, Cochins: Birchen, Partridge, Buff, Golden Laced, and White; Dark Brahma, Buff Brahma, Salmon Faverolle, Black Langshan, Black Frizzle, White Frizzle, Bearded White Silkie, Bearded Mille Fleur, Geese: Canadian, Egyptian. Ducks: Muscovy: Black, Blue, White and Chocolate. Turkeys: Narragansett, Black, Bourbon Red, Slate, Wild Turkeys, Royal Palm, Beltsville White Turkeys, Standard Bronze Turkeys.

**Missouri**

CAKLE HATCHERY®, PO Box 529, Lebanon, MO 65536. 417-532-4581. <cacklehatchery@cacklehatchery.com> <www.cacklehatchery.com> Fancy chicks, ducks, geese, turkeys, bantams, guineas, pheasants, quail, chukar. FREE COLOR CATALOG.

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**Wisconsin**

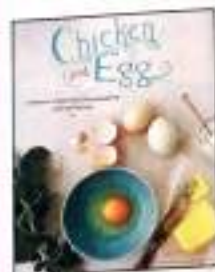
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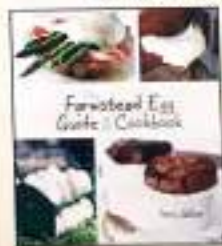


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## Sheep

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DESERT WEYR, Ken & Oogle McGuire, 16870 Garvin Mesa Rd., Paonia, CO 81428. 970-527-3573. <www.desertweyr.com> <sales@desertweyr.com> Black Welsh Mountain sheep.

### Idaho

FISHER TEXELS, W. Eugene & Niki Fisher, 2275 N. Grays Creek Rd., Indian Valley, ID 83632. 208-256-4426. <fishertexels@gmail.com> <www.fishertexels.com> Texel.

### Michigan

THE WHITE BARN FARM, The Preston's, 10080 S. Wyman Rd., Blanchard, MI 49310. <The6PsinA@power-net.net> <www.TheWhiteBarnFarm.com> 989-561-5030. Romeldale/CVM breeding stock & fleeces.

### Minnesota

PERGAMINO FARM, 320-396-2361. <harpepun@aol.com> East Friesian Dairy Sheep. Fleeces and other products.

### Missouri

MISSOURI KATAHDIN BREEDERS ASSOCIATION, Randy Wehner, 12 Morningside Ln., Long Lane, MO 65590. 417-345-1515. <MoKats@case-agworld.com> <www.case-agworld.com/MKBA.html> Katahdin Hair Sheep. Why shear when all you want is meat? Missouri Katahdins are hardy, good mothers and excel on forage.

### New York

LIGHTHOUSE FARM, Mary & Herb Tucker, PO Box 85, West Clarksville, NY 14786. 585-928-1721. <maire8797@yahoo.com> <www.lighthousesheepfarm.com> Purebred Finnsheep, Finn x Dorset crosses. R genetics. Accelerated lambing, high selection criteria. Pasture raised, grain finished.

### Ohio

RPM FARM, Don & Janice Kirts, 5990 Beecher Rd., Granville, OH 43023. 740-927-3098. <admin@rpmfarm.com> <www.rpmfarm.com> Reg. Romanov, Horned Dorset & Miniature Baby Doll Southdown sheep.

### Oregon

WHISPERING HILLS FARM, Joe Schallberger, DVM, PhD & Sue Schallberger, DVM, 6515 Kurtz Rd., Dallas, OR 97338. 503-704-2408. <whisperinghillfarm@gmail.com> <www.whisperinghillfarm.com> Suffolks. Fast growing, grass-fed Suffolk genetics. Also Heritage Polled Shorthorn cattle.

### Pennsylvania

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## Various

### Wisconsin

WOOLLY WOOD RANCH, Roger & Bonnie Feist, Amery, Wisconsin, 715-268-2456. <ovine@amerytal.net> Registered Huacaya alpacas, Southdown sheep & Kiko goats.

# Associations

AMERICAN BLACK WELSH MOUNTAIN SHEEP ASSOCIATION, Eugenie McGuire, Sec./Treas., PO Box 534, Paonia, CO 81428-0534. <info@blackwelsh.org> <www.blackwelsh.org>

AMERICAN EMU ASSOCIATION, 1201 W. Main St., Suite 2, Ottawa, IL 61350. 541-332-0675. <info@aea-emu.org> <www.aea-emu.org> Emu.

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By JEANNIE EWING

Most people either deride or ignore Indiana, because it isn't glamorous like Hollywood or L.A., nor is it hip and trendy like Chicago or New York City. Instead, Indiana is unassuming, unpretentious, and down-to-earth. As a native Hoosier, I have traveled extensively, and in so doing would either be met with a blank stare or a slight sneer after sharing my geographical origins. I deeply internalized these reactions, mainly because Indiana represents me: all that I am in temperament and what I value most. I think that's why I never left my roots for too long as an adult; nowhere else quite felt like home, irrespective of its beautiful landscape or terrain, amazing culture and food or access to celebrities and trends.

Living in New Paris has left me scratching my head more than a few times, however, because I can't quite put my finger on how to describe the cultural milieu around here. Being a fairly quiet, rural community, one might assume its people reflect a certain small-town mindset, and yet I have discovered it can be quite the contrary. The demographics include farmers, high school dropouts, small business owners, pastors, homemakers, the disabled, the elderly, college-educated, blue- and white-collared professionals, and college professors.

As I walk my dog through the neighborhood, I see both dilapidated houses with confederate flags proudly displayed on front porches as well as beautifully renovated country cottages with meticulously placed perennials and freshly painted fences. There are the traditional families, as well as the blended families. Downtown sports both a bar and a

Mayberry-esque corner store that is family owned and operated. We have a post office, a credit union, an auto shop, and a hardware store. The local thrift store relocated about two blocks from our house nearly two years ago and has regular patrons who stop by to simply chat for an hour...or two...about local "news" (although it seems more like gossip to me). There exists the independent, small business owner as well as the mass merchandiser, since we recently received a Dollar General across the highway. And, of course, one could expect both a gas station and a small café, but what about a golf course and specialty ice cream shop? Would one suspect New Paris to be home of the famous "Old Time Pizza," which people from surrounding metropolitan areas patronize?



At least 15 churches adorn our town, yet I pass a seedy apartment behind the bar and notice a disheveled man staring at me walking my pitbull mix.

New Paris offers a new perspective of the cliché, "Don't judge a book by its cover." So many of the buildings are shabby and rickety, but there are plenty of people who have hearts so generous they would give their last penny to a stranger in need. I have been the recipient of such charity recently. Even more, New Paris is a cultural microcosm of what one may observe in a larger, more prominent and well-known city, in the sense that it is a true conglomerate of people from all sorts of socioeconomic backgrounds and professions, values and lifestyles, but it retains the small-town feel by its quiet Sundays and gatherings of local farmers over a cup of coffee at

the local gas station or post office in early morning hours.

People here will call you by name. They probably know your neighbors and may well know your family more than you realize. This can be both intimidating as well as refreshing. I know when someone stops to say, "Hi Jeannie! How's your family? Is Sarah doing well?" that I may or may not know the person. But they know our story and me. And rather than offering a snub and a wave that gestures I have no time for them, I know it is both expected and polite to pause for a moment and talk.

What I love about small towns is that people haven't completely lost the sense of appreciation for the little things, and people truly care for one another in their community. There is a sense of security in the heartwarming gesture of being asked—by name—how one's day is going. It allows for a moment of reflection, and I cannot help but smile, regardless of how frantic my day may be, because to be called by name is such a personal gesture of kindness in an otherwise impersonal society and era.

The truth is Indiana has something to offer, even though it is often forgotten or written off as too dull or unenlightened compared to the big-city mindset. It would behoove those of us who are educated city slickers to embrace the slower pace of a rural life, because truth be told, nothing compares to the liberation of the heart when one is driving on a dusty gravel road at 55 miles per hour on a crisp autumn afternoon in the countryside. To smile in appreciation at the blue horizon and vast array of wheat, soybeans and corn peppered with the occasional vintage farmhouse and livestock casually grazing in the field—there is no comparison to this, and I wouldn't trade it any day. I am proud to call myself a Hoosier and am grateful that the down-home folk of New Paris have both welcomed me and called me neighbor...or perhaps even friend.

I suppose one could rightly assume that I was born a city gal, but I have truly become a country girl convert! 🍷

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