

January, 1974

Tennessee Magazine

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Tennessee Magazine

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On the cover. Another outstanding wildlife painting, the "Cardinal", by Artist Ralph McDonald. For an update on this Tennessean's works, see Page 26.

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Volunteer Views

By J. C. Hundley
Executive Manager, TECA

Ready or not, 1974 is with us. What this year holds in store, none of us knows for certain. There are some things that we can do nothing about. About these, it is natural to worry, but what we all should be far more worried about are the many, many things that we CAN do something about — and don't.

Your cooperative rural electrification program is one of the finest examples that we know where small town and rural people — like you, or perhaps your parents — recognized a problem about which they COULD do something — and did. They organized electric cooperatives to provide themselves with some near-necessities and advantages in life that most existing private power company distributors were unwilling to provide, and that fewer than 40 years ago.

Today, there are almost 1,000 electric distribution cooperatives serving 6.5-million members some 78-billion kilowatt hours of electricity each year over 1.7 million miles of line, or about 44% of all the distribution lines in the United States. (The 6.5-million co-op members represent only 8.5% of all electric consumers in the United States, but because they reside in less densely populated areas, it requires 44% of all distribution lines to serve them. Perhaps that is why most of the private power companies unwisely chose not to do so in the first place.) Some 40 generation-transmission cooperatives supply more than one-quarter of the power needs of the distribution co-ops. The remaining power is purchased from such Government sources as TVA, and private commercial companies, in about equal amounts.

Yes, the cooperative rural electrification program continues to prove that problems can be solved by people who have a common need, meet together, plan together and cooperatively work together toward a common goal.

Here's to YOUR health, happiness and success in 1974!

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Even after only 100 miles of driving, conventional spark plugs start to become eroded and coated with carbon. Their electrodes begin to "burn away." The spark has to jump across a wider and wider gap to maintain the position right in the cylinder—becomes less and less reliable. So the cylinders "misfire" and the engine loses more. Your engine runs at lower and lower efficiency. You wonder where the car's been and pick up some gas. You can't understand why your gas mileage is so poor. Before you know it, your mechanic tells you you need a new set of plugs. And your engine has grown old long before its time!

ACROSS THE U.S.A., USERS REPORT AMAZING RESULTS WITH JET-FIRE FUEL IGNITERS!"

"Had Jet-Fire Fuel Igniters installed in my car—a 1966 Country Squire with a 390 engine. Immediately I noticed great difference in performance and economy—automatically gained 2½ miles to the gallon." J.J.L., Glenview, Ill.

"Very definite increase in power (on) a 1,200 mile trip in '66 Volkswagen bus. My car was much

quieter and smoother, 5% more gas mileage—with heavier load." E.C.R., San Diego, Calif.

"Removed (and) new plugs installed a set of Jet-Fire plugs, and had a pronounced improvement in the car ('65 Cadillac)."

J.H.M., Fredonia, N.Y.

"We tried out a set of your plugs on trip to Gulf of Mexico and back

recently, and they were all that you claimed for them—plus!"

R.E.P., Moline, Iowa

"This '69 Ford V-8 of mine has increased 4 miles to the gallon." C.W.G., Dallas, Tex.

"(Owner) says he never saw a gas so good. In the last 5,000 miles it cost him \$6.00 for plugs (in a '65 Corvette with a 331

ratio engine). I told him about Jet-Fire Igniters and he bought a set and has run them 700 miles and says they are wonderful. He wants another set to have on hand."

F.L., Downey, Calif.

"Immediately performance, pick-up, and top speed (of '57 VW) were increased."

M.H., Cambridge, Mass.

(Original letters in our files)

When you install Jet-Fire Fuel Igniters, you say "goodbye" forever to spark plug problems! They deliver sure-fire performance conventional spark plugs can't match—for more efficient, more economical performance... mile after mile... month after month... year after year—in any kind of driving! It's all a matter of design!

By their very design, conventional spark plugs must deteriorate in use. Each time your cylinders fire, they erode the electrode of your spark plug, and cake it with carbon. Because the spark then has to jump across a continuously wider gap, it weakens and becomes less efficient. So your cylinders often misfire, and foul the plug even more. Especially with today's "hot", high-compression engines, plugs often "cook out" in a few months of hard use.

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Jet-Fire Fuel Igniters' patented design eliminates this problem before it starts! The electrodes are solid, not wire—as they don't burn away! The firing tip is a semi-conductor—so carbon can't foul it! There is no gap to adjust—so the spark is a strong, constant swirl of flame! You get the same reliable ignition every time—for miles. Just starts... even in the coldest weather! Your battery won't be drained and run-down by slow starting... and you won't have to turn the key and pray, whenever the temperature drops! What's more, Jet-Fire Fuel Igniters make your engine run more powerfully and efficiently—and on less gas than the conventional spark plugs you have in your car right now. And you can prove it to yourself... on your car.

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When you receive your set of Jet-Fire Fuel Igniters, make this "before-and-after" test yourself... on your car:

1. Run your car until the engine is fully warmed up.
2. Stop on a perfectly level stretch of road.
3. Put the car in Drive (1st gear with manual transmission) and see exactly what speed the car rolls at with your foot off the gas (driving speed).
4. Turn off your engine, remove the plugs, and screw Jet-Fire Fuel Igniters into the plug sockets, following the simple directions (a 10-minute job).

3. Start the engine, warm it for a minute, put the car in Drive again, with your foot off the gas. Now see how much faster it rolls at idle speed—probably 4 to 6 miles per hour faster without touching the gas pedal! It's proof that Jet-Fire Fuel Igniters increase engine RPMs by 100 to 120, with no increase in gas consumption. (At high speeds, the increase will actually be 300 to 350 RPMs!).

Right then and there, you can adjust the filing screw to cut down on your gas flow and your gas consumption. Now your Jet-Fire Fuel Igniters have started to save you money before you've even driven a single mile!

How to Get Even More Savings!

Want even greater efficiency and economy? Make your air-to-gas mixture leaner. With Jet-Fire Fuel Igniters, your engine can perform at full power and efficiency on a 15:1 ratio (instead of the conventional 9:1). You or your mechanic can make this simple adjustment in a minute. Then watch how you can get 19... 20... 20... even 20½ miles on a tankful of gas!

Your engine is finally able to produce all the horsepower it was designed for! Up to 30 more horsepower of acceleration power, climbing power, and passing power! And it uses less gas than ever while producing this extra power!

Forget About Replacement or Adjustments!

Jet-Fire Fuel Igniters have no spark gap—so they never need adjustment! They "swallow" themselves every time they fire a cylinder. So they never need cleaning or servicing. Because they have a semi-conductor, photo-schotched tip, carbon buildup actually improves conductivity, carries even more of the jet flame into the cylinder—for even more sure-fire performance! They can't foul up, burn out, or blow out—the way conventional plugs do! That's why they're guaranteed for the life of your car! (or 30,000 miles). Guaranteed to keep right on saving you money by running your engine at maximum power... on a minimum of gasoline!

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mint advanced engines with Fuel Igniters like these. But you needn't wait—because you can install a set in your car right now. Simply mail the coupon with the make and model of your car, and we'll rush you a set with full instructions.

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Jay Norris Corp. 1971



GCEMC's Floyd Roberts stands by unafraid as "Slingshot" Charlie Childress prepares to shoot a cigarette out of his mouth. Fortunately, he didn't miss.

There aren't many people who go hunting squirrels with a fork from a box elder tree and some rubber straps, but Charlie Childress does. What looks deceptively like an ordinary child's slingshot is, in reality, a lethal weapon in his hands.

Charlie's ability with this ancient device is well known around Reelfoot Lake, his family home for several generations now. For the past five or six years, Lake County residents have watched the 26 year old employee of Goodyear Tire and Rubber of Union City wander about shooting cans and bottles with his slingshot, so much so that folks are now beginning to compare him to his grandfather who, old-timers say, was the greatest slingshot shooter of all time. And that just happens to be Charlie's goal — to be as good as his

grandfather was.

Charlie Taylor was born in the late 1800's in Paris, Tennessee, but moved to Tiptonville as a small boy. It was in this environment that he began developing the skill that would make him nationally famous. Practicing by shooting snakes and frogs, the young Taylor soon got to the point where he could hunt ducks with the slingshot. A passing promoter during the '30's saw the young man shoot and took him on a nation-wide tour, billing him as "Slingshot Charlie."

From Madison Square Garden in New York to the movie kingdom of Hollywood, "Slingshot Charlie" amazed and baffled people with his fancy shooting for the next ten years. He then gave up the bright lights to return to his beloved Reelfoot area. He spent his last years as a guide, and one of the best, on the lake.

Grandson Charlie Childress also serves as a guide on the lake, in addition to his tire making duties. Spare time is devoted to slingshot practice.

Flipping a can into the air and then popping it in flight with a marble, Charlie says, "My Grandfather could strike a match with a slingshot from fifteen yards away, that's how good he was. He could even hit a piece of thread

with a rock hanging from it at that distance."

While he may not be as good as his grandfather yet, Charlie Childress is better than anyone else around at the moment. It's nothing for him to shoot marbles out of the air with mind-boggling regularity. He doesn't even consider still targets to be sport anymore. (This writer stood like William Tell's son, while Slingshot Charlie Jr. calmly shot a can off my head, not once, but twice. And, in all honesty, I wasn't really worried about it after watching him shoot those marbles out of the air.)

Already a veteran of television, (he gave a performance at last year's Cerebral Palsy Telethon in Cape Girardeau, Mo.) Charlie Childress would like to pursue slingshot shooting as a career. He says he plans to contact places like Opryland and Disney World to see if they would be interested in having a slingshot act. Chances are that they will, especially if he continues improving at his present rate.

If so, we may soon see the billing for "Slingshot Charlie Jr." in bright lights across the country. And that would just tickle Charlie Childress to death because, after all, he is just a chip off the old box elder branch, so to speak.



All eyes are skyward as Charlie draws a bead on a marble thrown into the air by Floyd Roberts. He didn't miss again.



The proper form, Charlie explained, is to sight right thru the middle of the slingshot.

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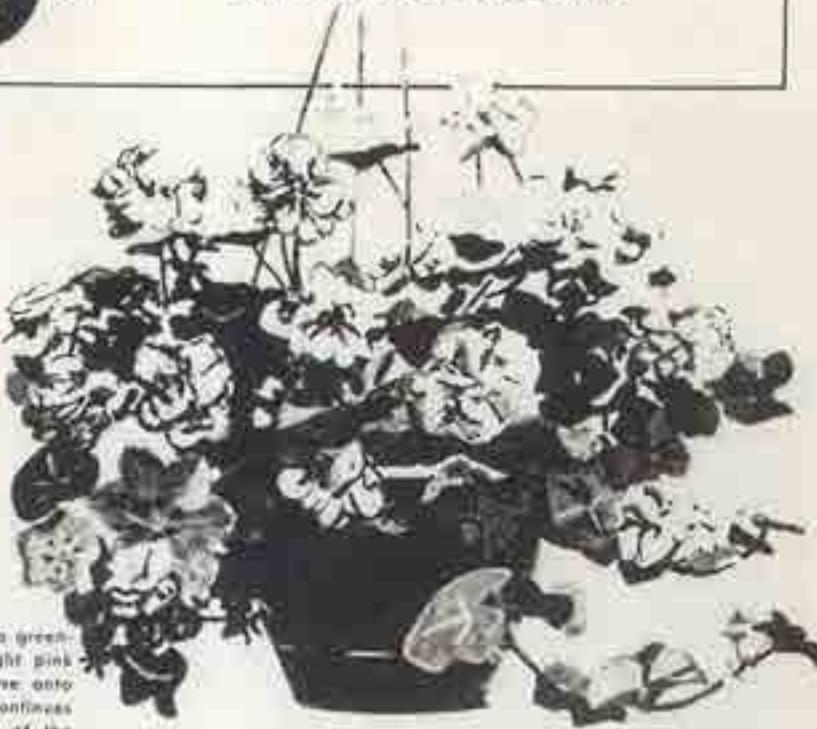
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WEBB SCHOOL AT BELL BUCKLE — ‘MORE THAN JUST A SCHOOL, IT’S A GROWING UP PLACE’

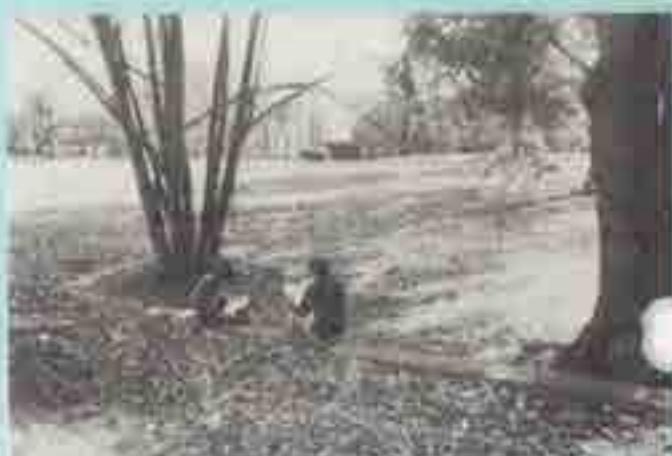
By: Patty Comstock
Public Affairs Coordinator
Duck River Electric Membership Corporation

Located in a quiet, unassuming Middle Tennessee town of 50 people is a private boarding school of whose graduates a university professor once emphatically stated, "The best prepared boys we get come from a small school in Tennessee, known to its students as Old Sawney's." The school is Webb School at Bell Buckle in Bedford County and the university professor — Woodrow Wilson.

Immediately after the Civil War, William R. "Sawney" Webb, later affectionately known as "Old Sawney", left his native North Carolina to find a teaching position. Handicapped by being a rather frail looking 130-pound war veteran with a lame right arm, 27-year-old Sawney Webb finally landed the teaching position at Cullieoka School in Maury County. Webb School was a part of the educational program in Cullieoka from 1859 to 1886. That year the then well-established schoolmaster moved his school to Bell Buckle, Webb School's permanent home. The move was initiated for three reasons: (1) Bell Buckle was a prospering rail center, (2) the boys would be under the care of a good doctor, and (3) in 1886 Cullieoka went wet.



Webb School President Dr. Gary M. Jones chats with Bryan Shaan, a student from Dalton, Georgia and a member of the school's Student Honor Committee. In the background is the Falls Administration Building and Auditorium. The all-electric facility is located on the school's campus in Bell Buckle and is served electrically by Duck River Electric Membership Corporation.



Studying under the trees is a Webb School Tradition as popular today as in "Old Sawney's" day. Quinton Stimpson of Shelbyville (left) and Dan Andrews of Dickson enjoy the time-honored custom. The "Big Room" where most of the classes meet is seen in the background.

That's how Bell Buckle, Tennessee became the home of a private boarding school that before its 50th birthday counted more Rhodes Scholars among its graduates than any other secondary school. The community of Bell Buckle and its rural atmosphere make it an ideal place for the growth and development of the whole person, one of Sawney Webb's main concerns. Old Sawney considered the school's first task as "the building of character; the will to do the best one could, the courage to be honest not only with one's fellow but with oneself. These ideals were the basis of Sawney Webb's teaching philosophy and the thoughts are as relevant today as they were in "Old Sawney's" day.

Today — one hundred and eighty students representing 17 states and two foreign countries are "grown up" at Webb — a predominantly boys school. According to Dr. Gary M. Jones, President of the School, Webb School of today honors many of Old Sawney's time worn traditions, ideals, and methods. Due to its superior academic program and its individualistic teacher-student relationship, Webb offers young men and women the opportunity to deal with themselves and the challenges. It is for these advantages many parents choose



Robin Mason of Memphis, a Senior Perfect — the student disciplinary council, says studying in the "Webb Tradition" appeals to him because of the high educational standards of the school, the smallness of the classes, and the country setting of Webb.

for their children to be educated in the "Webb Tradition."

Perhaps one of the oldest honor systems in the country, Webb's Honor System is a trademark and tradition as old as the school itself. Administered by a Student Honor Committee who act as keeper of the Honor Tradition, each student upon enrollment is asked to take two pledges. The first:

I pledge my word of honor as a Webb gentleman (or lady) that I will not be absent from my premises after the curfew bell at night.

A second pledge arises from the school's motto, *Noli Res Abdole Facere*. It is:

I pledge my word of honor as a Webb gentleman (or lady) that I will not lie, cheat, or steal.

Both pledges are binding upon the student until he is authorized to leave Bell Buckle.

A college preparatory school for grades 7 through 12, Webb's emphasis is on academics. Dr. Jones describes their typical student as very serious about his work, more so than the average high school student, and the curriculum is geared

to that student. "Old Sawney's" curriculum embraced chiefly Latin, Greek, and Mathematics. Emphasis is still on the basic curriculum with special attention to the English language, mathematics, science, literature, and history. Voluntary participation in athletic games is encouraged.

Believing that spiritual values give life its ultimate meaning, each day at Webb begins with morning chapel services with attendance compulsory. This is one advantage of a private school Dr. Jones believes, "We have more freedom to work with the whole person and growing spiritually is part of the mental and physical development of a whole person." Webb is probably one of the few schools, if not the only one, to give a Bible at graduation exercises with the diploma inscribed in the flyleaf.

Sawney Webb, together with his brother John who later joined him at the school, complimented each other in forming traditions at the school which made it the unique place of learning it is today. Sawney Webb admonished his students not to do anything on the sly. Discipline was and is an important Webb concept — imposed upon students from the outside



Webb School students are seen during a typical meal in the school's all-electric cafeteria. Meals are served family-style with the students taking turns in waiting on tables.



Chambliss Dormitory on the Webb School Campus is the new-structure to be built. The new building is part of a campus where new and old structures and ideas blend together harmoniously.

until later it came from within the student. A system of rewards for work well done is still an integral "Webb Tradition." Studying under the trees in ideal weather is another tradition. The Webb campus embraces some 150 acres where the trees are not only sources of beauty but "outdoor study halls."

A school that claims to have been new for the past 100 years is today offering students, in the words of its President Dr. Jones, "a viable opportunity to establish a strong foundation on which to build." "Old Sawney" Webb, called the "South's greatest teacher of boys," established an educational philosophy that spawned the Webb Schools at Knoxville and Claremont, California. Webb School at Bell Buckle is still making a special contribution to the field of education by developing self-discipline, an open mind and a spirit of inquiry, freedom, and self-reliance as vital parts of the treasured and unique "Webb Tradition."

Some Things You Should Know About Cooking In The 70's.

By Virginia Lowe, Home Economist
Cumberland Electric Membership Corp.

The new way of cooking in the 1970's is by microwaves. Interest has grown in this amazing cooking method, and manufacturers have improved both the product and service. It is predicted that by 1976, 25 percent of all residential ovens sold will be microwave ovens.

The advantages of cooking with microwaves are numerous — easy cleaning, cool cooking; cooking time cut by almost 75 percent for most foods; fresher looking, better tasting, more nutritious food due to shorter cooking time; food prepared and served in one dish; and use of fuel per year compared to conventional ovens.

Microwaves are a particular type of high frequency radio energy, and, as the name would imply, microwave cooking is the application of this type of energy for producing heat within foods. While heat is produced in the food, very little heat is conducted or radiated to other materials within the oven.

The reason that microwaves cause heat primarily in food lies in the character of microwave-energy. When microwave energy comes into contact with a substance, any one of a combination of three things can occur: (1) It can be reflected. (2) It can be transmitted. (3) It can be absorbed. When it is absorbed, it is converted into heat. Foods absorb the energy and consequently become hot. Glass, china, and paper products transmit the energy, and since there is no absorption, there is no heating. Microwave energy is reflected from metallic substances.

The question which pushes the heat

when microwave energy is absorbed is complex. However, in simplified terms, the major result is the friction created between the molecules of the food as they rapidly rearrange themselves, thus causing the food to heat and cook. No physical changes take place in the food except those normally produced by heat.

The net result is the production of hot food in a cool atmosphere in cool utensils in a cool range. This means a cooler kitchen, almost complete elimination of danger from burns, and a cleaning technique which consists only of wiping the oven with a damp cloth (for no burning occurs to require "elbow grease"). Food might be over cooked, but it can never be burned!

Although manufacturers stress the safety features of their products, and the federal government has set up specific safety standards, some people still seem concerned about the old question of radiation exposure from microwave ovens. Much of this concern is from lack of understanding of the principles behind microwave cooking.

Microwave ovens emit non-ionizing rays similar to radio waves and infrared light. It is ionizing rays such as X-rays, Gamma rays, and Cosmic rays that are potentially dangerous to humans because they may damage body cells and chromosomes. However, the wise microwave oven consumer should follow these suggestions:

1. Be sure the oven purchased meets U.S. Government safety standards. (All the major brands do.)
2. Clean oven regularly after each use.
3. Be aware of the safety features

manufacturers have included in the oven (shut-off locks, indicator lights).

4. Operate only according to instructions.

5. Never attempt home repairs.

Most microwave ovens can be classified as portables for use on a kitchen counter top or as built-in wall ovens. Several compact models recently added to the market measure approximately 16-17 inches deep, 19 inches wide, and 35 inches high. The compact ovens are reported to hold up to a 4 pound roast or a 2 quart casserole. The standard, portable microwave oven measures 18-19 inches deep, 22-24 inches wide, and 16 inches high, and will hold a 10 pound roast. However, some manufacturers' ovens will accommodate a 20 pound turkey. For the consumer who needs a range, microwave ovens also come in a free-standing single or double oven range that combines electronic (microwave) cooking with conventional cooking. In most double oven units, each oven can be operated only one way, using either microwaves or conventional heat. However, one combination model offers a conventional oven and a versatile oven that can cook conventionally or electronically or both ways at the same time.

In selecting a microwave oven keep in mind the following points:

Size — Check and compare dimensions of both the exterior and oven cavity.

Price — Compare cost of various models for size and extra features.

Voltage — Most ovens require 110-volt and can be plugged in an outlet.



ing convenience outlet (unless it is a free standing range which would require a 240 outlet).

Locks — The oven must be equipped with a safety lock that automatically shuts off the oven when the oven door is opened.

Timer — Does the oven have one, two, or more timers? Are the timers set by minutes, seconds, or both? What span of time will the timer cover in one setting cycle?

Safety — Be sure the oven meets U.S. Government safety standards. Is the oven equipped with automatic locks and/or a signal light that remains on when microwaves are being generated?

Extra features — Check ease of cleaning. If the oven is a portable model, is a broiling unit included or available for purchase? Is a cookbook provided? Are there any special cooking utensils included in the purchase? One current model offers a large glass roasting tray. Other manufacturers have recently introduced a special ceramic grill made by Corning. It will brown, grill, and sear foods with microwaves making it possible to grill a steak or hamburger in a matter of minutes.

Warranties or Guarantees — Most manufacturers offer repairs and replacement of parts two years after purchase if the oven has been in normal use. One manufacturer guarantees parts and labor for five years.

After the purchase of the microwave oven, the consumer should read the use

and care booklet provided by the manufacturer. Each oven varies in some way from others, so it is important to carefully study the particular instructions applying to its basic use. Recipes provided by the manufacturer may be used as a guide for cooking other foods of a similar nature, therefore, adapting your own conventional recipes to microwave cooking.

Even with the help of manufacturers' cookbooks, microwave cooking involves a lot of trial and error experimentation. It just takes practice to accurately judge how long it takes to cook a certain size potato or when the roast should be turned for even roasting.

Time rather than temperature is the important variable in microwave cooking. There is no temperature control — only a time setting. The longer food is kept cooking, the more well done it will be. Remember food can be overcooked, but will not burn!

When working with the microwave oven, be careful to cook foods "only" to the tenderness called for by the oven's cookbook. Many meat recipes will suggest under cooking then setting aside for a standing period which finishes the cooking process. This standing time between actual cooking and serving allows for the heat inside the food to be conducted to the center of the food, thus completing the cooking process. If this standing time is not taken into consideration, the food may be too well done. A roast prepared by the cookbook may

appear rare when first taken from the oven, but after the standing time it will be done.

Standing is also important when defrosting foods. Short periods of cooking and standing time are required so that the heat can be conducted to the center of the food for an even defrosting process. A new defrost feature is available on at least one manufacturer's microwave oven, so that one needs only set the oven timer once for defrosting.

Cooking utensils that may be used in microwave ovens are generally the same for all the various oven manufacturers. Glass, china, and Corning Ware with no metal trim are ideal cooking utensils. However, Centura and Corelle dinnerware by Corning are not recommended. Dishwasher-safe plastic, foam cups, and baby bottles are good microwave utensils. Paper plates, towels, and napkins are handy disposable microwave cookware. When recipes call for food to be covered, wax paper, paper toweling, and plastic wrap will safely cover the dish and can be thrown away when cooking is completed.

While not all food can be cooked using microwave energy, it does offer today's homemaker the advantages of speed, convenience, coolness, simplicity, ease of cleaning, economy, and preserved food value.



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All's quiet on the Stones River now, but the stone markers indicate that it hasn't always been that way.

Offering her gray, stone markers as symbols for the brave, young men who fell there, the Stones River National Military Park, peacefully situated on about 340 acres of rolling Rutherford County countryside, appears as anything but the site of a grisly confrontation of men in war.

Located near Murfreesboro, the park is a perfect picture of serenity with the soft, airy wind of autumn blowing through the fire red leaves of the sugar maples and its visitors leisurely walks across the grounds. Were it not for the grim gray reminders few would believe that in a fateful four-day period over 100 years ago, about 23,000 soldiers of the Confederacy and the Union were killed, injured or lost here at the Battle of Stones River.

On December 26, 1862, Union Major General William Rosecrans with the 47,000-man force of the Army of the Cumberland began a movement southward from Nashville to Murfreesboro to engage the Confederate Army of Tennessee, encamped there under the direction of General Braxton Bragg. Numbering less than 38,000, Bragg's forces, by controlling the main road and rail routes, moved in a block to Union emplacements between Nashville

and Chattanooga. It was Rosecrans' desire to remove the Confederates from this strategic location, but from the very beginning, this proved to be a difficult task. By utilizing their superior cavalry, the Confederates made Rosecrans' trip South miserable by waging constant skirmishes at every turn. Every time the Union forces crested a hill, it seemed that a small band of mounted riders would sweep down on them like bees for a moment and then just as quickly depart to wait at the next hillcrest.

Bragg's cavalry units were so effective that it took Rosecrans four days to march the 30 mile distance between the two armies. However, by the evening of December 30, Rosecrans had his forces deployed in the area immediately opposite the Confederates and it soon became apparent to both commanders that the following day would be a day of full-scale battle. It was Bragg's plan to "force the enemy back on Stones River, and, if practicable, by the aid of cavalry, cut him off from his base of operations and supplies by the Nashville pike." Rosecrans planned to attack the Confederate right flank, cause a breakthrough and force them back into the city of Murfreesboro.

Rosecrans' orders called for the opening

attack to be launched at 7 a.m. on the 31st; however, Bragg beat him to the punch by attacking the Federals' extreme right at dawn. Catching the Union army during breakfast, Bragg's forces routed them into retreating in confusion. They then attacked the legions of



Like a lone sentinel, this cannon keeps vigil over the grounds where Union and Confederate forces met in conflict.

The Battle of Stones River

Rutherford County recalls a divided nation in conflict

By Jim Lynch, Staff writer



Brigadier General Philip Sheridan, forcing him to retreat and captured 11 of his cannons.

The Union forces then concentrated in and about a four acre thicket known in the records as the "round forest", established a solid artillery defense, and until darkness rescued them, withstood wave after wave of Confederate assaults.

Bragg was jubilant. With an impetuosity that he probably regretted later, Bragg telegraphed Confederate President Jefferson Davis that he had won a great victory and that "the enemy is falling back."

They weren't. Rosecrans considered retreating under the advisement of several of his officers, but decided to stay and create a few diversions. By lighting campfires in empty fields, Rosecrans created the illusion of having a much larger force than he really had. They made as much noise as possible to further confuse knowledge of their size and strength.

But the next day, New Years Day, 1863, no battle took place. Both armies spent the day recovering their killed and wounded, and regrouping their forces. Light skirmishes took place as Bragg's cavalry continued hit and run activities on the Union supply lines to the North, but there were no major confrontations.

For a while on the following morning, seemed that the inaction might continue through another day, although Bragg engaged in a brief exploratory

artillery duel with Rosecrans on his center position near the "round forest." It became clear now to the Confederate General that his victory celebration was a little hasty. The Federals had been pushed back, but not away.

Noticing that the Federals had only one division of men on his side of the river, Bragg decided to chase them back and ordered the commander of his right flank, Breckinridge, to advance on the division of Union Colonel Beatty. Breckinridge was horrified at the prospect and explained that the Federals controlled the high ground on the other side of the river with artillery and the ridge

he would have to capture in order to dislodge Beatty was well within that artillery range. Other officers questioned the necessity of attacking such an inconsequential target. They felt it mattered little that the Federals had crossed the river on their right, but Bragg was unwavering in his decision.

Breckinridge's advance was scheduled to begin at 4 p.m. As a decoy, Bragg had his forces in the center open fire, feinting an attack and, at the appointed time, Breckinridge and 4,500 troops, preceded by heavy artillery bombardment, leapt forward and quickly forced Beatty and his troops to flee across the river.

(continued on pg. 24)



The old, weathered markers in the foreground, reminders of battles gone by, contrast sharply with the new monuments in the background of recently deceased veterans of the Second World War. The park was established by an act of Congress in 1927.

Uncle John's Page

This page is reserved for the young folks. We will pay one dollar for each poem or drawing published. ALL WORK MUST BE ORIGINAL. Drawings should be in black, and drawn on white, unlined paper. Tell us your age, address, and Electric Co-op, and

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Basic laundering procedures--

SORTING, PRETREATING AND WASHING CYCLES

Even people who have washed clothes for years need to review their procedures every so often. Knowing how to handle today's fabrics, appliances and detergents is important for efficient, satisfactory results. Here's background information involving sorting, pretreating and washing cycles.

SORTING: Laundry should be sorted into loads that will wash well together with the same water temperature, agitation and spin speeds. Sort by color, separating whites and colorfast items, other colors and those that are not colorfast. White permanent press and man-made fabrics are prone to picking up color. Dark or very bright colors should be washed only with similar items.

Sort by type of fabric and construction. Fabrics that are delicate in construction should be separated from regular washloads. Also, lint givers, such as chenille robes and bath towels, should be washed apart from lint attractors, such as corduroy, permanent press and man-made items.

Sort by amount of soil—heavy, normal and light. And, finally, consider the size of items. Heavy,

bulky things like blankets, bedspreads and slipcovers should be washed alone.

PRETREATING: Prepare clothes for washing by checking pockets, brushing lint and dirt from pant cuffs, closing zippers and hooks and removing any unwashable trimmings. Certain items may need pretreating for spots, stains and heavy soil. It's a good idea to keep a stain removal chart in the laundry room as a guide for unusual or difficult stains.

Soil lines around collars and cuffs and small stained areas can be pretreated by dampening the area and rubbing with (1) a paste made of detergent granules and water, (2) a liquid detergent or (3) a bar soap. Heavily soiled articles and those that have yellowed will benefit from a pre-soak before washing. Dissolve a pre-soak product or laundry detergent in the soak water. Products that contain enzymes are especially effective for stains caused by body soils, blood, eggs, baby formula, grass and chocolate. Use warm water, as hot water can sometimes set stains. And again, be sure to separate whites from colors before

soaking. The time needed with enzyme pre-soak products varies from 15 minutes to overnight, depending on the age and amount of stain. And finally, it is important to spin out the soak solution before washing in fresh water and detergent.

A pre-wash includes agitation, unlike soaking, and it provides extra cleaning power for heavily soiled work or play clothes and diapers. Use hot water for oily soil and warm or cold water for protein stains, such as blood, milk or grass. For machines that do not have a pre-wash cycle, fill the tub and turn to deep rinse. Add laundry detergent and clothes. When washer shuts off, reset and launder as usual. Add additional detergent.

WASH CYCLES—Temperature and Speeds: Water temperature influences cleaning, wrinkling, dye stability and the durability of fabric finishes. A good rule is to use the hottest water the fabric and color can stand. Check instructions on labels and home furnishings for recommended water temperatures.

Hot water (140F-160F) is for white and colorfast cottons, diapers and heavily-soiled permanent press and man-made fibers. Keep



in mind that for hot water to be delivered to the machine, the water heater thermostat should be set at HIGH or at least 160°F. Use warm water (about 100°F-120°F) for non-color-fast fabrics, washable wools, permanent press and man-made fibers. Cold water (60°F or under) can be used to protect sensitive colors and reduce shrinkage and wrinkling.

The permanent press cycle, available on many washers, provides a special cool-down right after the

wash portion of the cycle to cool garments before they are spun. This tempering treatment, followed by a cold rinse, helps prevent wrinkles.

Another choice must be made dependent on fiber content, fabric and garment construction and the amount of soil. This is washing action: the time and vigor with which laundry is moved about in the wash and rinse cycles. Sturdy whites, colorfast and heavily soiled items should be washed for 10 to

15 minutes at regular agitation and spin speeds. Non-colorfast fabrics require normal speeds but less agitation time—6 to 8 minutes—to reduce color loss. Permanent press and synthetics respond best to frequent laundering in small loads using regular agitation for about 6 to 8 minutes and a slow spin to minimize wrinkling. Delicate fabrics and those that may ravel or fray easily should be washed 4 to 6 minutes with slow agitation and spin speeds.

CHOOSING AND USING A SOAP OR DETERGENT

■ The primary purpose of a soap or detergent is to loosen and remove soil from fabrics and to hold the soil in suspension in the wash water until it is drained away. There are many products on the market designed to do just that. Which you choose depends on water conditions in your area, the kind of washer used, fabrics laundered, degree and types of soil and personal preference. Soap and detergents are classified according to use. The following information will assist you in selecting laundry products for your needs.

It should be noted that the main difference between a soap and detergent is in the way each performs in hard water. While soap is satisfactory in soft water, in hard water it reacts with the minerals, to form an insoluble curd or film which deposits on clothes. Detergents give satisfactory results in hard and soft water, and are therefore more widely used for home laundry. There are two categories for both soap and detergent products—light-duty or all-purpose.

LIGHT-DUTY SOAPS: These are primarily pure soap and are formulated for laundering diapers, other baby clothes and lightly-soiled delicate garments such as lingerie, stockings and fine woolens. Suited for both machine and hand-washing, they are available in two forms—flakes and granules.

ALL-PURPOSE SOAPS: These are designed to clean full range of fabrics found in family wash. All-purpose soaps contain builders and often fluorescent whitening agents and come in granule and flake form.

LIGHT-DUTY DETERGENTS:

These, like light-duty soaps, are designed for laundering delicate, lightly-soiled fabrics. They are found in granule and liquid form.

ALL-PURPOSE DETERGENTS: As classification suggests, these are designed for the entire household wash from heavily-soiled work clothes to delicate fabrics. They are available in granule, liquid or tablet form and are generally identified by their sudsing characteristics—high (normal), intermediate and low.

High and intermediate sudsing detergents can be used in top-loading washers, the automatic and wringer types. The low sudsers can be used in all washers but are of particular advantage in front-loading, tumbler-type washers where an excessive amount of suds can interfere with washing action.

All-purpose detergents are also available for cold water use. The cold water detergents are designed for situations in which cold water may be desirable, e.g. to guard against shrinkage, wrinkling or color loss. They are also effective in water of any temperature.

The following basic types of ingredients are found in most all-purpose detergents:

Surfactants (surface active agents) to make water wetter, to loosen, make soluble and/or suspend soil.

Builders to tie up hardness minerals, maintain desirable alkalinity and help disperse and suspend soil.

Soda control agents to establish and control desired sudsing characteristics.

Corrosion inhibitors to protect metal parts of the washer.

Soil redeposition inhibitors to

help prevent loosened dirt from settling back on the fabrics.

Fluorescent whitening agents to whiten and brighten fabrics.

Perfumes to help cover odor from soiled cloth during washing and give a clean fragrance on clothes after washing.

One or more of the following optional ingredients may be incorporated into a laundry product:

Oxygen bleach to aid in removal of some soils and stains.

Borax to aid in removal of some stains and to impart a sweetness and freshness to clothes.

Bacteriostats to inhibit the growth of some bacteria on washed fabrics.

Bleuings to leave a slight blue tint on fabrics and thus tend to counteract yellowing.

Colorants (other than bleuings) to impart individuality to a product.

Enzymes to aid in cleaning and stain removal, especially protein soils.

USING SOAP & DETERGENTS: Follow package directions for the amount to use. The recommended amount on the package is based on average washing conditions, a five to seven pound load of clothes, moderate water hardness (four to nine grains per gallon), and average water volume (about 17 gallons for a top-loading washer, eight gallons for a front-loading washer).





HELPFUL HINTS

Causes of High Electric Bills

1. Inadequate wiring caused by using wire too small; not enough circuits.
2. Failure of wiring system through poor wiring, or one not properly maintained. Electricity can leak to ground where wiring comes in contact with pipes, gutters, lightning rods, windmills, trees or roofs of buildings. Interior wiring used outside, in conduits or pipes quickly breaks down and leaks current.
3. Improper care of motors and equipment. The squeaky wheels need more kilowatts.
4. Leaving unnecessary lights on when not at home, including lights in barn, attic and closets.
5. Lime deposits on electric water heater elements. Locate water heater thermostat near water use area; use small pipes and insulate well.
6. Following manufacturer's recommendations in use and care of electric ranges; turn units off before food is completely cooked.
7. Place refrigerator and freezer away from heating system. Check door latches and gaskets.
8. Leaky faucets, especially on the hot water system.

How To Check Your Wiring For Grounds

1. Turn off all appliances and lights. Be sure to disconnect electric clocks.
2. Check the revolving disk in the electric meter. It may move slowly either forward or backwards, but will stop before it makes a full turn. This is normal.
3. If the disk continues to rotate, electric current is being used. Disconnect at the fuse box, one circuit at a time. If the meter stops, this indicates the trouble's in one of the circuits that was disconnected. Meters do not run unless current is being used.
4. If the disk still continues to rotate after all circuits have been disconnected, this indicates the trouble is between the meter and the fuse box. Trouble may be in the entrance cable; trees, windmill frames, and ground wires.
5. Electric leaks are more pronounced during wet weather. Trouble can often be located around water pumps, shop equipment or entrances to buildings. No. 1 cause of accidents is ignorance and carelessness. So — here are some things everyone should know about electricity and electrical equipment from a safety point of view.
- Electrical safety begins with proper wiring. Wiring should be installed and checked by a qualified

electrician. Every home should have at least a 100-amp service (200-amp service for homes heated electrically). No more than six outlets on any one circuit.

- The 120-volt electric current in your wiring can kill you! Respect it. Pull the entrance switch or fuse before working on wiring, or any equipment connected to the wiring. The best advice on working on your wiring is this: Don't! When in doubt about installation or repair, call a competent electrician.
- If a fuse blows or a breaker trips, find out the cause before you restore current to that circuit. Look for damaged wires, bare wires, defective outlets, and defective appliances first. When a fuse blows it should be replaced by one of the proper size. Never put a penny or anything else behind a fuse!
- Plugs on electrical appliance cords should be the grounded, three-prong type.
- Check cords for wear, especially at plugs and connections.
- Keep cords away from heat and water. Do not wrap cords around any metal device or pipe. Always place wires, especially extension cords, where nothing will rub them or drop on them. Keep cords out of the way so people will not trip over them.
- Always pull the plug, not the cord.
- All convenience outlets should be grounded.
- Electrical outlets for outdoor use should be weatherproofed.
- Every major electrical appliance should have its own circuit.
- Power tools should have heavy duty, grounded cords.
- Moisture-resistant appliance cords should be used outdoors.
- Do not operate an electric lawnmower in wet grass.
- If you get so much as a tiny electrical tingle from any part of your water system, disconnect your water heater and pump right now; then look for the trouble.
- Do not use electrical tools or appliances outdoors if it is raining or is wet.
- All antennas should be grounded.
- When erecting television antennas or working around water wells, be sure you are clear of all electric lines.
- Teach your children not to fly kites near power lines.
- Never shoot at insulators.
- Do not touch electrical wires that have fallen — they may be energized.

Timely Topics

BEEF COWS MAY NEED SOME EXTRA PROTEIN

Beef cows need a protein supplement when feed is of low quality, advises a University of Tennessee livestock specialist.

If a cow produces a heavy weaning calf, she must have enough protein to maintain her body and produce enough milk for the calf, points out Clyde D. Lane, Jr., UT animal science assistant professor.

Pastures usually provide a cow's protein needs without difficulty, he explains. In the winter, when little pasture is available, the cow's energy and protein needs must be met with silage, hay and other feeds. These usually provide enough protein for the dry cow, but are deficient when her protein needs double following calving.

"Additional protein needs can usually be met by feeding a limited amount of protein supplement with the regular feed," he continues. Either natural (cottonseed, soybean or linseed oil meal) or synthetic (urea) protein supplements can be used. They can be fed as a meal, liquid or block, depending on the individual farm situation.

"Regardless of the type used, the level of consumption should be watched to insure adequate consumption and to prevent overconsumption," points out Lane.

You can determine the amount of protein to be added to the ration by having a sample of your forage tested at the UT Forage Testing Laboratory. You can get further details at your county Extension office.

BURN WOOD AND SAVE MONEY

You can burn firewood this winter and save money, while improving your timber stand, suggests a University of Tennessee Extension forester.

Storm-damaged, misformed and other undesirable trees can be removed

from the forest and improve the timber stand," points out John H. Sharp, UT professor. "Many fallen trees which have not rotted will make excellent firewood, providing considerable savings in fuel costs this winter."

A recent forestry study indicates that one cord (4 ft. by 4 ft. by 8 ft.) of oak, maple or beech equals 166 gallons of oil. Oak is the most common forest tree in Tennessee. If oil costs 30 cents per gallon, a cord of the above firewood would have a value of \$49.80.

"If you can buy a cord of air-dry firewood for less than \$50 and burn it in an efficient manner, you can save money," points out Sharp. "By air-dry, we mean that the wood has been under cover for three months or more with good ventilation. This should bring the moisture content down to about 20 percent."

The 166 gallons of oil is about equal to 1.2 tons of coal, he continues. By comparison, one cord of elm is equal to 130 gallons of oil, while pine is equal to only 94 gallons.

SEED INFLUENCES TOTAL FARM INCOME IN STATE

The seed used by Tennessee farmers contributes a major role in the total agricultural income of the state, says R. E. Cobble, University of Tennessee Extension specialist.

The quality of seed sold by seedsmen and used by farmers directly influences the total income and profits from the sale of all crops, he points out. The seed planted also indirectly influences the returns from livestock and livestock products through the quality and performance of forage crops.

"In the overall cost of producing a crop, seed is a minor item, whether it is the cheapest seed or the most expensive," says Cobble. "Generally, in the end the cheapest seed is the most expensive. It is impossible to justify the

loss in yield and quality resulting from poor seed when compared with the few cents more per acre a farmer might pay for a good seed of known quality and performance."

FARM LAND BEING LOST ON URBAN EXPANSION

City growth, highways, reservoirs and other non-farm uses "gobble up" about 1.5 million acres of farm land every year, says a University of Tennessee Extension specialist.

About 15 million acres of cropland and 3.5 million acres of pasture land were "lost" in the period 1958 to 1967, continues George J. Bentley, associate professor of plant and soil science at UT.

"Bringing the matter closer to home, indications are that by 1975 Tennessee will be down to 6.5 million acres of cropland, 4 million acres of pasture and 11.5 million acres of woodland," he points out.

These figures indicate that a realistic allocation of our land resources among competing agricultural and non-agricultural uses is one of the most pressing and important land use management decisions in the country, says Bentley. If we do this rationally for the long time benefit of society, we must plan and practice objective urban-rural land allocation.

The planned preservation of agricultural land is already in practice in some areas. New York State recently passed legislation making it possible to create agricultural districts. This enabled several New York counties to set up agricultural districts to preserve the state's farm land.

The primary purpose of agricultural district legislation is to protect farm land and its food-producing potential from residential, commercial and industrial encroachment and the resulting economic squeeze.



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Puzzle Corner

Congratulations! Nearly all of the replies we received for the December puzzle were correct and we received quite a few. To test your knowledge of Tennessee, we asked you to identify the State Bird, Flower and Tree and give the year that each became so. The correct answer is:

State Flower — Iris — 1833

State Bird — Mockingbird — 1933

State Tree — Tulip Poplar — 1947

The winners, chosen by lot from all correct answers on a rotating basis of the State's three Grand Divisions are as follows:

First Place: Veronica Hamm, P. O. Box 138, Oakland, Tennessee 38060, a member of Chickasaw Electric Cooperative — \$10

Second Place: Janice M. Boers, 511 Oak Street, Manchester, Tennessee 37355, a member of Duck River Electric Membership Corporation — \$5

Third Place: Eddie Layne, P. O. Box 863, Jasper, Tennessee 37347, a member of Sequatchie Valley Electric Cooperative — \$5

And now for the January puzzle:

Two of our 50 states are tied for having the largest number of bordering states. You are asked to give us the names of these two states plus the names of the states that border each.

Send your replies, along with your name, address including zip code, and the name of your electric cooperative to:

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Automation, Storage Are Keys To Couple's Successful Farming

By John Stanford

Adrian Cunningham of Route 1, Morriston, Tennessee agrees with the old slogan that "Time is Money," especially if that time is spent storing grains during periods of relatively low prices and selling them when the financial return is considerably higher.

Cunningham, 50, has been farming since 1947 and he along with his wife who, he says, "can out-work me any and every day of the week," farm a total of 535 acres, 330 acres of which they own.

Since the Cunninghams farm this sizeable acreage entirely on their own, two problems had to be solved if they were to make this fairly recently-acquired operation a success: (1) how to offset the lack of available manpower and (2) how to make a sufficient profit to make farming their full-time business.

Perhaps overly-simplified, the Cunninghams have found their nearest complete answers to these questions, and in the same order, through (1) electrical automation of a large part of their operation and (2) grain storage in their own bins.



This is where the automated grain drying storage begins. Grain is transported by way of this conveyor from the dumping pit (at bottom of picture but not shown) to 1,225-bushel holding bin at top of picture.

The Cunningham's farming operation is primarily one of grain and livestock. On a typical year, 200 acres are planted to corn, 200 acres to soy beans and 75 acres to wheat. Most of the remaining 60 acres are devoted to pasture for livestock.



In addition to conveyor, augers, including one shown here, are instrumental in automated system.

During 1972 Cunningham topped out 1,200 hogs, using most of his 200 acres of corn for this purpose. Present plans call for a departure from swine to Holstein heifers, of which he had some 36 head near the end of 1972. He will continue heavily in field crops, particularly in corn, wheat and soy beans.

Although the growing of field grains has not yet reached the stage of "electrical automation," once these commodities have reached the Cunningham's processing area, it's almost a push-button operation. From one central unloading site, the grains are moved by conveyor to a 1,225-bushel holding bin. From there they are conveyed by auger to a dryer which, in one hour, can reduce moisture content in 120-bushels of corn, for example, from 25% to 15%. From the dryer the



From holding bin, extreme right, grain is transported by auger to dryer at left center. Large fan on dryer helps exhaust moisture from dryer.

grain is transported by auger to one of four 3,750-bushel storage bins already in operation on the Cunningham farm. The grain will remain in these bins until Cunningham finds what is considered a good market price, which generally comes in February or March. The cycle from the holding bin through the dryer to storage bins will continue, automatically, as long as there is grain in the holding bin. That means that, with a 1,225-bushel holding bin and with a 90-minute span of loading-drying-unloading of 120-bushels at a time through the dryer, the Cunninghams can have 16 hours in a row to call their own, including a night's sleep, without having to devote any work or time to their automated drying and storing operation.

The Cunninghams put in two of their four 3,750-bushel storage bins two years ago, soon after they bought their present farm. They added two more of the same size in 1972.

As stated earlier, one of the prime reasons for storage bins is for holding grains for prices higher than those which generally prevail at harvest time. At various times, for example, Cunningham has held soy beans that were selling for \$2.85 until they reached \$3.50. He held 5,000 bushels of wheat when it was selling for \$1.10 until it reached \$2.00. On another crop of soy beans that were selling for \$3.18, he stored his crop until the price reached \$7.00.

Another reason that Cunningham has put in so much storage space is that it

enables him to get crops out of the field in good weather and not have to wait at a public elevator. This also enables him to make better use of his combine.

The third reason for the Cunningham farm's large installation of storage bins goes back to and ties in with the need for electrical automation in the first place — to help ease the shortage or lack of farm labor. With automation and so much storage, the Cunningham can — and do — go it alone. And it's not only well, but necessary, that they have these facilities since their grain operation in 1972, dried and stored, was up to 24,000 bushels of corn. 5,000

bushels of soy beans and 2,000 bushels of wheat.

As to the future with most farmers, Cunningham does not know what the future holds for farming. For certain, however, he doesn't plan to retreat. Asked what his plans are for 1954 Cunningham replied, "We plan to add another storage bin, this one of 40,000-bushel capacity, or about half again as much as we have in our four bins now."

That's real confidence, but affordable to a man who has a good, automated drying system, plenty of storage bins—and a wife who can cut-wire him any and every day of the week!



Helping Cunningham (right) install his new grain dryer is Marvin Lusk, a fellow farmer and friend.



From dryer (center of picture) low-moisture-content grain is conveyed by auger to one of four 3,750-bushel storage bins shown in background.



Cunningham (right) shows farm boy Fork Electric Coop employee John Cox and Clarence Redmon his electric control board. Canny Fork Electric provides service to the Cunningham household and grain drying operation. The latter requires 13 motors ranging in size from one- to 12-horsepower.

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he rather stiffly but more reasonable
said "No, I have no objection." He
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Meanwhile, Union General Crittenden and his chief of artillery, Major John Mendenhall, had been riding along the Nashville pike watching the formation of Breckinridge's assault. Crittenden ordered his major to strengthen their artillery position on the high ground west of the river. In a matter of minutes, Mendenhall had amassed 57 guns at that point. As Breckinridge completed his sweep of Beatty's division, his forces made their fatal mistake. Not satisfied that they had taken the ridge, they pursued the fleeing Federals down the hill toward the river — right into the teeth of Mendenhall's awaiting arsenal. The Union infantry had also concentrated at their edge of the river, and the results were murderous. The pursuing Confederates crashed headlong into this barrage, wavered, and fell back. Fresh Federal troops then charged across the river, scattering the survivors of Breckinridge's ill-fated charge. As night fell, Breckinridge was back in the position from which he had started, with 1,700 casualties, and the controversial ridge still in the hands of the enemy.

Bragg's right flank was shattered and intelligence reports indicated that Rosecrans was receiving reinforcements from



One of the newer additions to the park, this modern welcome center greets visitors with information about the battle and the grounds, and offers a variety of souvenirs. Several of the original cannons used in the battle are still kept outside the center. Inside, the visitor can learn to operate these pieces by using a special model that does everything but explode.



Row upon row of gravestones dot the fields where 23,000 troops of the Confederacy and the Union fell during the four-day battle at Stones River. Union General Rosecrans is generally credited with the victory, however, the loss of men by both sides raises the question of whether anyone really won.

Nashville. It was estimated that the Union army would soon number 70,000, so Bragg, on January 4, gave the reluctant order to retire to the South near the Duck River.

Actually, Bragg had overestimated the size of the Federal forces, largely due to Rosecran's campfire tactics, and could have probably maintained his position. However, confidence in his leadership abilities was at low tide — so much that several of his officers petitioned him to withdraw. He first refused, but the next morning changed his mind and ordered the retreat.

The four-day encounter cost the Union

13,000 troops and the Confederacy lost 10,000. The South also lost the strategic Murfreesboro location.

Rosecrans, victorious in his first major command, could have had reason to be boastful of his accomplishments. But, being a pious man, he closed out his report of the Battle of Stones River thusly:

"I say, from conviction, and as public acknowledgement due to Almighty God, in closing this report, *'Non nobis Domine! Non nobis sed nomini tuo da gloriam.'* ("Not unto us, O Lord, not unto us, but unto thy name give the glory.")



The tourist information marker notes that over 2,500 of the 6,100 Union soldiers buried here are unknown but to God.

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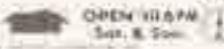
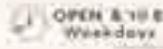
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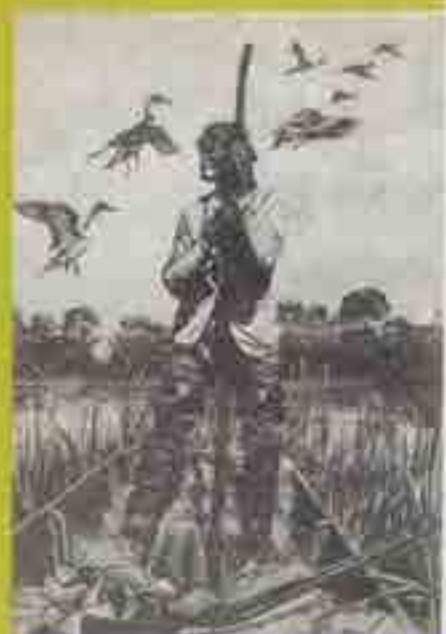


McDonald Wildlife Painting Ushers in 1974 Cover Series

GIVING the TENNESSEE MAGAZINE'S 1974 cover series off to a beautiful start, as artist J. McDonald's "Cormorant" which was commissioned by the Tennessee Ducks and Geese Unlimited Fund, the first member of the Southern Society of Artists. The "Cardinal" measures 16 by 20 inches overall and is a companion print to #46, to the "Screech Owl." The "Cardinal" is a signed-lithograph.

Also pleased with our October cover of "Mallards" is "The Bassin Guide" which McDonald painted in cooperation with and for the fund raising benefit of Ducks Unlimited of Tennessee. Although not strictly a wildlife painter since the central figure is a human, "The Bassin Guide" is proving extremely popular with sportsmen and McDonald collectors. Measures 20 x 26 inches overall and is limited to only 1,000 signed and numbered prints. Price of this fund-raising print is \$60.

Norman wildlife releases are expected from McDonald into Spring.



The Bassin Guide

Interested readers who would like to order the "Cardinal," "Bassin Guide" or any previous print still available. McDonald prints may do so by filling out and mailing the coupon below.

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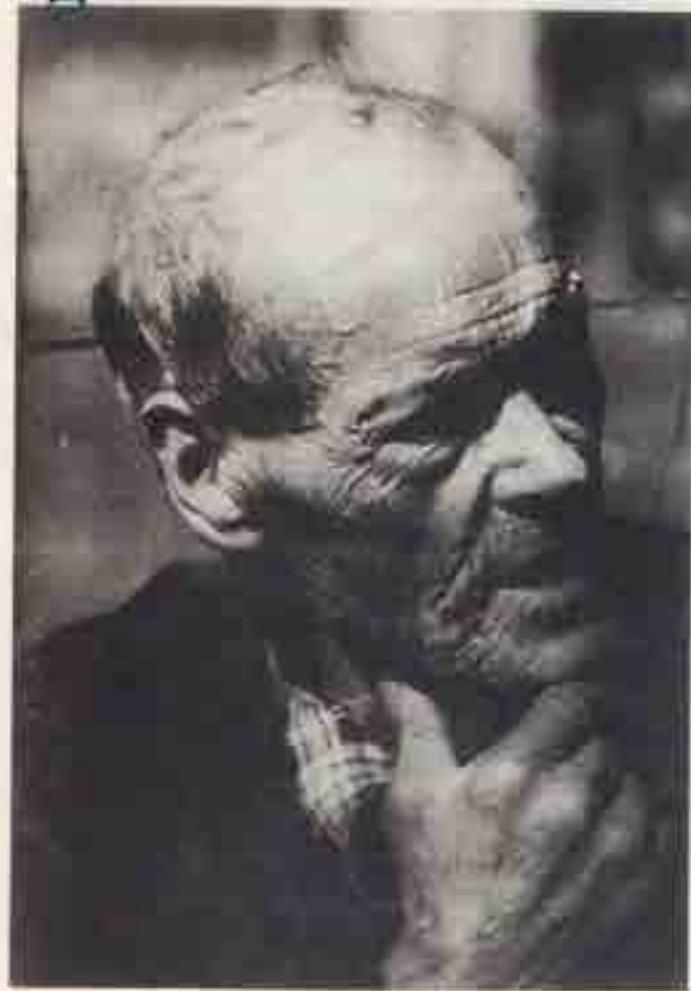
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Meet Your

Neighbors —

By Tony Holmes



"We ain't goin' to quit — and that's h'it."

Clinic Opened in 1971
Briceville's temporary clinic first opened its doors in April 1971. By the end of December almost 600 patients had asked for help. Almost 1,700 were treated in 1972, and about 1,400 were treated in 1973, according to nurse Sue Schwer. (Sue and Elvira Foust, the receptionist, spend more time at the clinic than anyone else.)

Visiting doctors and nurses and a few local folks have pitched in to provide medical help on a part-time basis. Most of the medicine is donated by pharmaceutical companies and other donors. Among other things, the most commonly treated ailments include wounds, infections, rashes, and eye diseases. Patient fees are deliberately kept as inexpensive as possible. For a standard fee of three dollars a patient can see one of five visiting doctors who alternate in giving their time free of charge or the full-time nurse.

"The clinic has might nigh got anything in the country

Muleheaded, stubborn, determined — whatever you call it, the folks in this small, isolated, mountainous community have a bad case of it. And it seems the fellow most afflicted is a crusty, 73-year-old, retired coal miner-farmer by the name of Byrd Duncan. Byrd, weathered and energetic, has just about infected everyone with his deep-down determination to see a permanent health center opened.

Briceville is what city people who never lived in the country call "quaint" or, worse yet, "old timey." Local people call it "country," and the tone of their description doesn't give an inch. Most of its 800 or so residents live in modest bumes along Coal Creek, a small stream zigzagging through the middle of town. Everybody knows everybody else.

The community is not much more than a crossroads that made it. There are no doctors and only recently did the community get a full-time nurse. The only medical facility, a 10-foot by 40-foot trailer, is not large enough to handle the crowds that travel from 35 miles around for care. They come, mostly in the winter flu season but steadily, the year-round, from places like Graves Gap, Laurel Grove, Frost Bottom, The Wye, Airshaft Hollow, Minersville, and other small settlements up and down Coal Creek and Walden Ridge. When the small waiting room fills you stand outside. When it rains you get wet.

Life isn't easy in this out-of-the-way section of Tennessee. Walking over the hills and valleys, you'll find by actual count between 40 and 50 cemeteries within a two-mile radius of town.

"you need," says Duncan, "but it's just too small. We need more room."

Lending the drive for the much needed larger and permanent clinic is the People's Health Council, a group of local citizens under the leadership of Duncan. To raise funds, the Council has held bake, art, and rummage sales, raffles, singing conventions, and membership club drives. Occasionally well-wishing concerned outsiders send donations.

Byrd's not apt to talk of such things as "community consciousness," "self-reliance," and the like although he is a good example of both. His great grandfather settled on the farm where he has lived all his life, with the short exception of an 18-month stint in the army in 1920. Like his parents before him, he was born in Graves Gap. Like several others in the area, Byrd didn't have electricity until 1956 — Until 11 . . . Wednesday . . . a memorable day.

"Life isn't Easy in this Out-of-the-Way section of Tennessee.

Walking over the hills and Valleys around here You'll find between 40 and 50 cemeteries in a two mile radius of Town."

Plowing at 73

Byrd worked in the mines for thirty years before retiring in 1959. Now he farms, enjoys visitors, and cares for his turkeys, guineas, ducks, chickens, a cow, and a pony.

At 73 he plows his own ground and in the summer sells beans, tomatoes, and potatoes from his summer garden and stores the rest for winter. By his own word, he makes a "fine grape wine" which he gives to friends. He doesn't drink.

"We're doin' the best we can . . ."

Since 1971 Byrd has devoted an increasing amount of time to helping his neighbors and getting the permanent clinic for Briceville. In December he was honored by the National Foundation for the March of Dimes for distinguished voluntary leadership in the fight against birth defects. At the same special award banquet, the Anderson County native was presented the Service to Mankind award by the Oak Ridge Soroptimist Club.

Said Duncan philosophically: "The best thing we can do is just to do the best we can. And that's what we're doing. It's the Briceville people — they stand by me and I try to do right. We've been with this thing a long time now. We ain't goin' to quit — and that's K.R."



"We might nigh got anything in the country you need but the clinic is just too small."

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