

REN

Illinois Rural Electric News
July 1989

Rural revival
is coalition goal
See page 4

Big cats
of Southern
Illinois

See page 20

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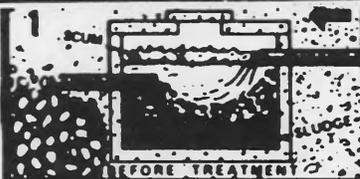
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Illinois Rural Electric News

Rural development partnerships—idea for the times

Illinois Senators Alan Dixon and Paul Simon are among sponsors of S. 1036, the Rural Development Partnerships Act of 1989, introduced in the U.S. Senate in May. More than 30 senators have joined as co-sponsors of this important legislation that, according to the National Rural Electric Cooperative Association, goes a long way toward implementing NRECA member resolutions on rural economic development.

The legislation would provide rural electric cooperatives with vital new tools and assistance to become even more powerful players in local community development. Included in the bill are provisions for:

(1) An economic development technical assistance group within the Rural Electrification Administration to provide hands-on, circuit rider assistance to rural electric and telephone systems on local development projects.

(2) A rural distance learning program that would make funds available to partnerships consisting of local REA borrowers, the National Rural Telecommunications Cooperative and educational institutions to make instructional courses available to rural schools, particularly in the subject areas of math, science and languages.

(3) A business incubation program that would

provide funds to REA borrowers to promote new business formation or growth of existing rural businesses through the creation of small business incubators and incubator programs to bring management, technology and other types of support to rural business.

(4) A program to permit REA borrowers to defer payments on REA insured loans and use these amounts to make loans or investments in community and economic development projects. This new authority would be based on an amendment to the RE Act.

(5) REA funding to rural electric systems for water and waste disposal facilities in cases in which (a) the provision of such services by the rural electric system would promote economic development, or (b) the territory of a rural electric system would otherwise be lost through annexation.

Support for major rural development programs is not limited to Washington. A group drawing much of its start-up energies from Illinois electric cooperative leaders, Rural Partners, has launched a statewide, focused effort to stimulate rural development. A kick-off ceremony in Springfield drew Governor James R. Thompson, who restated his support for programs and plans to revive rural Illinois. This concerted effort is explained on pages 4 and 5 of this month's issue.

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REN

Illinois Rural Electric News

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Cover: Cassy, a Bengal tiger, is one of many unusual animals Lou Mayhall has assembled at his animal park—M/M Exotics—near Metropolis in Massac County. Mayhall's 52-acre park is open to the public. See article beginning on page 20.

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An Illinois electric cooperative-supported coalition of private and public interests has launched a concerted, statewide effort to promote rural community development.

Rural Partners made its debut June 14 in a ceremony at the Capitol complex in Springfield featuring Governor James R. Thompson and Lieutenant Governor George H. Ryan. Ryan, Chairman of the Governor's Rural Affairs Council, is co-chairman of Rural Part-

ners, representing the public sector. The other co-chairman is Douglas Dougherty, director of economic development for Soyland Power Cooperative, representing the private sector.

Soyland, which serves about two-thirds of rural Illinois, and the Rural Affairs Council are two of the founding members of Rural Partners, along with the Illinois Farm Bureau and Illinois State Chamber of Commerce. Some of the other organizations that have joined the coalition are the Association of Illinois Electric Cooperatives, Consolidated Telephone Company, Central Illinois Public Service Company, Illinois Power Company and the University of Illinois Cooperative Extension Service.

Thompson said, "Whenever I attend a meeting of the National Governors Association, we don't adjourn until we have addressed the issue of rural economic development, an area that's often overlooked in economic development plans, which have been in the past dictated by urban interests, who focus almost exclusively on urban areas.

percent of our state's population—an awful lot of people—it's becoming clearer that this state, like this nation, needs a focus on rural economic development.

"If rural areas prosper, the whole state prospers," the Governor added.

Ryan said, "Government can help solve problems, but the best solutions are those that have been developed by local business, agricultural, educational and other leaders—those having sup-

Private-public coalition goal is rural development

port of the local community."

"When plans and projects have been developed locally—from the bottom up and with strong private sector participation and leadership—it is then that government joins hands to help out," Ryan said. "This will mean the most effective and lasting solutions for rural development."

Dougherty said, "Rural Partners will encourage local community development efforts.

"All of the members of Rural Partners have signed a resolution of support to provide through shared interests and resources coordinated leadership and action to achieve community development and economic progress in small towns and rural areas of Illinois."

John White, Jr., Illinois Farm Bureau president, said, "The Farm Bureau has always worked for rural stability and development. We are glad to be a part of a broad-based organization which will join together agricultural, business, educational and other associations with interested government agencies for the benefit of our rural citizens—especially our young people."

Lester Brann, Illinois State Chamber

"Whenever I travel Illinois and go into the rural areas, into the small towns and farms that make up still nearly 25

percent of our state's population—an awful lot of people—it's becoming clearer that this state, like this nation, needs a focus on rural economic development.

Lester Brann, Illinois State Chamber



Governor James R. Thompson (left) expressed his support for Rural Partners during ceremonies announcing the organization of the rural development coalition. Lieutenant Governor George H. Ryan (center) and Douglas Dougherty of Soyland Power Cooperative co-chair the alliance. Dougherty was one of several private sector speakers during the public announcement held in Springfield June 14.

of Commerce president, said, "The State Chamber of Commerce has long worked for community development, through leadership development seminars and practical actions. We support the formation of Rural Partners because there is a need for better cooperation among the many associations and local chambers of commerce that are devoting effort and resources to improving and developing the Illinois economy.

"We do not need another organization for its own sake," Brann continued. "What we do need is a network and a forum to bring together all the talent we can and harness it for a better tomorrow for small town and rural Illinois."

Robert Anstine, mayor of Macomb and president of the Illinois Municipal League, said, "Rural Partners will hopefully produce additional employment opportunities for rural Illinois citizens, thus reversing all trends of declining population in rural Illinois counties. With a coordinated effort in rural counties, many will learn of advantages of rural life.

"A recent Gallup survey found that a majority of Americans prefer rural

towns to larger cities," Anstine continued. "The cost of housing and labor is lower in rural settings. The key to rural revival is the process of regrouping around strength with leadership."

E. H. (Ed) Williams, Soyland general manager, said the alliance "will encourage local community development efforts. All of the members of Rural Partners have signed a resolution of support to provide through shared interests and resources, coordinated leadership and action to achieve community development and economic progress in small towns and rural areas in Illinois.

"One of our first projects will be to solicit sponsorship for a community development pilot project, which will be undertaken in six rural Illinois counties. This ambitious and comprehensive two-year project is designed to empower local leaders to initiate a grass-roots strategy for community development. Many of the private Rural Partners like Soyland have a network of locally based financial, technical and human resources which can be collectively mobilized to achieve meaningful economic development of rural communities."

Membership in Rural Partners is available to any association or organization in Illinois having an interest in rural development. There is no membership fee. For additional information, contact: Douglas Dougherty, Rural Partners, 788 North Sunnyside Road, Decatur, IL 62522, 217/423-0021, or Donald Norton, Executive Director, Rural Affairs Council, 612 Stratton Building, Springfield, IL 62706, 217/782-7514.

LIGHTNING



The advantages that nature gave to the countryside as a place to make a home are many, but they do not come alone. There are some disadvantages, too. One of them is nature's most destructive force, lightning, which poses three special drawbacks to people with rural addresses:

- The average house in the country commands a larger site than a typical city lot and is more prominent on the landscape, giving it a somewhat greater chance of being struck by lightning than a similar house in a city.

- Statistics show that a house in the country is about twice as likely to burn to the ground if ignited by a lightning "hot bolt" than its city counterpart, because of distance from firefighting facilities.

- Country homes are serviced by longer utility lines—electric, telephone, and cable television. Therefore they are exposed to more potentially destructive lightning-caused power surges over

those utility lines.

For all three of those reasons, rural property owners receive more attention from lightning protection salesmen and installers than do their counterparts in the city. That's well and good, provided the company the caller represents is a reliable, knowledgeable organization that you can rely upon if you choose to have your property protected.

What lightning is

Lightning is the result of a separation of electrical charges in the atmosphere. It is a huge electric spark between one charge center and another oppositely charged center. About one lightning flash in three occurs between the bottom of a thundercloud and earth. The other two are cloud-to-cloud lightning discharges. Thunder is the sound of lightning's tremendous flow of electrical current literally exploding the air around the cloud-to-ground current path.

Nature's most common destructive force poses a special threat to rural areas.

According to scientists, about two-thirds of all lightning flashes are "cold bolts" during which thousands of amperes of current at millions of volts flow to ground at a speed as high as one-fifth the speed of light. That's too fast for heat to build up enough to set wood or asphalt shingles afire, for example. "Cold bolts" can cause severe structural damage, however, and they can set off flammable gases or vapors.

"Hot bolts" include at least one long-duration flow of lightning current which applies heat long enough to ignite flammable building materials.

How to rate your lightning risk

You can roughly determine the chances of a "hot bolt" causing a fire or a "cold bolt" shattering a chimney or doing other damage by using a "risk assessment guide" prepared by the National Fire Protection Association's Lightning Protection Code Committee.

The NFPA's lightning risk guide has

seven tables. Six are used to assign index values to factors affecting a building's chances of being damaged or destroyed by lightning. The six factors are (1) type of structure; (2) type of construction; (3) relative location; (4) topography; (5) occupancy and contents; and (6) lightning frequency in the area.

After each factor is rated, the risk faced by the building is determined by values ranging numerically from 9 to 7 and descriptively from "light" to "severe." An owner-occupied building will rank considerably lower as a risk than rental property, because legal liability for injury or property loss is a factor in tenant occupancy. However, many owners might consider family safety just as important as legal liability.

Here's how a wood-frame house with a composition roof on a hilly site in Illinois would be rated if "owner occupancy" is used as the dividing factor.

Step 1 is evaluation of six factors according to given index values.

Step 2 is determination of the building's "risk value" by adding up the values of the structure's five features and dividing the resulting sum by the index value given for lightning frequency in the area.

The southern third of Illinois averages about 55 thunderstorm days a year, according to an isokeraunic map developed by the World Meteorological Organization. The northern two-thirds of the state averages about 45 days of thunderstorm activity annually.

The index value based on lightning frequency in the northern two-thirds of Illinois is listed as 4. Therefore the formula is:

$$\frac{1+3+4+2+3}{4} = 3.25$$

The index value based on lightning frequency in the southern third of Illinois is listed as 3, and the formula to be used there is:

$$\frac{1+3+4+2+3}{3} = 4.33$$

According to the NFPA committee, an index value of 3 to 4 produces a "moderate" risk value, while an index value of 4 to 7 indicates a "moderate to severe" risk.

**By Marvin M. Frydenlund,
managing director, Lightning
Protection Institute, Woodstock**

The Lightning Protection Institute has available a 16-page booklet entitled "Lightning Protection for Home, Family and Property," which gives further information that might be helpful. To receive a copy, send a check or money order for \$1 and a stamped, self-addressed No. 10 (business size) envelope to LPI Booklets, P.O. Box 1039, Woodstock, IL 60098. If you would like to receive copies of the NFPA risk assessment tables, enclose an extra dollar.



Dave Dooley with black-and-white and color pencil drawings.

Colored pencil artistry

There are artists who work in just about any medium you might want to think about. Many work in oils, while others prefer acrylics. Still others use pencils, and charcoal is popular, too. So are watercolors.

Dave Dooley, a Norris Electric Cooperative member who lives near Bridgeport (Lawrence County), uses an unusual—and seemingly unlikely—medium. He makes colorful, vibrant drawings that are just amazing, when you consider that he uses ordinary colored pencils to do his extraordinary work.

Dave notes that he's not making any big, bold psychological statements by using pencils. "I just don't like to paint all that much," he says with a smile, "even though I do a little once in a while."

Dave did a lot of black-and-white pencil drawings and noticed that color—mostly paints—was doing better in

shows, so he decided to try color, too.

"Nobody was doing colored pencils then," he says, "but I decided to give it a try." His "try" worked well, and many of his works hang in million-dollar collections, including a Bristol-Meyers collection. L.S. Heath and Sons, Inc., the candymaker in nearby Robinson, has one of Dave's drawings in its collection, too. Not surprisingly, it's a drawing of several of the firm's candy wrappers. "I have a drawing that I really like," Dave says, "and it's made up of crushed pop cans on a mirror. I do a lot of drawings of things around the house, and my wife, Debbie, serves as a model sometimes. Our son, Davey is also in some of my drawings.

"I like old store windows and that kind of thing, too. The small town atmosphere, the things I'm familiar with, have all influenced my work."

Dave, who started college on an athletic scholarship, majored in physical education and minored in art. He quit school after a couple of years and was drafted into the military. He later attended classes at the University of Illinois and the Chicago Academy of Art. Four years ago, he began teaching art at Vincennes University, where he still works.

BRIEFLY

News items of interest to members of Illinois electric cooperatives

Illinois Foundation FFA honors AIEC

The Association of Illinois Electric Cooperatives received the Illinois Foundation FFA 25-Year Sponsor Award during the 61st Annual Illinois FFA Convention June 13-15 at the University of Illinois Assembly Hall in Champaign. The 25-year sponsor award is presented to sponsors of the Illinois Foundation FFA who have donated to the Foundation for 25 years. The Foundation provides incentive awards and leadership training for the more than 11,800 FFA members in Illinois. This past year more than 6,600 individuals and companies supported the Illinois Foundation FFA. More than 3,000 Illinois FFA members and guests attended the three-day convention.

Rural consumers pay more excise tax

Rural consumers bear a higher burden of excise taxes—paying an average of 33 percent more—than the rest of the population, according to a new study by the American Agriculture Movement. Because people who live in rural areas spend more of their incomes on goods and services that are subject to excise taxes, they are shouldering more of the burden of those taxes, which are paid by consumers all over the country. The group says the disparity reaches as high as 49 percent more for gasoline and motor oil, adding that the findings show that since excise taxes fall so much harder on rural taxpayers, Congress should not try to solve the deficit problem by increasing such levies.

California nuclear plant closed by vote

The Rancho Seco nuclear power plant, plagued by unplanned shutdowns in its 15 years of existence, became the first in the nation to be shut down by a vote of the ratepayers. In Sacramento County, California, a ballot measure to prolong the life of the plant lost, 53.4 percent to 46.6 percent. The plant stopped producing electricity in early June. The Rancho Seco vote was the 15th election in the country in the past 13 years on the issue of closing or restricting nuclear power plants. In previous elections, voters have declined to intervene.

U.N. scientists warn of global warming

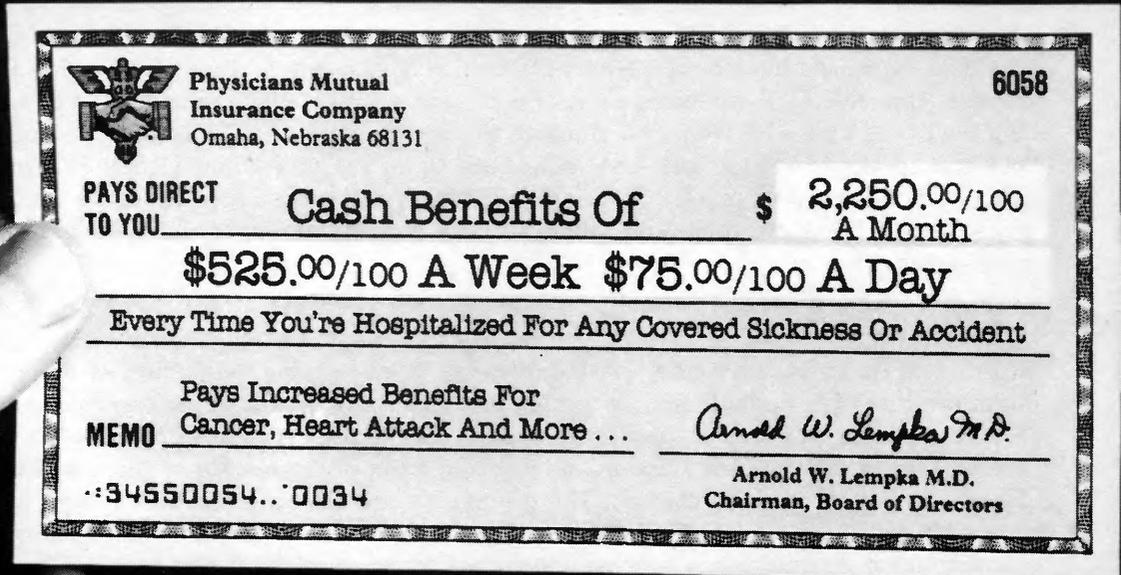
Floods, droughts and disrupted food supplies will be common features of the 21st century unless governments act now to control industrial emissions that are changing the earth's climate, United Nations scientists have warned. Global warming caused by the so-called greenhouse effect "is our first priority for the rest of the century—and beyond," said U.N. environment program director Mostafa Tolba, who adopted "Global Warming: Global Warning" as the theme of this year's June 5 Environment Day. The U.N., in a troubling report, says it is too late to stem all impact from global warming and nations should brace for rising sea levels and crop damage. "The stakes are incomparably high—a warming of just a few degrees could seriously damage the economies of both developing and industrialized countries and could disrupt many natural ecosystems, said the report, titled, "The Full Range of Responses to Anticipated Climatic Change."

Superconductor research hits snag

A problem with high temperature superconductors is threatening commercial development of the most promising applications, according to the journal Science. The scientific journal reported that the problem has been documented by scientists at AT&T Bell Labs, International Business Machines Corp., and other research centers over the past six months. "The obstacle arises from a rather technical feature of superconductors called a magnetic flux lattice," which interferes with magnetic fields critical to transmission of electrical current, the article said. Robert Dynes of Bell Labs said, "This certainly is giving us pause." Superconductivity is the loss of all electrical resistance in a material, allowing current to flow forever. Other conductors, like copper, offer resistance to electricity and some of the energy is lost as heat.

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Chairman, Board of Directors

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Should you die in a covered accident, your beneficiary will receive a total cash refund of all premiums you've paid into the Protection Plus Hospital Plan, up to a maximum of \$10,000.00! In addition, you and all insured family members are covered with an automatic \$1,000.00 accidental death benefit.

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Your checks will come directly to you, unless you tell us otherwise. These cash benefits are yours to use in any way you wish.

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No matter how many claims you file—or how much money you collect—we guarantee to renew your protection for as long as you wish. Only you can cancel your coverage. And, the only way your rate can ever change is if we raise the rate on all policies like this in your state.

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Husband-Wife	34.35	39.30
All-Family	44.15	49.10
One-Parent	28.25	31.00

OPTION B

Pays \$1,500.00 A Month—\$50.00 A Day!

	39 & under (use age of principal insured)	40 & over
Individual	\$12.95	\$14.95
Husband-Wife	24.35	28.05
All-Family	31.15	34.85
One-Parent	19.75	21.75

OPTION C

Pays \$900.00 A Month—\$30.00 A Day!

	39 & under (use age of principal insured)	40 & over
Individual	\$ 8.55	\$ 9.95
Husband-Wife	16.35	19.05
All-Family	20.75	23.45
One-Parent	12.95	14.35

NOTE: Your renewal rate does not increase when you move from one age group to another.

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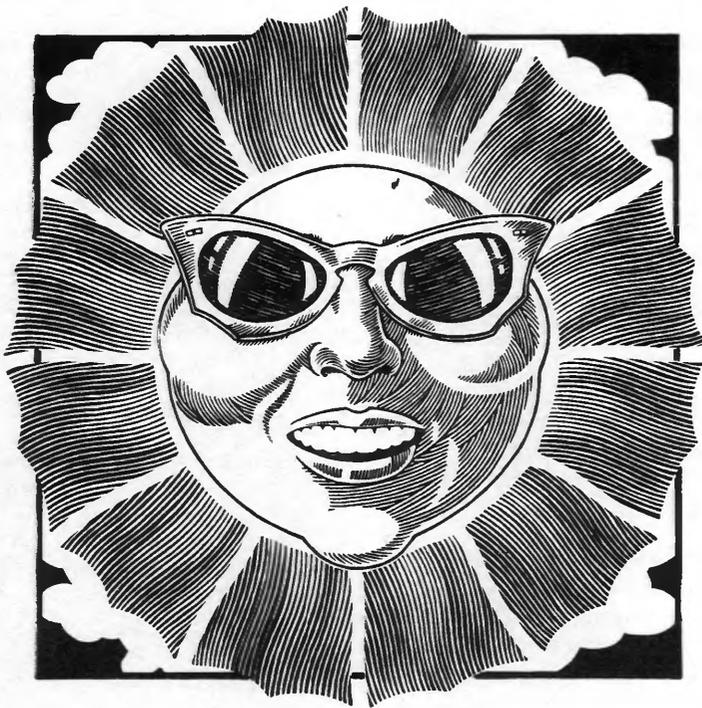
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Information About Your Spouse <small>(complete if you have chosen the Husband-Wife or All-Family Plan)</small>	
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SUN SENSE

Warm and sunny weather brings more daylight hours for cookouts, softball games, swimming, camping, biking, gardening and other outdoor fun. From June through September, we come out of our hibernation and stay outside.

Yet for some, hot summer months can mean heat exhaustion, heat stroke, dehydration and sunburn. It's important to be able to recognize and treat these problems in order to prevent serious harm.

Heat exhaustion results from a loss of body water and salt and often occurs during periods of exertion and extreme heat. A victim of this illness will have pale and clammy skin, weakness, nausea and a weak pulse. To treat heat exhaustion, help the victim drink liquids and lie in the shade with feet propped up.

Heat stroke is a medical emergency requiring immediate attention and treatment by a doctor. It often occurs when it is humid and the victim has been in the sun and heat. With heat stroke, the person's body loses its ability to cool itself down by sweating. Symptoms of heat stroke include: very red, dry and hot skin; dizziness; faintness; nausea; high temperature; headache; and a strong, rapid pulse.

A heat stroke victim needs to cool down. The victim should lie in the shade with head raised slightly, drink sips of water, loosen clothes and sponge with cool water. Most important, call a doctor. Dehydration is the excessive loss

of water from the body. Your body needs a continuous supply of fluids to function properly. If you lose a lot of fluids through sweating or do not drink enough water on very hot days, your body cells pull fluid from the blood and elsewhere. Eventually, a person can go into shock and even die. The condition is very dangerous, especially to children, infants and the elderly.

Signs of dehydration include darker, concentrated urine; dry, sticky urine; paleness; and weakness. To treat, give the victim fluids. Call a doctor if there is no or little urine for 12 hours, if a high temperature develops, if the skin is doughy or if liquids cannot be "held down."

Sunburn is what comes to mind immediately when we think of summer injuries. Many of us are painfully aware of sunburn. Overexposure to the sun, even through the clouds, actually burns the skin. The skin becomes hot and red and sometimes blistered. To treat sunburn, apply cool, wet cloths or take a long, cool shower. Do not apply ointments or lotions, as this acts to trap the heat in and may even cause increased discomfort. Also, ointment may need to be scraped off if medical treatment is needed (imagine how that would feel!). See a doctor if the burn is heavily blistered, if the burn is over 15 percent of the body or if burns are on sensitive areas typically unexposed to the sun.

To avoid sunburn, the Skin Cancer Foundation recommends using products with a sun protector factor rating of at least 15, but warns that sunscreens do not block all of the sun's damaging effects. Burned skin is never fully repaired. Even though the red color and blisters fade away, repeated exposure to sunlight over the years is linked to skin cancer. Many of these summer sun risks can be prevented. Caution, common sense and prompt medical attention (when needed) can help people to avoid heat-related illnesses.

The best way to stay cool is to stay indoors or in the shade, especially during the hottest part of the day or when at high altitudes. Also, drink plenty of fluids, but avoid alcohol; avoid strenuous activity during the hottest part of the day; wear lightweight, loose-fitting clothing to allow sweat to evaporate; and try taking a cool shower.

—Rural Electric News Service



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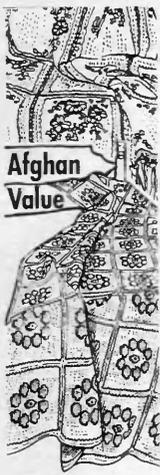
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Sizzling good times

TANGY BARBECUED PORK CHOPS

- 3/4 cup barbecue sauce
- 1/4 cup orange juice
- 1 teaspoon grated orange peel
- 1/2 teaspoon dried rosemary leaves, crushed
- 1/2 teaspoon dried thyme leaves, crushed
- 4 pork loin chops, cut 1" thick (approximately 2 pounds)

Combine all ingredients except pork loin chops in saucepan. Bring to boil; reduce heat. Simmer 10 minutes, stirring occasionally. Place pork loin chops on cooking grid; brush generously with barbecue sauce mixture. Cover; cook over medium heat* 15 minutes or until done. Yields 4 servings. NOTE: Preheat grill on high for 10 minutes. Reduce heat to medium. Preparation time: 15 minutes. Cooking time: 25 to 30 minutes.

FRUIT KABOBS

- 2 tablespoons margarine
- 1 tablespoon packed brown sugar
- 1 tablespoon orange juice
- 1/4 teaspoon ground cinnamon
- Fresh pineapple wedges
- Plums, cut into wedges
- Limes, cut into wedges

Soak four 9" wooden skewers in water 10 minutes. Combine all ingredients except fruit in small saucepan. Cook over medium heat until margarine is melted. Thread fruit onto skewers. Brush with glaze. Place skewers on cooking grid. Cover; cook over medium heat 5 to 10 minutes or until hot, brushing once with glaze. Yield: 4 servings. Preparation time: 10 minutes. Cooking time: 5 to 10 minutes.



MEXICAN CORN BREAD

- 1 cup corn meal mix
- 3/4 cup milk
- 1 (8 oz.) can cream style corn
- 2 eggs, slightly beaten
- 1/3 cup melted butter
- 2 or 3 chopped green chilies
- Dash of salt
- 3/4 cup grated sharp cheese
- 1 medium onion, chopped
- 2 teaspoons butter

Combine corn meal mix, corn, eggs, milk, salt, melted butter, chilies, onion and half of cheese. Meanwhile, melt 2 teaspoons butter in an 8" skillet. Place in oven until hot. Pour above ingredients in hot skillet and sprinkle with remaining cheese. Bake at 400 degrees for 40 minutes.

RICH DINNER ROLLS

- 1 cup milk
- 1/4 cup sugar
- 1 teaspoon salt
- 1/2 stick oleo
- 1/4 cup lukewarm water
- 2 pkgs. yeast
- 2 eggs, beaten
- 5 1/2 cups (about) unsifted flour

Scald milk; stir in sugar, salt and oleo. Cool to lukewarm. Measure warm water in bowl; sprinkle in yeast. Stir until dissolved. Add cooled milk mixture, eggs and 2 cups flour. Beat until smooth. Stir in enough flour to make soft dough. Turn out onto lightly floured board. Knead until smooth, about 8-10 minutes. Place in greased bowl; cover. Let rise in warm place, free from draft, until doubled in bulk. Punch down. Turn out on lightly floured board. Make in your favorite roll. Bake at 350 degrees for 15-20 minutes, or until browned.

LASAGNA

- 1 lb. lean ground beef
- 1/2 lb. lean ground pork
- 1 small onion, chopped
- 1 clove garlic, minced
- 1 (16 oz.) can tomatoes, cut up
- 1 (8 oz.) can tomato paste
- 1 beef bouillon cube, crushed
- 1/2 teaspoon oregano
- 8 oz. lasagna noodles, cooked and drained
- 1 tablespoon parsley flakes
- 2 teaspoons sugar
- 1/2 teaspoon salt
- 1/2 teaspoon crushed basil
- 1 pt. cottage cheese
- 1/2 cup Parmesan cheese
- 1/2 teaspoon salt
- 8 oz. Mozzarella cheese, sliced

In a large skillet or crock pot, cook and stir beef, pork, onion and garlic. Drain off excess fat. Combine meat, tomatoes, tomato sauce, bouillon cube, parsley, sugar, 1/2 teaspoon salt and basil. Cover and cook on low heat 6 to 8 hours. Mix cottage cheese, 1/2 Parmesan cheese, 1/2 teaspoon salt and oregano. In 13"x9" casserole, layer half the cooked noodles, sauce and Mozzarella cheese and cottage cheese mixture. Repeat, reserving enough sauce for a layer on the top. Sprinkle 1/4 cup Parmesan cheese on top. Bake at 350 degrees for 45 minutes. Serves 8-10.

FROSTY STRAWBERRY SQUARES

- 1 cup plain flour
- 1 stick oleo
- 1/2 cup brown sugar
- 1/2 cup chopped nuts
- 2 egg whites
- 1 cup sugar
- 2 teaspoons lemon juice
- 1 pkg. Dream Whip or whipped cream
- 1 10-oz. pkg. partially thawed strawberries

Mix flour, oleo, brown sugar and nuts in shallow pan and bake 20 minutes. Stir frequently. Beat egg whites, sugar and lemon juice. Whip Dream Whip. Add partially thawed strawberries (fresh may be used). Fold in egg mixture. Line pan with nut mixture saving some to sprinkle on top of them. Add strawberry mixture. Freeze at least few hours before serving.

FROZEN SALAD

- 2 small cartons sour cream
- 3/4 cup sugar
- 2 tablespoons lemon juice
- 2 bananas (chopped)
- 1/4 cup cherries (chopped)
- 1 small can crushed pineapple
- 1/2 cup pecans (chopped)

Blend sour cream, sugar and lemon juice. Then add remaining ingredients and freeze. Will keep up to 2 weeks.

JELLO DESSERT

- 1 large pkg. black cherry or black raspberry gelatin
- 2 cups water
- 1 can blueberries (not pie filling)
- 1 small can crushed pineapple

Topping:

- 1 carton sour cream
- 1 (8 oz.) pkg. cream cheese
- 1/2 cup sugar

Boil water then stir in gelatin. Add blueberries, including juice, and pineapple. Put in refrigerator to jell. Combine ingredients for topping and beat with electric mixer. Spread over top of gelatin dessert.

CHESS CAKE

- 1 box yellow or lemon cake mix
- 1 stick oleo
- 1 egg

Topping:

- 1 pkg. cream cheese
- 1 box confectioner's sugar
- 2 eggs

Melt oleo and beat eggs, add to cake mix. Press into oblong pan. Mix topping ingredients together and pour over cake. Bake for 50 minutes at 350°.

CARAMEL LAYER CAKE

- 1 box German chocolate cake mix
- 1/3 cup Pet milk
- 3/4 cup oleo, melted
- 1 cup chopped nuts
- 1 (14 oz.) pkg. light caramels
- 1/2 cup Pet milk
- 1 (6 oz.) pkg. semi-sweet chocolate chips

Combine cake mix, 1/3 cup milk and melted oleo and mix by hand; stir in nuts. Press half of dough into a 13"x9" greased and floured pan. Bake at 350° for 6 minutes. While that is baking, melt caramels and 1/2 cup milk. Take out of oven, sprinkle chocolate chips over baked crust, then pour melted caramels over this. Take the rest of dough and drop in small pieces all over top. Put back in oven and bake for 15 minutes at 350°. Let cool 30 minutes in refrigerator before cutting.

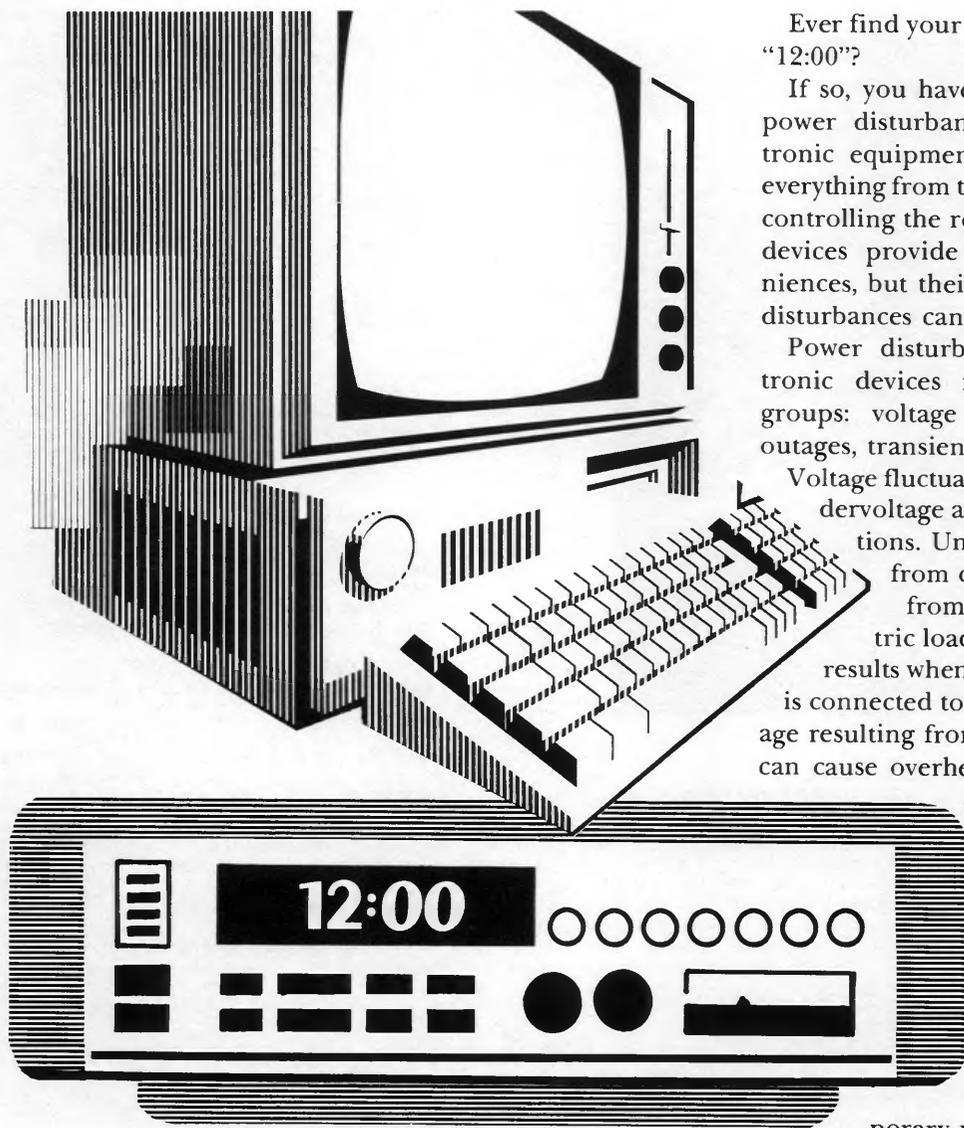
BLUEBERRY GLACE PIE

- 1 pkg. (3 oz.) Concord grape flavor gelatin
- 1/2 cup sugar*
- 1/4 teaspoon salt
- 1 1/2 cups boiling water
- 2 tablespoons lemon juice
- 1 envelope whipped topping mix
- 1 baked 9 inch pie shell
- 1/4 teaspoon almond extract
- 1 cup fresh blueberries

*Or use 1 cup drained canned or thawed frozen blueberries; decrease sugar to 1/4 cup.

Dissolve gelatin, sugar, and salt in boiling water. Add lemon juice. Set aside 1/2 cup gelatin mixture. Chill remaining gelatin until slightly thickened. Prepare topping mix according to package directions. Measure 1 1/3 cups and blend into the slightly thickened gelatin. Spoon into pie shell; chill until almost firm. Meanwhile, add almond extract to reserved gelatin and chill until thickened. Stir in blueberries; spread over filling and chill until firm. Garnish with remaining whipped topping and almonds.

Power disturbances



Ever find your digital clocks flashing "12:00"?

If so, you have seen the effect of a power disturbance on modern electronic equipment. Capable of doing everything from tuning the television to controlling the refrigerator, electronic devices provide many useful conveniences, but their sensitivity to power disturbances can be frustrating.

Power disturbances affecting electronic devices fall into four basic groups: voltage fluctuations, power outages, transients and noise.

Voltage fluctuations include both undervoltage and overvoltage conditions. Undervoltage can result from circuit overloading or from starting a large electric load. Circuit overloading results when too much equipment is connected to one circuit. Low voltage resulting from circuit overloading can cause overheating and shortened

life of electronic components. Starting a large electrical load can cause temporary undervoltage conditions. A "shrinking" television or computer screen is an indication of temporary undervoltage.

temporary undervoltage.

Overvoltage conditions are most often traced to a loose neutral conductor, but can occur naturally from lightning discharge in the vicinity. Signs

of overvoltage are sudden brightness of lights or an increase in speed of some types of motors. Overvoltage problems can result in failure or shortened life of electronic components.

If you experience problems with overvoltage or undervoltage conditions, contact an electrician to perform a comprehensive check of your electrical system. Most electronic equipment is immune to small variation in voltage supply. Extremely sensitive computer equipment may require a power enhancement device to prevent memory errors.

Power outages (see inset) cause a number of problems with electronic equipment. Many newer electronic devices incorporate battery backup to protect them from memory loss during power outages. Many computer users can lessen the impact of an outage by "saving" data frequently.

Transients are short power disturbances called spikes or surges. Spikes and surges occur so quickly you probably don't notice them. Surges lasting less than one-half second are usually invisible to the human eye. Computer equipment, however, may suffer memory loss or internal damage from a surge lasting only 30 thousandths of a second (30 milliseconds). Transients can be as high as five to ten times the normal voltage level. Low-level transients are often caused by electric motors cycling on or off. Higher-level transients usually result from lightning strikes. Even lightning strikes that do not directly hit power lines can cause transients.

Surge protectors are widely available and range in price from less than \$10 to hundreds of dollars. Look for a protector with a response time of less than a few milliseconds. Many protectors respond in nanoseconds (millionths of a second). Most surge protectors simply plug into a receptacle and the equipment to be protected is then plugged into the surge arrestor. Whole-house protectors are available and can be easily installed by a qualified electrician. Response time is often longer for whole-house protectors than for arrestors protecting one piece of equipment.

The disturbance known as noise gets its name from the effect it has on audio equipment. Noise or "static" is often heard as a low-pitched hum or buzz on

radios or stereo equipment. Noise can also cause memory problems on computers and "snow" or other problems on video equipment.

Noise takes two forms: electromagnetic interference (EMI) and radio frequency interference (RFI). EMI is often caused by fluorescent lights or dimmer switches. If you suspect a device is producing EMI, turn it off and see if the problem stops.

Noise from RFI results from a signal being transmitted over airwaves. RFI problems were very common during the citizens band radio craze. Powerful radio signals can interfere with radio and television reception as well as creating problems with nearby computers. Fortunately, many surge protectors also include noise suppression circuitry. The best noise suppressors will arrest both EMI and RFI. Power disturbances are not new; modern electronic equipment just makes their effects more noticeable. Electronic suppliers are well equipped to answer questions about power disturbances and can provide equipment to minimize their effects.

This is one in a series of consumer-oriented articles relating to home energy use. The articles are prepared in coordination with the Association of Illinois Electric Cooperatives Member Services/Power Use Section, which is made up of staff personnel of the state's electric cooperatives who are directly involved in consumer energy efficiency activities.

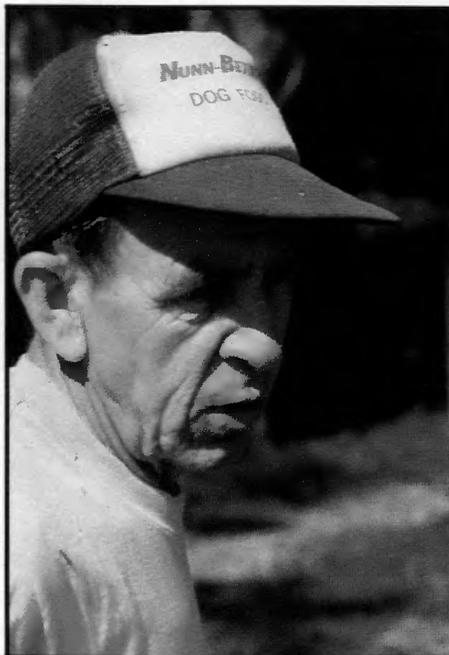
Power outages

A power outage can result from circuit overloads causing a household circuit breaker to operate or fuse to blow. Outages also occur because of storm damage or electric supplier equipment failure. Brief outages result when a temporary problem (like a branch brushing power lines) causes a type of circuit breaker known as an oil circuit recloser to open (shut off the line) and reclose (turn the line back on) in anticipation of the problem clearing itself. If the problem still exists after three tries to clear it, the line will stay off. Line crews must then be sent to correct the situation and reclose the circuit breaker. Remember, when you experience an outage you need to check your equipment all the way back to the meter. Your cooperative provides power to your meter. Contact a qualified electrician to correct problems on "your side" of the meter. Your cooperative will be glad to work with your electrician if the service must be de-energized or the meter removed.



Massac menagerie

Above: Nancy Fleckenstein pets King, a lion who is a long-time M/M resident. Right: Lou Mayhall, a lifelong animal enthusiast, opened M/M Exotics after being stricken with arthritis.



Buffaloed for a place to take the kids to see exotic animals? Don't want to brave the jungles of St. Louis or Chicago? Take heart! An exotic animal farm in Southern Illinois may help you solve your problem.

M/M Exotics is a 52-acre spread about 10 miles north of Metropolis (Massac County). There's always a pretty good selection of hard-to-find animals at the place, and they're always looking for more. They hope to "go ape" in the near future, notes Lou Mayhall who, with his wife, Lillian, owns and operates the place. So far, though, there are no primates.

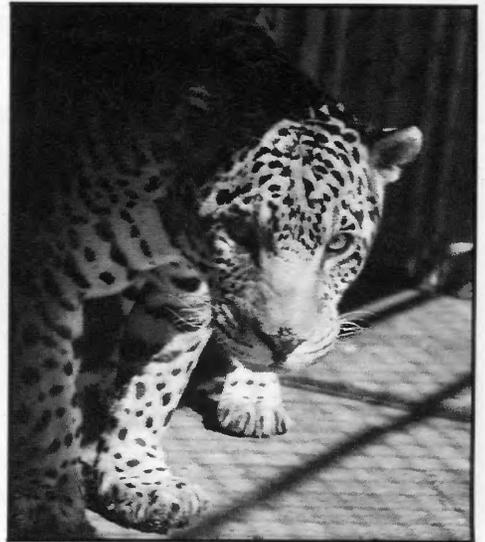
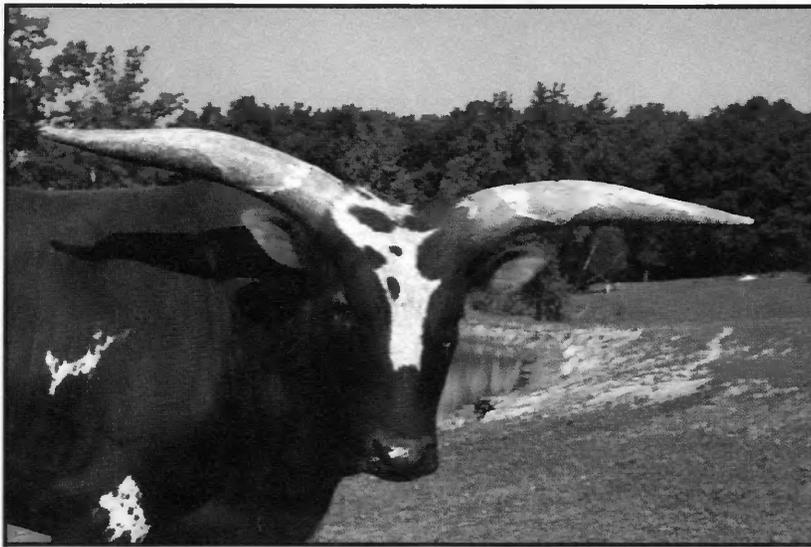
Interestingly, M/M Exotics, served by Southern Illinois Electric Cooperative, is a childhood hobby that raged out of control and turned into a full-fledged business. "I don't remember not having an animal of some kind around," Lou relates. "When I was a kid, I always had a little lamb, or a goat—there was always something."

He went into construction work, and kept at that until he was stricken with arthritis. "I really got to feeling low," he says, "and friends convinced me to develop a walk-through park and share the animals we'd accumulated over the years."

He notes that his place is not just a "looking" zoo, but that one of the people there will escort those who are interested and tell them about each animal. "If somebody shows even a tiny bit of enthusiasm," he laughs, "we'll unload on 'em with everything we know. We're here to both show the animals and to share our knowledge, too."

And there's much behind-the-scenes work that has to be done to keep the place going, too. The Mayhalls, along with Nancy Fleckenstein, work hard to keep the place clean and the animals well cared for. Nancy was a nurse for 32 years before giving up that profession—and Arizona—to head east to work as an animal handler.

"Like all exotic animal places," Lou says, "we're regulated by the U.S. Department of Agriculture, and they inspect the place four times a year to make sure we take good care of the animals. We have an exhibitor's license, just like the big zoos have to have, and each state has different laws about how you have to take care of them. In Illinois, meat that's fed to exhibited



animals has to be USDA inspected, and we do a lot of traveling to get approved products. They're awfully expensive."

The big cats, who are confined in mesh corn cribs, receive frozen meats, which are passed into the cages through small "portholes" high up on the walls. Lou takes a piece of meat, maybe 15 pounds or so, and drops it into the cage, where it lands with a satisfying "thwack." The cat picks it up and retreats warily into the far part of the cage, then alternates between gnawing with gusto and growling greedily. "We don't bother to thaw the meat before we give it to 'em," Lou says, "because they always pounce on it eagerly, just as it is. I guess it's kind of chew food for 'em."

At the moment there is a jaguar, a couple of lions and a Bengal tiger at the place. There were some cougars, but they're gone now. "We're always buying, trading and selling," Lou says, adding, "our jaguar is extremely rare, and its tail's been bobbed. Some people were going to raise it as a house pet, but changed their minds. We had a funny thing happen about the jaguar," he relates with relish. "A lady called me after her son had taken a tour with his school group. 'What kind of cats do you have out there,' she asked, 'My son says you have one named after a car, and that it isn't a cougar.' Well, we had to think a while about that, and finally came up with the Jaguar, the car that's named after the cat. There are always interesting questions."

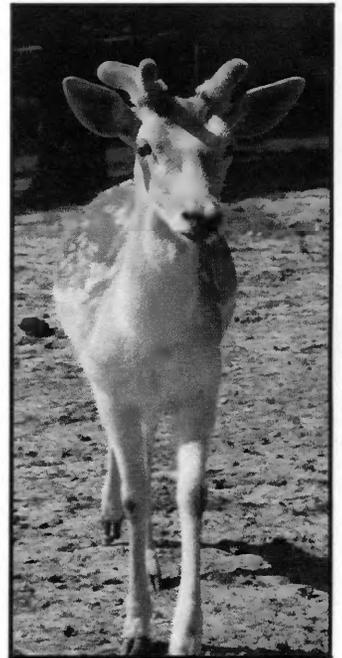
Naturally, there are other animals, besides just cats. While the roster changes fairly frequently, Swede, the African Watusi bull, seems to have

found a home, and so have some European fallow deer. There are a couple of buffalo—or more correctly, American bison—and a black bear, some Sicilian donkeys, and various sheep and goats.

As mentioned earlier, there are no primates, but the M/M people are working on that problem. "The regulations are particularly restrictive when it comes to primates," Lou says, "and not only do we have to have separate pens for them, but we have to have 'housing,' too. And like most exotic animals, they're sometimes hard to come by."

Along with the exotic animals, there is also a herd of cute garden variety critters. There's a raccoon, a skunk, a gaggle or two of Canada honkers, ducks, a horse and, once in a while, deer. The Mayhalls have a deer there now that they just got and, unfortunately, will be a permanent resident. "It's just a little fawn," Lou says, "and a man hit it with his car. We finally got the little guy, and we took him to the vet. He had to amputate the rear leg, way high up, and we have him now. We're licensed wildlife rehabilitators, and normally we'd treat the animal and do our best to keep him from getting attached to us or too dependent on us, then we'd release him into the wilds when we think he could survive on his own. This little fellow wouldn't have a chance, so we'll keep him. He'll be a good addition to the place."

The little fawn's story, along with the stories about the other animals around the place, makes M/M an interesting place to visit and adds interest to Southern Illinois.



Clockwise from upper left: Swede, an African Watusi bull, seems to have found a home in Southern Illinois. This jaguar, a recent acquisition, was originally destined to be a house pet. This friendly fellow is a fallow deer.

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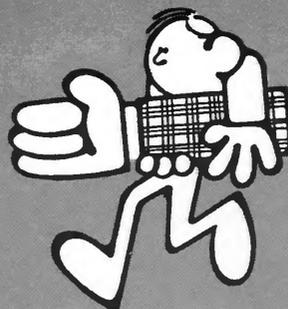
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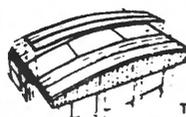
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