

Take these tips---save some energy

By JOANNE SPAHR
LANCASTER — Although farmers are "notoriously prudent with electricity," as Jerry Shaffer, farm and industry business consultant with Pennsylvania Power and Light phrases it, there are still a few tips on cutting costs and saving energy which anyone can benefit from during these last chilly months of Winter.

According to Shaffer, there are some energy

saving products on the market which were created specifically for the farm. One of these is the heat-exchanger.

PP&L did studies on the bulk milk compressor and tube cooler types. Both these heat exchangers reroute the energy used in cooling milk into heating water for the dairy operation. The electric company's studies showed that in two to three years this energy saving equipment

pays for itself over and above the standard piece of apparatus.

"Each farmer must make sure the water is checked for chlorides when using this equipment, however," cautions Shaffer, since chlorides destroy the system.

Energy Saving in the Home

In the home, a number of energy saving measures can be taken. First of all, says Shaffer, the cheapest energy saver for heating and cooling a residence is insulation.

"Actually, insulation give you the fastest return on your investment—it takes about five years," explained the consultant.

Recommended insulation standards encouraged by PP&L include 10 to 12 inches of (R-30) insulation in the ceiling; full thick wall insulation (R-13) for walls; about six inches (R-19) for floors and basement areas; and two inches of rigid insulation (R-7) for the perimeter slab.

In discussing masonry fill,



Jerry Shaffer

Shaffer points out that PP&L questions the effectiveness of this insulator when wet.

"It's a good insulator when it's dry, but if it gets wet and freezes, it loses some of its effectiveness," says Shaffer.

An added suggestion which PP&L makes is to ventilate when insulating.

"Insulation needs to breathe. Any place you in-

ulate, you ought to ventilate to keep it from reaching the dew point," says Shaffer. "You don't want dampness."

Some rules of insulation include: installing a minimum of one square foot of inlet vent and one square foot of outlet vent for each 300 square feet of ceiling area in the attic; a minimum of one square foot of vent for each 1500 square feet of crawl space with a moisture seal; and a minimum of one square foot of vent for each 150 square feet of crawl space without a moisture seal.

"Even with insulation in the home, infiltration at doors and windows is a problem—especially with farm houses.

"When you have 23 windows and five doors, it does create a problem," quips Shaffer who lives in a farm house near Manheim in Lancaster County.

The best advice the business consultant can make is to "do the best you can" with window stripping and caulking, and to triple glaze windows. Triple glazing, according to Shaffer, is done by using a double glazed window plus storm windows as a third layer.

"A single layer of glass is 13 times as inefficient as an insulated wall," quotes Shaffer. Explaining this concept further, he notes that a single layer of glass requires 26 watts of energy per square foot per hour; two layers take 13 watts per square foot per hour, and three layers take only eight watts.

Plastic is also a good material to stop the flow of heat out of the house. It does rip, however, which makes it less effective than an extra layer of glass.

Another method of saving energy involves insulating standard water heaters. According to information disseminated by PP&L, with electric heaters, the standby

heat loss can amount to as much as seven Kwh per day. However, a heater wrapped with a 3½ inch batt of fiberglass insulation will reduce standby heat loss by about half, and the insulation investment will be recovered in less than a year.

"It costs from \$12 to \$15 to do this," quotes Shaffer, but after the investment is paid off, it will save the home owner \$25 a year from then on.

Shaffer points out that an energy efficient water heater is on the market which has about two times as much energy value built into it. PP&L suggests to their customers if they are purchasing a new water heater, this model is the best purchase. If, however, the home owner has a standard model, the electric company encourages them to insulate that model.

Along with insulating the water heater, Shaffer suggests checking the temperature with a thermometer and not setting it higher than purposes require. For instance, he feels that for domestic use, 120 to 130 degrees F. is a high enough setting.

And, as with water heaters, most fireplaces are energy drains. To minimize this problem, Shaffer advised burning all outside air so that the fireplace does not draw warm air out of the home. A fireplace should also be insulated with a glass door leading into the room, and should have an opening constructed so that the air enters into the back of it.

One last point that Shaffer touched on was the use of efficient light sources. According to the energy advisor, incandescent lighting is the cheapest light source, but it is also the least efficient. Metal halide and high pressure sodium, while more expensive, produce much more light for the money and last longer.

FEBRUARY SPECIALS

- ★ Taylor-Way Tillage Equipment.
- ★ Chisel Plows from 5-tooth up.
- ★ Disc Harrows from 8 ft. up.
- ★ Subsoilers, Field Cultivators and Disc Plows

Small Deposit will hold for later pickup and delivery.
CAN FINANCE
Shop Hours: 7:30 A.M. to 5:30 P.M.
Phone Hours Till 9:30 P.M.

A. C. HEISEY
FARM EQUIPMENT INC.
RD1, Jonestown, PA 17038 Phone 717-865-4526
Located ½ mile south of Fredericksburg off Rt. 343

FARMERS' FERTILIZER WORKS, INC.

**PREMIUM GRANULAR FERTILIZER & LAWN FOOD
LIQUID NITROGEN - LIMESTONE - PESTICIDES
PHONE 717-367-1211
365 W. BAINBRIDGE ST. ELIZABETHTOWN, PA 17022**



**INTRODUCING . . .
FARMERS' FERTILIZER'S NEW
PREMIUM GRANULAR FORMULATIONS:**

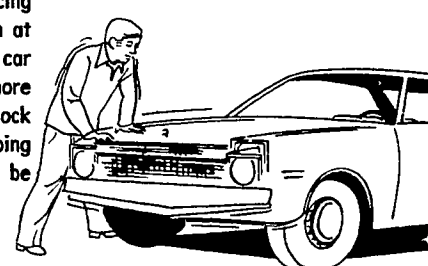
- ★ CONTAINING GUARANTEED SECONDARY PLANT NUTRIENTS (• CALCIUM • MAGNESIUM • SULPHUR • IRON • ZINC)
- ★ CONTAINING A MINIMUM OF THREE FORMS OF NITROGEN
- ★ LOW CALCIUM CARBONATE EQUIVALENT PER TON, WHICH REDUCES LIMING COSTS
- ★ ALL PREMIUM STARTER FERTILIZERS (in the row) CONTAIN 100% MONO-AMMONIUM PHOSPHATES
- ★ SOME OF OUR NEW FORMULATIONS FOR 1978 IN ADDITION TO OUR REGULAR FORMULATIONS ARE AS FOLLOWS:
 30-5-15 PREMIUM PLOWDOWN
 15-15-15 PREMIUM PLOWDOWN
 8-32-16 PREMIUM STARTER FOR CORN
 10-6-4 LAWN FOOD 50% ORG. 35% W.I.N.
 30-0-0 LIQUID NITROGEN

CONTACT US OR ONE OF THESE SALES REPRESENTATIVES IN YOUR AREA FOR YOUR 1978 FERTILIZER PROGRAM

<p>DANIEL L. ESH P.O. Box 203 Intercourse, PA 17534</p>	<p>VAN-MAR FEEDS, INC. P.O. Box 303 Shoemakersville, PA 19555 215-926-2121</p>	<p>POWL'S FEED SERVICE RD 2 Peach Bottom, PA 17563 717-548-2376</p>
<p>L. H. BRUBAKER, INC. 350 Strasburg Pike Lancaster, PA 717-397-5179</p>	<p>LESTER M. WEAVER RD 1 New Holland, PA 17557 717-354-5477 215-286-5337</p>	<p>ROY W. ZIMMERMAN & SONS, INC. 1661 Rohrerstown Rd Lancaster, PA 17601 717-569-2361 717-733-8161</p>

Auto Service Tips

Test your car's shock absorbers by bouncing the car up and down at each wheel. If the car bounces twice or more after you let go, shock absorbers are not doing their job and should be replaced.



OPEN HOUSE

**MONDAY & TUESDAY
FEBRUARY 20 & 21**

- ★ Special Discounts On Plow Parts & Oil
- ★ All Other Parts 10% Discount
- ★ Chicken Corn Soup
- ★ Lots Of Special Discounts

**MORE DETAILS IN
NEXT WEEKS ISSUE**

R. S. HOLLINGER & SON, INC.
113 W. MAIN ST., MOUNTVILLE
Phone 717-285-4538