

Solar energy eyed for broiler industry

COLLEGE PARK, Md. — Despite its relatively high costs, solar energy will reduce the amount of liquefied petroleum (LP) gas used in the U.S. poultry (broiler) industry, University of Maryland scientists say.

The scientists are part of a multidisciplinary Maryland Agricultural Experiment Station team studying the

use of solar energy as a replacement for conventional fossil fuels in the broiler industry.

"Finding alternative uses for overflow energy...and reducing fixed costs of solar facilities are the keys to economic feasibility of solar energy in broiler production," says a conference report by agricultural and resource economics professor Jarvis L. Cain.

"We've already done some work on cost reduction," Cain explains. Excess energy produced by the experimental solar power system could be used for heating farm houses and buildings or drying grain, Cain says.

Adapting broiler management procedures to use the solar energy system a greater portion of the year and modifying the system to reduce fixed costs are ad-

ditional possibilities, Cain says.

His economic analysis of the heating cost of raising broilers under a solar energy system as opposed to a conventional LP gas heating system revealed that the cost per 1,000 birds was \$54.43 under the first and \$13.54 under the second.

While preliminary findings indicate that solar energy is a costly alternative, Cain and his associates are convinced

that the use of the sun's energy for poultry production and other farming activities looms as a future possibility.

"I think we can look forward to the increased use of solar energy in agriculture" says research team leader Kenneth E. Felton, associate professor in the department of agricultural engineering. He says researchers working at the environmental research broiler facilities at the university's poultry research farm near Salisbury, Maryland, are considering a number of approaches aimed at lowering the cost and improving the efficiency of solar energy systems.

Felton says skyrocketing costs and growing scarcities of conventional fuels are other critical factors that will speed the adoption of solar energy on the nation's farms.

The poultry-related energy research is funded by the Maryland Agricultural Experiment Station, the U.S. Department of Energy, and Delmarva Poultry Industry, Inc. The studies are a phase of a more than five-year effort by university researchers to find ways of stemming rising energy costs in poultry production.

Maryland broiler producers spend \$43.5 million on heat, light, and power to produce 397 million broilers in 1978. Energy added 11 cents to the cost of each broiler produced.

University researchers believe energy can be conserved and used more efficiently in poultry production without sacrificing product quality.

Earlier experiments at the Salisbury farm have improved the functional efficiency of the experimental solar energy system. The system initially used hot water to store and transport collected energy, but has been modified to a heated rock storage and air transport system.

Increased energy efficiency resulting in savings of more than 78 percent of the LP gas normally used by the facility occurred when limited area brooding (raising the broiler in a reduced area) was combined with solar energy heating.

Researchers also have experimented with modifying the energy used to light and ventilate broiler growing facilities. Some of the tests have resulted in substantial savings without adversely affecting the health or growth of the broiler.

STOLTZFUS MEAT MARKET RETAIL MEAT MARKET RIGHT ON THE FARM.

- FRESH CUT BEEF & PORK
- FRESH EGGS RIGHT FROM THE FARM

★ OUR OWN COUNTRY CURED HAMS, BACON AND SWEET BOLOGNA

Orders Taken For Beef Sides; Wrapped
And Ready For Your Freezer

**Attention Farmers:
We Do Custom Slaughtering
For Your Freezer.**

PH: 768-7166

Directions: 1 block east of Intercourse
on Rt. 772

Reg. Hours: Thurs. 9-5; Fri. 9-8; Sat. 8-5



Group to compete in square dancing

READING — Competing in the 23rd Annual Folk Dance Contest at the Pennsylvania Farm Show in Harrisburg on Tuesday evening, January 8, is the Marion Grange group from Berks, reports County Agent J.F. Haldeman.

The contest, which is open to all clubs, groups and organizations in Pennsylvania, should prove a very colorful spectacle. Groups from 18 Counties have been accepted in the competition.

The Marion Grange group has been practicing the

numbers which the entire 60 sets in the competition will be performing together.

The Danish system of judging is to be used, which may result in more than one set finishing in the Blue Ribbon Class.

In order to win cash awards, the sets will first perform enmass, then the judges will select the better dancers to compete for Blue, Red, and White ribbons in each division.

Any number of sets may be placed in each category by the judges.



SOLID FEED SUPPLEMENT BLOCK

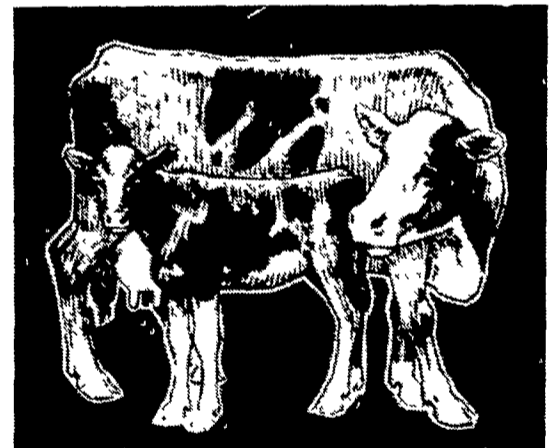
DAIRY CATTLE • BROOD COWS • BULLS • YEARLINGS • REPLACEMENT HEIFERS



With Energiblock, your stock eats everything but the profits! And it can be stored for long periods of time, safe and ready to use

ENERGIBLOCK is a liquid molasses feed supplement in solid form complete with protein, carbohydrates, vitamins, phosphorus, trace minerals and organic iodine. The molasses supplement is poured hot into a specially constructed, completely edible cardboard box where it hardens, ready to feed your stock.

- Convenience No mixing necessary. Standard size makes it easy to calculate herd feeding requirements.
- Reduced feeding time and costs Since the entire ENERGIBLOCK is edible, there's no complicated equipment needed for mixing or feeding ENERGIBLOCK to your stock Energy, protein, vitamins and minerals—all in a single, easy to use package.



The solid feed energy supplement block specifically designed for dairy cattle.

Industrial Molasses ENERGIBLOCK plays an important part in every phase of your feeding and breeding program.

- Heifers must reach two thirds of their mature weight by 15 months in order to calve as two year olds and rebreed. ENERGIBLOCK can help your stock reach this goal
- Yearlings must gain through the winter if they are to make the size and weight you expect during the grazing season. ENERGIBLOCK helps provide your cattle with the energy protein vitamins and minerals needed for superior weight gains
- Dry Cows need the energy and nutrient balance of ENERGIBLOCK for ease of calving and growth of developing calves

FOR THESE REASONS — AND OTHERS — IT MAKES SENSE TO MAKE ENERGIBLOCK AN IMPORTANT PART OF YOUR FEEDING PROGRAM!

- Nursing Cows need extra energy to recover from calving rebreed rapidly and keep milk flowing for nursing calves. ENERGIBLOCK feed supplement provides the needed nutrients
- Bulls requirements change due to the amount of service expected during the breeding season. ENERGIBLOCK supplement formulas are specially designed with information about your forages and animals needs to help prepare your bulls for the breeding season

Medication works more efficiently on stock in "sick" or "recovery" pens when administered in conjunction with an Industrial Molasses ENERGIBLOCK feeding program

Remember - ENERGIBLOCK contains no salt.



**FOR FULL DETAILS ON ENERGIBLOCK, CALL OR WRITE
Toll Free in Area Codes 215 and 717 - 800-662-7464**

ZOOK MOLASSES CO.

WEST MAIN ST., HONEY BROOK, PA. 19344

ALONG RT. 322

DEALER INQUIRIES INVITED

PHONE: (215) 273-3776