## **USDA Announces Record Red Meat Purchases**

WASHINGTON, D.C. Secretary of Agriculture Richard Purchases of ground beef and E. Lyng today announced the canned beef will continue to be E. Lyng today announced the Commodity Credit Corporation will purchase over 16 million pounds of ground beef and canned beef under provisions of the 400million-pound red meat purchase program authorized by the Food Security Act of 1985.

Lyng said that of the total 16 million pounds of purchased beef, some 12 million pounds will be ground beef - the largest single purchase of this product on record.

The remaining four million pounds will be canned beef. This is the second time USDA has purchased canned beef, bringing to 9.8 million pounds the amount purchased under the program to date.

Prices for the ground beef ranged from 86 cents to 97 cents per pound. Prices for the canned beef ranged from \$1.19 to \$1.20 per pound. USDA will take delivery

and-answer sheep

Farm and Home Center.

industry related topics.

moderator.

beginning the week of June 1. made weekly.

As authorized by the 1985 Farm Bill, half of the 400 million pounds to be purchased will be donated to domestic nonprofit charitable institutions for the needy, to nutrition programs for the elderly, to nonprofit summer camps for children and to other child-nutrition programs including the school lunch program. The remaining 200 million pounds will be exported.

Lyng also reminded the industry that first offers for frozen hams are scheduled to begin with bids due on Monday, May 5, and first offers for choice beef roasts are due Wednesday, May 14. In-formation on purchases may be obtained from the Contracting Officer, Livestock and Seed USDA, Division, AMS, Washington, D.C. 20250; telephone (202) 447-2650.

# Forest **On Fowl** by **Forest Muir** Penn State Extension Poultry Specialist

### The Quality of Light

My March article discussed light intensity and length of the daily light period for poultry flocks. This discussion will focus on various bulb types as the source of lighting in poultry houses. Light quality is one factor to consider in the choice of poultry light sources. Quality refers to the various rays in the color spectrum. The research work in this area has not been extensive, but results show that rays at the orange-red end of the visible spectrum may be more stimulating to egg production, while the blue and green rays favor growth.

Traditionally poultry houses have been equipped with in-candescent bulbs. The usual bulb size was either 40 or 60 watts with the light fixtures being spaced 8 to



12 feet on center. Incandescent bulbs were chosen because the relative initial cost of this system of lighting was very low compared to alternatives. In addition, the relative light control over incandescent bulbs is much greater than for alternative systems. Inexpensive dimming systems are available that offer a wide range of control over incandescent lighting. A large portion of the light rays produced by incandescent bulbs falls in the orange-red end of the visible spectrum. The incandescent lighting system was inexpensive to install, afforded the producer a high degree of control and produced a favorable quality of light. Thus, it became the system of choice for poultry houses.

Unfortunately, incandescent bulbs are not very efficient in converting electrical energy into light. Other bulbs, including fluorescent, mercury vapor and high pressure sodium, are more efficient in converting electricity into light. With steadily increasing electrical costs, research and field trials have been conducted to explore alternative lighting systems for poultry houses.

#### **Mercury Vapor and High Pressure Sodium** Lamps

The quality of light produced by these lamps is acceptable for lighting poultry houses. They are very efficient in converting electricity into light and have a long lamp life. Currently, the major limitation to these sources of light for poultry housing is the high light output per lamp, Although very few lamps would be required for a poultry house, the light level within the house would be extremely variable. The light level in the area of the lamps would be much higher than proper management would desire.

#### Fluorescent Bulbs

The initial expense for tube type fluorescent fixtures is greater than for incandescent fixtures and normal fluorescent bulbs cannot be dimmed. The major advantages of fluorescent lights are the greater efficiency in converting electricity into light and the increased bulb life. Fluorescent bulbs are 3 to 4 times more efficient as measured by the amount of light produced per watt of electricity. A 20 watt fluorescent bulb will produce as much light as a 60 watt incandescent bulb.

Recently fluorescent bulbs which screw into incandescent fixtures have been developed. These bulbs are available in sizes that are practical for poultry houses. These screw-in fluorescent bulbs are available in warm white types that produce a large quantity of the light in the orange-red portion of the spectrum.

Field trials conducted by Extension personnel in other states demonstrated that screw-in fluorescent bulbs could be used to maintain egg production levels comparible with layers lighted with incandescent bulbs. The fluorescent bulbs accounted for approximately 50 percent reduction in electrical con-sumption. Screw-in fluorescent bulbs are a practical alternative for reducing electrical costs associated with providing proper light levels in poultry houses.

## Specialist urges hog producers to rethink antibiotics

### Using the right drug for the job aids performance, reduces costs

NEW YORK, NY - Hog producers can reduce feed costs in growing-finishing swine and improve disease control by learning to use feed antibiotics more judiciously, an industry nutritionist says. In fact, he adds, being more selective with feed antibiotics and dosage rates could lead to marked improvements in feed efficiency, average daily gain, days to market, and overall health of the animal.

"Each antibiotic on the market today has its strong points and weaknesses, and you can't say that one is better than another," says Dr. Ralph Fell, director of animal technology, A. L. Laboratories, Englewood Cliffs, N.J. "The point is, some antibiotics are better for disease control and others are better for growth promotion. Understanding this distinction could help producers cut their costs for feed additives in half without sacrificing animal health or performance."

antibiotic in the growing-finishing stage - not necessarily to prevent or control disease, but to promote growth and enhance feed efficiency."

Though tetracyclines and penicillin are effective growth promotants, even in disease-free hogs, Fell thinks producers would be wise to reserve these drugs resistance-prone specifically for special-need uses. "This type of antibiotic should be your ace in the hole - your trump card to play when the chips are down and your hogs are genuinely sick," he says.

Fell also notes that producers who use these drugs solely for growth promotion must often in-



LANCASTER - "Everything In addition, those present will be you wanted to know about sheep .... updated on recent actions of the new Lancaster County Sheep and but were afraid to ask!", will be the theme of a special question-Wool Growers Association steering committee. This will include a industry meeting to be held at 7:30 p.m., brief review of the adopted bylaws, Monday, May 19, at the Lancaster an explanation of membership and dues structure, program plans and Anyone interested in sheep membership signup.

Lancaster Slates Sheep Meeting

#### **Breaking Tradition**

Traditional antibiotics such as tetracyclines and penicillin are well accepted for controlling respiratory infections and other diseases in hogs. The problem, says Fell, is that many producers use these antibiotics longer than necessary. Research has shown that continuous use of these drugs can help create resistant bacteria and reduce antibiotic effectiveness.

"Farmers begin using them at farrowing to protect young pigs from disease - and that's fine,' says Fell. "The trouble starts when they keep using the same

crease dosage rates 50 to 100 percent to bring unexpected diseases under control.

'That can get pretty expensive,'' he says. "I've seen far too many producers have to push antibiotic rates up to 400 grams, when ordinarily a 200-gram dose should be sufficient. Anyone using tetracycline or penicillin solely for growth promotion ought to talk to their vet or feed dealer about more cost-effective alternatives.'

**Cut Costs in Half** 

For the sake of reducing bacterial resistance and holding down costs, Fell suggests using one type of antibiotic for growth promotion and another on an as-needed basis for disease control. For example, after pigs reach 75 pounds and begin to develop a natural immunity to certain diseases, producers should consider discontinuing tetracycline or penicillin in favor of a 30-gram

While some antibiotics work best as disease control agents, others are effective growth promotants, says A.L. Laboratories' Dr. Ralph Fell.

level of BMD (bacitracin methylene disalicylate), which is primarily intended for growth promotion.

"Unlike drugs used for respiratory problems; BMD works in the gut of the animal, where digestion takes place," Fell says. "It doesn't enter the bloodstream, so there is no withdrawal. Nor has the growth promotant been linked to any cases of bacterial resistance

- even when fed continuously at low levels."

On the other hand, diseasecontrol antibiotics work in the bloodstream and, as a result, may require a withdrawal period before marketing to eliminate residues in the animal tissue. They are also more expensive. Using a growth promotant such as BMD costs about \$2 per ton of feed, while the other type of antibiotic costs in the

#### neighborhood of \$4.

"Both types of antibiotics are important to modern hog production," Fell concludes. "But to get the most from each one, you have to understand their difficult modes of action and how they can affect your bottom line. Investing time now to learn the difference between growth promotion and disease control could yield a high return when you take those hogs market."