

Poultry Pointers

(Continued from Page E7)

a better therapy can be made. If susceptibility testing results for a certain bacterial problem on a given farm are known, and the problem occurs again, a selection of drug based on the previous results can be made pending the test results on the current case. Decisions based on susceptibility testing can save medication dollars in the long run.

Waltman presented data collected over the last five years on susceptibility patterns of four major bacterial pathogens of poultry, *E. coli*, *Salmonella* sp., *Pasteurella multocida*, and *Staphylococcus aureus*, isolated from clinical case of poultry submitted to the Georgia Poultry Laboratory. High percentages of *E. coli* isolates were resistant to many of the approved poultry drugs. The susceptibility profiles of *Salmonellae* were generally better, but still have areas of high resistance to some drugs. Waltman stated that he believes "much of our resistance problems that we have today are due to the fact that we do not have other available agents that can be used on a rotational basis."

On the other hand, *Pasteurella multocida* isolates have shown little, if any, trends toward developing resistance. *Staph. aureus* isolates vary in resistance patterns, but many of the drugs with action against gram positive organisms are still fairly effective. Waltman's data did not show any clear trends toward net increases in resistance over the last five year period.

• Does antimicrobial use in poultry promote resistant strains of bacteria that cause disease in people? To help answer this question, Waltman compared his susceptibility data with that of several hos-

pitals in his area, and found major differences in susceptibility patterns. Bacteria of poultry origin in general showed more resistance to specific poultry drugs, while the same species of bacteria from humans were quite susceptible to the same drugs. For *Staph. aureus*, the poultry bacteria were much more susceptible than were the human bacteria to the same drugs. Waltman concludes, "if we look at the antimicrobial agents approved for use in poultry and the situations in which those agents are the drugs of choice for human diseases, we see very few instances where poultry pathogens would have the opportunity to pass this resistance to the respective human pathogens."

Dr. R. Greg Stewart alluded to the general observation that veterinarians tend to make frequent use of laboratory culture and susceptibility testing in making rational decisions on treating animal diseases. In contrast, their physician counterparts often prescribe antibacterial drugs symptomatically without benefit of the knowledge gained by knowing what the exact organism is and what drugs it is sensitive to. If clinical improvement is not forthcoming, the drug may be switched to another, again without benefit of supporting laboratory tests. This approach may be more likely to lead to the emergence of resistant bacterial strains than a more directed approach guided by laboratory confirmation.

• Are there any "new" antimicrobials on the horizon for use in poultry? The only new drugs under advanced development for use in the US are those in the fluoroquinolone class. They are not yet approved for use in poultry in this

country, although they are used quite successfully in humans and other animal species. At least two drugs in this class have been used widely in poultry in countries other than the US over the last few years.

Dr. John Glisson, a poultry veterinarian and scientist at the University of Georgia, presented information on the use of these drugs. Glisson noted that, "The fluoroquinolones have an antimicrobial activity which is ideally suited for treatment of bacterial diseases of poultry." Glisson said that these compounds generally work extremely well against *E. coli*, *Salmonella* sp., *Pasteurella multocida*, *Haemophilus* sp., and *Bordetella* sp., as well as many *Mycoplasma* sp. He pointed out that although resistance to the new fluoroquinolones is usually slow to develop, the poultry industry must use these drugs in a judicious and reserved way in order to maximize and extend their effective life. They are likely to be the only new and different category of antibacterial drug available for poultry for many years to come.

• What is the future of antibiotic use in poultry?

Dr. R. Greg Stewart presented a thought provoking paper on this subject as the finale of the symposium. He stressed the need for change in the "pipeline" through which current and new drugs as well as vaccines (biologics) are identified, developed, approved and regulated. An intense cooperative effort between regulatory agencies and industry must exist in order to facilitate these changes. Unless changes occur, the future is not bright. Stewart said, "The industry will continue to search for alternatives to drug use, preventive methods, and improvement in genetic stocks but all those doctrines cannot obviate the legitimate need for therapeutic agents."

Horses Highlight Ag Progress

ROCKSPRING (Centre Co.)—Horses and ponies and their role in Pennsylvania will be featured during the Equine Program at Penn State's Ag Progress Days, Aug. 15-17.

The program highlights Penn State's teaching, extension and youth programs, and calls attention to the \$4 billion horse industry's contributions to Pennsylvania agriculture.

The Equine Exhibits Tent will feature informative displays about various aspects of the horse industry in the Commonwealth. Video presentations will highlight equine educational and career opportunities and various aspects of the commercial horse industry.

"Other exhibits and demonstrations will showcase Penn State's Quarter Horses and equine teaching programs, 4-H and therapeutic riding programs, horse shoeing, horse feeds, various breeds and miniature horses," said Ben Nolt, 4-H therapeutic riding coordinator in Penn State's College of Agricultural Sciences.

A variety of attractions is scheduled in the Ag Progress Days Horse Arena on all three days of the event.

At 1 p.m. on Tuesday, August 15, the event will feature a handling and training clinic. Kathy Brown, manager of Ka-My Stables in Bellefonte, Pa., will be on hand to discuss the dos and don'ts of trail riding. Tuesday's

highlights also include breed clinics from 10 a.m. until noon and breed exhibitions from 3 to 4 p.m.

Quarter Horse and Paso Fino breed clinics will be held Wednesday, August 16, from 10 a.m. until 12:30 p.m. At 1 p.m., Centre County 4-H club members will conduct a mounted flag presentation. Also, Kathy Brown will conduct a handling and training clinic called "Back to the Basics, or What Makes Your Horse Tick."

Breed clinics and demonstrations featuring Arabians and Welsh ponies will be held Wednesday from 2:30 p.m. until 4 p.m. Afternoon events also include a therapeutic riding demonstration and a performance by the Cumberland County 4-H Drill Team.

Belgian, Clydesdale, and Percheron horses will be featured in a breed clinic held at 4 p.m. on Wednesday. Special exhibitions, draft horse driving demonstrations and other events will be held Wednesday evening from 6 p.m. until 8 p.m.

Breed clinics for Morgan horses will be held in the morning and afternoon on Thursday, Aug. 17. A training clinic entitled "Everything You've Wanted to Know About Competitive Trail Riding, But Were Afraid to Ask," will be held from 1 p.m. to 2:30 p.m.

For more information, call (800) PSU-1010 toll-free through Aug. 17.

AG Progress Days

"Penn State AG Science..."

We're More Than You Think"

See our beautiful new
Wood & Gas Stoves.

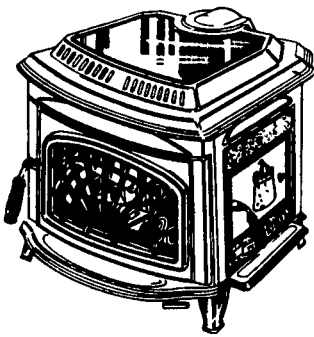
at

**OUSSINGER'S
QUALITY STOVES**

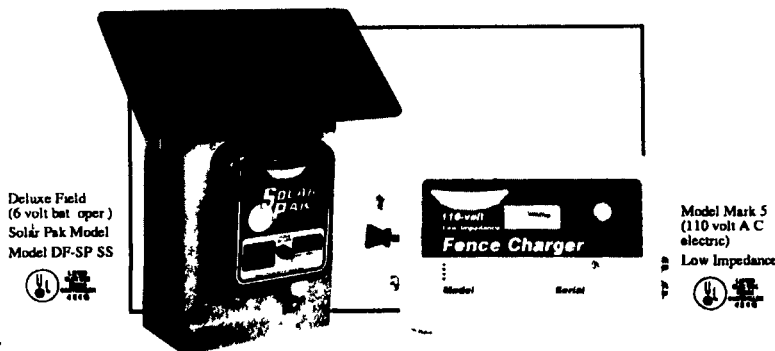
2533 Old Phila Pike, Rt. 340, Smoketown, PA
3 miles east of Lancaster
Tue., Thurs., & Fri. 10-8;
Wed. & Sat. 10-5

* See the New "STRATFORD CLASSIC" Coal Stoves

(717)397-7539



We've Got You Covered!



Eleven Models Cover Small to Large Fields —
Livestock In, Predators Out!

Choose your model of Parmak Power

- Solar — Free energy! Portable 6 or 12 volt, installs anywhere fast and easy, operates day or night! — America's first solar fence!
- 110 Volt A.C. Models — Shocks up to 50 miles of single or multi-wire fence — performance meter instantly reports condition of fence.

Get these other Parmak pluses, too:

- Durability — Rustproof housing and terminals, protected transformer.
- Reliability — Solid state circuits (no moving parts), higher shock output with no ground out.
- Warranted One Year — Even against lightning!
- American Made — Trouble free.

Write For Free Brochure:

PEQUEA BATTERIES

103B N. Ronks Rd. Ronks, PA 17572
717-687-0880



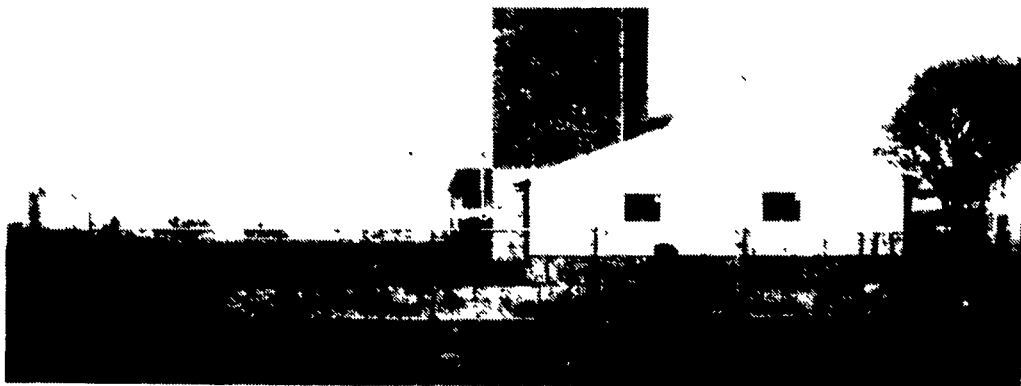
PRECISE
CONCRETE WALLS, INC.

Agriculture - Residential - Commercial

For All
Your Concrete
Walls And
Construction
Needs

- Buildings • Basement • Floors
- Retaining Walls • Footer
- SCS Approved Manure Storage Pits
- All Types Of Flat Work

Specializing In
Manure Storage
Round or Rectangular,
In Ground or
Above Ground



65' Diameter SCS Approved Circular Manure Storage

Invest In Concrete. Quality Work That Will Last A Lifetime

CALL FOR **FREE** ESTIMATES
AND SEE HOW AFFORDABLE
CONCRETE WALLS CAN BE

CONTACT
ROY SENSENIG
717-355-0726

**PRECISE CONCRETE
WALLS, INC.**

601 Overly Grove Road, New Holland, PA 17557