

er Tour Japan

some facilities of Mitsui and Co., Ltd. Recent earthquake damage will curtail visits to some of the agricultural businesses and historical landmarks in Kyoto and Hiroshima. While in Tokyo, they will visit the corporate headquarters of Toyota.

The officers will meet with their Japanese counterparts — members of the Future Farmers of Japan (FFJ) — to further extend contacts between the next generation of agricultural leaders for both countries. Despite the disaster in their country, FFJ has managed to reassign each officer with a Japanese host family for one weekend to learn more about the culture and traditions of one of the United States' most important trading partners.

The international program is sponsored by Mitsui & Co. (USA), Inc., as a special project of the National FFA Foundation, Inc.

"This experience will provide the national FFA officers knowledge about the competitive global economy," said Corey D. Flournoy, national FFA president. "Our officer team is anxious to learn about the agricultural marketplace in order to explain it to other members we will meet during the

year. We appreciate their extra efforts to host us during these difficult times."

The national officers traveling to the Far East are Flournoy, national president from Chicago, Ill.; Travis Hagen, national secretary from Chico, Calif.; Trisha Bailey, southern region vice president from Dover, Fla.; Jennafer Neufeld, central region vice president from Inman, Kan.; Greg Vetter, western region vice president from Carpenter, Wyo.; and Lee

Schroeder, eastern region vice president from Leipsic, Ohio.

The national FFA officers represent FFA members to officials in government, education, business and agriculture. As they travel during the year, they meet with members on the chapter, state and national levels and will be able to share with their fellow students the importance of developing a global perspective and an understanding of international trade issues.

(Continued from Page E20)

Many different variations of vaccination programs are in use. Proper scheduling of vaccination requires knowledge of the specific type of disease to be protected against, age of the birds, concurrent management procedures, disease status of the flock, and the duration of immunity that can be expected from the vaccine. Poultry veterinarians and other poultry health specialists can recommend sound vaccination programs tailored to specific situations.

Most commercial vaccines have been stringently tested and quality controlled for purity and efficacy. Vaccine companies make very specific recommendations on how their products should be handled and applied. These instructions should be followed closely in order to ensure that the flock will be properly protected.

Improvements and innovations in poultry vaccines are occurring constantly in response to industry need.

Responsible use of quality vaccines is an extremely valuable tool in controlling disease. However, it will not make up for the gross deficiencies in management of some of the other control methods. Sound biosecurity and stress reduction measures are important adjuncts in making vaccination work for your flock.

4. **MEDICATE.** Although medication is the strategy most often thought of as traditional disease control, it is arguably the *least* important to total flock health. Medication, when instituted in response to a disease problem is considered "damage control" rather than disease control. The disease is often out of control by that point. Medication certainly can help reduce sickness and mortality significantly, especially if instituted early in the disease course.

It can, however, be a waste of time, effort and money if not done properly. Antibacterial and anticoccidial drugs can be used at both treatment and preventive levels. Anticoccidials are invaluable in preventing losses due to coccidiosis. Their use is considered a necessity of modern poultry production.

Antibacterial drugs (antibiotics) are not effective against viral diseases. However, they are used in some situations in which a viral problem has been implicated in order to prevent or reduce secondary bacterial infections that inevitably follow.

Proper use of chemotherapeutic agents should be based on a correct diagnosis of the disease at hand, and specific targeting of a drug to the disease agent. If a bacterial disease has been diagnosed by culture, a laboratory test to determine the best drug to use against the bacteria found in the birds is in order. In the meantime, a "best guess" may be employed to start the birds on a treatment that is likely to help. For example, Staphylococcal infections are likely to be helped by penicillin, especially if the drug had not been extensively used on that farm previously.

Poultry drug lists and guides are available from many sources. Advice from poultry health specialists can be useful in guiding drug use in specific situations.

Poultry drugs are usually mass applied by inclusion in feed or drinking water. Mixing and dilution must be done carefully in order to avoid dosing mistakes. Both overdosing and underdosing can have adverse effects. Overdosing can cause drug toxicities and disruption of normal gastrointestinal flora. Underdosing leads to ineffective treatment (and therefore wasted dollars), and may promote the development of antibiotic resistance in bacterial populations.

Drug residues in animal and poultry meat and products is an important public health issue. Drug withdrawal times before slaughter or marketing of eggs must be strictly followed. Most poultry companies have stringent in-house programs to prevent any violations of drug use, and often check bird tissues for residues before slaughter to ensure that no traces of drugs are present. A recent issue of the FDA Veterinarian, Nov/Dec 1994, Vol. IX, No. VI, contains a summary of illegal drug residues in meat for the 1993 fiscal year. The incidence of detected violative tissue drug residues listed by class of food animal shows that turkeys and chickens made up the lowest number of cases. Poultry species (7 total cases) were significantly lower than any other major food animal category including cattle (3,373), swine (345), and sheep (17). Continued responsible use by poultry producers of drugs for treating poultry will help continue this enviable record.

Responsible chemotherapy can be summed up this way: Use the correct drug at the correct time for the correct duration. Above all, *don't* use a drug if you don't need it.

5. **ERADICATE.** The most drastic control measure is eradication. This is a strategy to eliminate the disease from the host population. Complete eradication schemes are reserved for highly contagious and virulent diseases such as highly pathogenic avian influenza and velogenic Newcastle Disease. The highly pathogenic avian influenza (AI) virus responsible for the 1983-1984 outbreak in Pennsylvania and surrounding states was eradicated from the area by an intense and costly effort. Monitoring programs involving testing of birds, environments, blood and eggs are still in place. These are considered necessary to prevent reintroduction or spread of similar AI viruses, which still persist in migrating waterfowl and live bird markets, into our commercial poultry populations.

Partial eradication programs, such as those included in the National Poultry Improvement Plan (NPIP), involve eliminating certain vertically transmitted diseases from the breeder bird populations. Pullorum disease and MYCOPLASMA GALLISEPTICUM (MG) infections have been drastically reduced in our country due to the collective efforts of the poultry industry. Other nations look to these programs as models of poultry health improvement. Partial eradication requires constant disease monitoring (usually by serologic tests) and follow-up on any suspected positive birds. Depopulation (or at least quarantine and discontinued use of hatching eggs) is necessary when disease breaks occur. Commercial level birds may have sporadic problems with these controlled diseases. Pullorum is extremely rare in most U.S. poultry, but MG is fairly common in multi-age layer flocks.

Backyard flocks serve as reservoirs for most diseases. For this reason, strict biosecurity around known positive commercial flocks and backyard flocks is necessary in order to prevent spread of the agents back to breeders.

As you can see, all five control strategies — Pathogen Reduction, Stress Reduction, Medication, Vaccination and Eradication — are very different from each other in details and scope, but the goal remains the same. It is necessary to combine various elements of the five methods to build a sound, total health program that works on your poultry farm. Everyone benefits from disease control efforts including your birds, you, and the industry.

SHALL'S
Carlisle, Pa.
17-249-22

EQUIPMENT
Clemens
field, Wv
14-538-00

ERMIT K
TLER IN
Lings High
transport, Pa
3-288-201

LANDIS BROS. INC.
Lancaster, PA
717-291-1046

LOST CREEK
IMPLEMENT
Oakland Mills, PA
717-483-2161

NORTHERN TIER
IMPLEMENT CO.
RD #1 Box 277
Manassfield, PA 16933
717-662-3200

O.C. RICE, INC.
104 North Main St.
Biglerville, PA 17307
717-677-6135

SMITH'S
IMPLEMENTS, INC
Mercersburg, PA
717-328-2244

WALTEMYER'S
SALES & SERVICE
Red Lion, PA
717-244-4168

LEHIGH AG
EQUIPMENT
Allentown, PA
610-388-2553

MILLER-LAKE INC.
Belleville, PA
717-435-2335

PIKEVILLE
EQUIPMENT INC.
Oley, PA
610-687-6277

SCHEFFEL
EQUIPMENT CO.
Red Goose Rd.
Somerset, PA
614-445-6500

S.P.E., INC.
Rd. 1, Box 157
Towanda, PA
717-265-4440

WINELAND
EQUIPMENT, INC.
Martinsburg, PA
614-793-2109

LONE MAPLE
SALES & SERVICE
New Alexandria, PA
412-688-7172

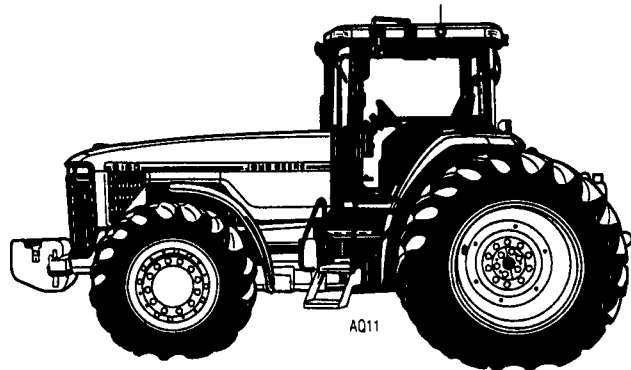
MILLER'S
EQUIPMENT
RD #1 Rt. 68
Fairmount City, PA

POLE TAVERN
EQ. SALES CORP.
670 Rte. 40
Elmer, NJ
609-358-2880

GEORGE V. SEIPLE
& SON
Easton, PA
610-258-7148

TOBIAS
EQUIPMENT CO., INC.
Harrisburg, PA
717-362-3132

M.S. YEARSLEY
& SONS
West Chester, PA
610-696-2990



JOHN DEERE

All-new 160- to 225-hp 8000 Series Tractors deliver all-new power train efficiency

- All-new 8.1 L and 7.6 L engines with exclusive electronic engine control: Generate torque quickly and maintain high response to as low as 1,000 rpm. Set your engine speed and keep it there with exclusive Field Cruise™ control. Get up to a 10 percent power bulge to handle extra-tough conditions easily.
- All-new 16-speed Power Shift transmission: Minimal gear meshes ensure maximum power flow. Wide range of speeds from 1.4 to almost 24 mph. Eight working speeds with only 1/2-mph speed increments.
- Four all-new models: 160-hp 8100, 180-hp 8200, 200-hp 8300, and 225-hp 8400 Tractors.



GOOD DEALS...AND A GOOD DEAL MORE

Nothing Runs Like a Deere™

