Leptospirosis on the Increase
Marshak Dairy Facility Update

The Marshak Dairy Facility has been in operation for over a year and the greenhouse-style barn is working well. Leroy Bruce, New Bolton Center’s Farm Manager for fifty years, retired in June of 1996. His place has been taken by Jim Wolfer who manages the farm and is involved with running the Marshak Dairy under the direction of Dr. William Chalupa, professor of nutrition.

The original herd of forty Holsteins was transferred from the tie stalls of the old bank barn to the new dairy on November 11, 1996. The cows adjusted very quickly to the free stalls with mattresses and sawdust beds. All animals used the stalls within a few hours after arrival.

Production remained constant throughout the transition. At present between 150 and 160 cows are milked with an average daily production of between 65 lbs. and 75 lbs. of milk per cow per day. One person milks 150-160 cows in approximately 2.5 hours twice a day. The milk tank is emptied on alternate days and the milk is sold to Land-O-Lakes Dairy Cooperative. The dairy houses 165 milking cows, 25 heifers and 50 calves, bringing the total number of animals at the dairy to 240.

Winter brought one ice storm that did damage the plastic roof which was immediately repaired. During the summer, Dr. Chalupa reports, very little effect from heat on the cows was noticed. During the hot months, shade cloths are placed over the plastic roofs to cut down on solar warming, side wall curtains are opened to allow air movement and fans enhance the air circulation throughout the barn for the cows’ comfort. The fly population was minimal.

A greenhouse-style heifer barn was completed in July and houses calves, heifers, and dry cows. It has box stalls for maternity cases.

Pasture has been created all around the Marshak Dairy for heifers and dry cows.

Mr. Wolfer reports that the dairy’s automatic flushing system has enabled New Bolton to use the wastes as fertilizer. The solid effluent that is separated from the flushing water has been used to fertilize NBC crops four times since the cows moved in. Waste water from the flush manure removal system has been irrigated on cropland four times since the opening of the dairy and slurry waste which settles in the ponds has been removed and distributed to cropland two times.

Jim Wolfer was born and raised on a dairy farm in the Western part of New York State and received his BS degree in general agriculture and agriculture education from Cornell University. Mr. Wolfer served as farm superintendent for ten years at the University of Delaware, prior to that he managed the dairy there.

The School recently hired a dairy manager, Mr. Tim Terry, who holds an Associate degree in animal husbandry from SUNY Cobleskill, BS in animal science and dairy management from Cornell, and a MS in animal science and ruminant nutrition and biochemistry from Michigan State University.

Increased Patient Load at George D. Widener Hospital

Bruce Rappeport, associate dean for New Bolton Center and director of the George D. Widener Hospital at New Bolton Center, reports that the hospital had a record year in FY 96/97 with over 6100 admissions (not including Field Service). In 95/96 the Widener Hospital had 5700 admissions.

Mr. Rappeport attributes the larger case load to 1) an increase in the client base; 2) a growth in performance horse clients (dressage, hunter/jumper, and driving horses); 3) an overall healthier economy. Also, the hospital is seeing people who are willing to make the investment in their “increased value” horses whereas in the past many would not have spent the money. The Emergency Service at New Bolton saw an increase in caseload for colics and orthopedics (sports medicine injuries).

Mr. Rappeport comments, “Our success in achieving this new milestone is due, in no small part, to the clinicians and staff who have provided top quality service to the horse-owning and agricultural community.”

Leptospirosis on the Increase

The annual vaccinations for dogs include an inoculation to protect the pet from leptospirosis. Unfortunately, the vaccine currently available against this disease does not protect against all of the leptospiral serovars and a dog can contract the disease even though it has been vaccinated.

The various serovars are in the wildlife population and are shed in their urine. Dogs in suburban and rural areas then can get infected as they come in contact with contaminated water in puddles and streams. Urban dogs can become infected through exposure to rat urine.

Leptospirosis is a zoonotic, a disease that is communicable from animals to people. It can cause acute or chronic illness, often involving the liver, kidney and/or eye. The symptoms may suggest a gastrointestinal ailment. If leptospirosis is suspected, a blood test can be performed. However, it needs to be interpreted carefully because previous vaccination against the disease may cause changes in the test results. Treatment is with antibiotics, often rather aggressively as the disease damages the liver and kidneys. If these organs have been damaged severely, the dog may have chronic liver and/or kidney failure.

Because the organism is shed in the urine of the ill animal it is extremely important that dogs be treated promptly and properly so that they are not a source of infection for people, other pets or livestock.

VHUP has seen an increase in leptospirosis cases during the last two years. Owners of dogs that run in areas with a lot of wildlife should be on the lookout for symptoms and take the animal promptly to the veterinarian if illness is suspected. It needs to be treated quickly to limit the damage to the liver and kidneys and to prevent infection of people, other pets and livestock.