

Livestock Ledger

By

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By the time you read this article, many of our local 4-H members will have completed their projects, exhibited their animals and participated in a sale of market livestock. For many of these youngsters, the 1963 project year has come to an end, while others, whose animals have been selected, will compete in the 1964 Pennsylvania Farm Show.

In Lancaster County, 76 boys and girls raised market hogs as a project which ended at either the County Roundup in August or the New Holland Fair in September. Over 40 members raised either breeding or market sheep projects with their roundup being held November 11 at the Manheim Farm Show grounds. The New Holland Beef Club's 28 members exhibited and sold their steer projects at the New Holland Fair in September. The 72 members of the Red Rose Beef Club were just involved in both their county roundup and the Southeast District Beef Show and Sale on November 11 and 12. The best market lambs and steers have been chosen to represent Lancaster County at the Pennsylvania Farm Show. In addition 14 4-H market hogs will

also be shown at the state show in January.

The 4-H livestock experience is one that involves dedication, determination, long hours, successes, failures, and satisfaction. The love between man and animal is truly shown through a 4-H livestock project yet each member learns the true purpose of meat animal production. Participating in monthly club activities and meetings builds character, sharpens leadership skills, and enables our youth to interact and make new friends.

The project year for many has come to an end, yet many have already selected project animals for next year or have signed up to again participate in a great 4-H experience. Beef projects begin in the fall by purchasing a feeder calf to raise to market weight. Lamb and pig projects start in the spring of the year and are less time consuming.

The 4-H program is open to anyone between the ages of 8-19. Our capable volunteer leaders are very willing to help you or a friend get started in a livestock project. For further information feel free to call your local County Extension Office.

Limousin breed sees growth

DENVER, Co. — The North American Limousin Foundation (NALF), Denver, Colo., reported a 12 percent increase in both new registrations and transfers for the 1962-63 fiscal year.

According to Dr. Greg Martin, NALF executive vice president, the association registered 49,182 new animals and processed 33,183 transfers during the fiscal year that ended Aug. 31.

The breakdown of new registrations by percentage presents a good picture of where the breed, which was introduced in North America only 15 years ago, stands in its development.

When the Limousin Foundation was formed in 1966, French cattle were not eligible for importation into the United States. However, Canada did accept the imports after a strict quarantine program, and semen from Canadian bulls could be shipped throughout North America.

As a result, the Limousin breed founders adopted a policy which allowed the recording of low percentage heifers, 37 percent, and bulls 50 percent. This policy allowed breeders to begin with foundation cows (no Limousin blood) and upgrade to purebred Limousin by using Limousin bulls for several generations.

This year's figures show that the policy is fulfilling its intent. Of the



Limousin cattle recorded during the past year, 33 percent were in the purebred category, 32 percent were seven-eighths Limousin, 19 percent were three-quarter bloods, 13 percent were half-bloods and only 3 percent were less than one-half Limousin.

After only 15 years, Limousin is coming into maturity as a cattle breed in the United States. However, even with this new maturity, the breed continues to grow in numbers and popularity, as evidenced by a 14 percent increase in lifetime memberships and a 13 percent increase in junior memberships during the last year.

Martin attributes this steady growth to the fact that Limousin cattle work for the commercial man.

"Calving ease, good growth rate and feeder calves that bring a premium because of their ability to grow and stay lean have been the keys to our acceptance by the beef industry," Martin said.

Paint Horse champions announced

HARRISBURG — Two entries from Ohio took top ribbons Nov. 5 in the 1963 Paint Horse Show. The show was held in conjunction with the Keystone International Livestock Exposition.

"Clegs Shot Round," a three-year-old stallion owned by Donald Vaughn, Lorain, Ohio, took honors for grand champion stallion, while "Sweet Oil," a two-year-old filly, captured the ribbon for grand champion mare. The mare is owned by Gary and Frances Inskip, Richwood, Ohio.

The reserve grand champion

stallion, "Broadway Fancy," also a three-year-old, was shown by P & A Burgon Stevenson, Lafayette, N.Y. the reserve grand champion mare, "Miss J Bar Seeker," was exhibited by Crystal Garvin, Pennfield.

Showing the grand champion gelding, "One Spot Tommy," a four-year-and-older entry, were James and Jill Pacelli, Clinton, N.Y. The reserve grand champion gelding, "Mr. Perfection," a three-year-old, was shown by Joe Luongo and D. Paulaski, Sussex, N.J.

Extra steps needed for greater feeder calf returns

ST. JOSEPH, Mo. — In the cow-calf business, considerable time and money is invested in a weaned calf crop.

Consider two extra steps to protect that investment and increase your odds for profit, says Dr. Kurt Wohlgemuth, Extension veterinarian at North Dakota State University.

First, precondition those calves. The simplest way to benefit is to participate in a state certified preconditioning program. Active programs exist in Georgia, Iowa, Kansas, Kentucky, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Tennessee.

Second, use program options to insure broad health protection and increase the value of the calves, Wohlgemuth says.

Basically a health program, preconditioning is gaining popularity as a marketing tool as well. Preconditioning initially was designed to prepare the calf to better withstand the stress of movement from point of origin through the marketing channels.

Though state standards vary slightly, preconditioning normally includes adequate castration and dehorning, weaning at least three weeks prior to sale, control of parasites and immunization against major diseases.

The local veterinarian who has done the work, or who can verify it, signs a certificate which declares the calves are preconditioned and lists the specific treatments.

Buyers benefit from reduced death loss and sickness in the calves, and improved performance. And, Wohlgemuth says, buyers have been willing to pay for that.

Sellers have received premiums on preconditioned calves of \$1 to \$4.50 per hundredweight over similar quality, nonpreconditioned calves, according to individual states' figures. There are other advantages, proponents say.

At marketing, preconditioned

calves normally weigh heavier than green calves, Wohlgemuth says. That extra weight alone should pay the cost. And while they're still in the producer's hands, disease control also is an economic advantage.

"We assumed in the past that we wouldn't see many respiratory problems in calves raised and weaned on the same farm — only in calves that have been transported and stressed," says Dr. Kenneth White, a private practitioner in Perryville, Mo.

"We do now. We're currently treating 'original farm' calves for bovine respiratory disease complex."

Disease protection at home, plus the extra sale value, have led to more use of the immunizations and procedures listed as "optional" in many state programs.

"Depending on local conditions and the buyer, some options may be necessities. The veterinarian working with the herd should be consulted on choices," Wohlgemuth emphasizes.

Some state programs require only IBR, PI3 and multipleclostridial vaccinations. Others commonly include BVD and pasteurella. An increasingly popular option, *Haemophilus somnus*, now is mandatory in Kansas and Kentucky, and gaining support in Missouri.

"We recommend *Haemophilus somnus* and pasteurella on all the calves we precondition," White says. "When we've got the calves up, we try to vaccinate and protect them for as many things as we can."

I think it helps and it's not much more expensive."

Another Missouri veterinarian, Dr. Dick Taylor, of Fayette, says he's confirmed cases of *H. somnus* in local feedlots and cowherds. "We've seen eight or ten breaks in the last couple of years," he said.

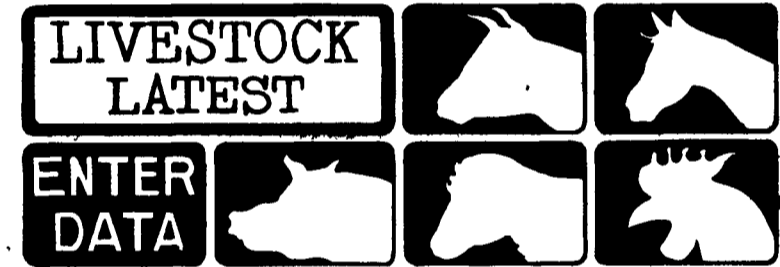
"Our main pneumonia problem is *haemophilus* underneath other organisms. I think we've controlled the other problems and now we're seeing the *haemophilus*," Taylor says. "I definitely want *haemophilus* (vaccine) in the calves."

Another big reason Taylor recommends full protection, including *haemophilus*, is marketing. "The biggest preconditioned calf market in our area has several order buyers that will not bid on calves unless they have *haemophilus* (vaccine) in them."

Wohlgemuth says buyer preference for specific vaccines — like the protection needs — will vary with areas. A check with your buyer, or marketing representative and veterinarian can help you decide on options.

"All other things being equal, in well-managed herds, the extra options can help protect calves and add value to them," he says.

White had another marketing observation. "The advantage in selling preconditioned calves is partly psychological — buyers seem to think they've come from better-managed herds," he says. "Fly (insecticide) tags and identification tags will help that perception along, too."



Kidney stones major problem among caged laying hens

UNIVERSITY PARK — Kidney stones have become a major cause of death among caged laying hens in the U.S. The disease has been severe the past two years but has plagued poultrymen for 10 years in Great Britain.

The disease damages only the kidneys of domestic fowl, according to Robert F. Wideman of Penn State's Department of Poultry Science. Affected hens show no consistent external symptoms and no other internal organs are involved routinely.

Since the urinary tract ("uro") contains stones or "liths" in infected hens, the disease is known as urolithiasis (uro-lith-i-sis). Research to uncover the cause is challenging the skills of poultry scientists at Penn State.

Small regions of the kidneys are destroyed during early stages of the disease. As tissue destruction progresses, large sections of the kidneys simply disappear.

In general, only one kidney is damaged, Dr. Wideman states in the upcoming Fall issue of "Science in Agriculture," the quarterly magazine of the Agricultural Experiment Station at Penn State. He said debris from the damaged tissue seems to serve as a focal point for stones to begin forming, although extensive damage can occur without stone

formation.

The stones contain calcium and uric acid. The latter is the major form of excreted nitrogen in poultry.

Kidney damage progresses slowly enough that many hens are able to survive through their egg production cycle. Kidney stones have been detected in hens as young as 10 weeks of age and as old as 70 weeks. Active laying hens have survived for 70 weeks with only one-fourth of their kidney tissue remaining.

Two attacks of kidney stones can often result in death. First, a decrease in functioning kidney tissue can allow nitrogenous wastes to accumulate in the blood. The accumulated uric acid can block capillaries and lymphatic vessels, killing the hens. Second, large stones can abruptly block the urinary tract, preventing all remaining kidney tissue from functioning properly. Death then occurs within two days.

"We are currently preparing an all-out assault on the urolithiasis problem," Dr. Wideman said. "We know that an 'initiating event' probably occurs early in life, prior to 10 weeks of age."

"Combined studies by various Penn State scientists are being carried out to identify the causes of kidney stones. Field outbreaks and

case histories are being evaluated. Recently, we caused urolithiasis under controlled conditions in a laboratory. Dietary modifications will be tested in an attempt to prevent stone formation," he added.

The overall impact of urolithiasis generally reflects the quality of flock management, Dr. Wideman said. Under the most desirable management conditions, urolithiasis causes only one to three percent increase in monthly mortality. With less desirable management conditions, death can rapidly exceed 50 percent of a flock.

Egg production suffers during an outbreak of kidney stones. Wideman and associates believe this is correlated with the fact that kidneys of laying hens undergo dramatic daily cycles. These 24-hour cycles are associated with the stages of egg formation. The best layers appear to be most severely affected by urolithiasis since their kidney undergo more cyclic stresses than the kidneys of poor or non-layers.

In the absence of stone formation, remnant kidney tissue is able to continue functioning. Ultimately, Dr. Wideman and associates should be able to describe to flock managers the cause, appropriate treatment, and preventive measures for kidney stones in laying hens.