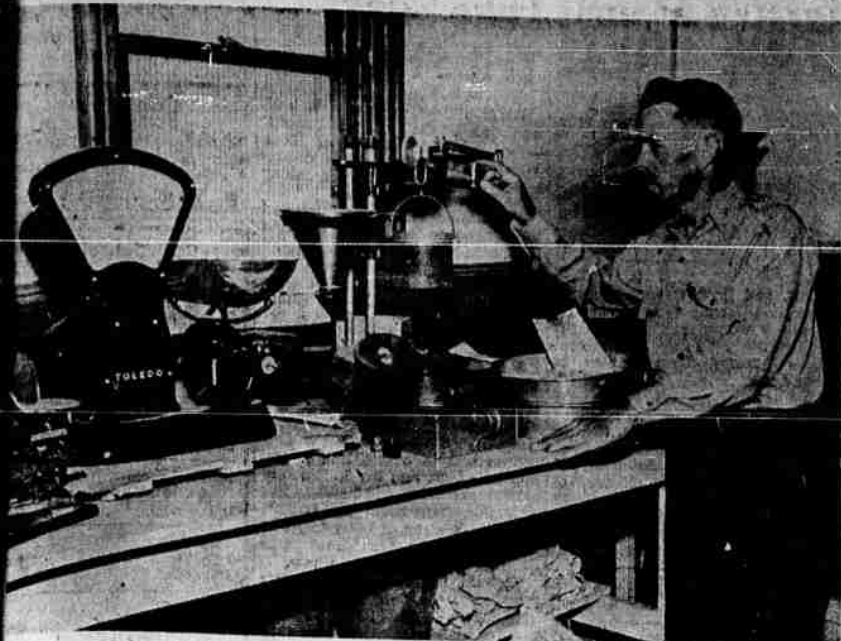




IN THE SAMPLE ROOM at the Winema Elevators in Tulelake you can check just about anything you want to. Here Ivan Kandra is shown at the weighing counter with some of the many pieces of equipment.

Leptospirosis Moves In On Oregon Livestock As Experts Seek Prevention

(Editor's note: This is the first of a series of three articles prepared by the State Department of Agriculture's Division of Animal Industry to advise Oregon livestock owners about four new diseases of livestock and to report current developments.)

The past year has brought more bad news to the \$200,000,000 Oregon livestock industry than any similar period in many years. Since the first cases of vesicular exanthema (VE disease) were observed July 10, 1952, in hogs shipped into Oregon, three other diseases of animals also have reared threatening heads.

They are leptospirosis, contagious to cattle, swine, horses and sometimes man; blue tongue, which affects sheep; and scrapie, also a sheep disease.

Leptospirosis and VE are here. Blue tongue was found in California and Utah last summer and had previously been reported in Texas. Scrapie, about which the least is known, so far has made one fleeting appearance here in imported sheep. If the combined alertness of stockmen, livestock officials of the state and federal departments of agriculture, and the state college extension service and experiment station prevail, these diseases should not become entrenched here. But none of these combatants is complacent.

This article will discuss leptospirosis as briefly as possible. What is it? What is the extent in Oregon? What is being done about it? Economic losses come not only from the death of animals severely afflicted, but from calf losses, and, in dairy cows, from decreased milk production.

Lepto — to use its nickname — probably has been present in eastern Oregon for some years. Veterinarians had suspected it, but only recently has a positive diagnosis been easy to make. At this time it is known to be present on a scattered basis in 21 Oregon counties. Control is not easy even after a diagnosis is made. This is because cows that have survived the disease become immune but remain carriers for up to three months or more. Even calves may be carriers. Dr. K. J. Peterson, state veterinarian, in writing on this disease in the Agriculture Bulletin cites an instance in which a 10-day-old calf, as the carrier, spread the disease. Possibly rodents and insects carry the disease also but this idea has not been proved.

A minute bacterial organism, a spirochete, causes leptospirosis. The disease may travel quickly through a herd, though the exact method of transmission is still something of a puzzle. In the acute stage, the organism is in the blood stream and in the milk. Later it localizes in liver and kidneys and is shed in the urine long after symptoms have cleared entirely.

What are the symptoms? The disease may take a very light form — or it may go to the other extreme with death resulting in 24 to 72 hours. Some of the signs are

common to several diseases, which adds to the diagnosis problem unless a laboratory test is made.

In severe cases temperature is high, anemia may be present, animals become severely depressed, appetite disappears. The milk flow becomes scanty, yellowish with occasional tinges of blood; jaundice is common and the urine may contain blood. A pregnant cow may abort at any stage.

In mild cases there are slight evidence of temperature rises, anemia and depression, with inappetence and some loss of condition. But the animal soon recovers.

For some time, Dr. Peterson says, Oregon has been sending 200 random samples of bovine serum, as well as suspected samples, to the Rocky Mountain laboratory at Hamilton, Montana. (This laboratory has assisted several western states in early studies of this disease.) It is from these samples, taken from the routine Bang's disease blood samples after the Bang's tests are completed, that there has come definite knowledge of presence of lepto in some degree in 21 of Oregon's 38 counties.

This is the first definite finding in cattle in Oregon. So far as the records show, the only other sure diagnosis of leptospirosis in Oregon occurred in early 1940 in four foxes in the Willamette Valley.

ley. The late Dr. W. H. Lytle reported the cases (brought to his attention by Dr. C. E. Long at Independence) after a report on blood samples shipped to Dr. K. F. Meyer of the Williams Hooper Foundation Medical Center in California. Dr. Meyer's test agglutinated leptospirosis. Two of the four foxes died. No additional cases were found, though 103 dogs were bled to determine possible presence of canine leptospirosis, in racing dogs of the Northwest. But this was canine leptospirosis and has no connection with the strain found in cattle.

The rather general findings here now give substance to the opinion of Director E. L. Peterson and other members of the staff that this disease has been present in Oregon for possibly four years. Why it hasn't come to light sooner is so much water over the dam. The more important thing now is that there's definite knowledge it is here and it must be met head-on.

In this opinion, the Oregon Cattlemen's Association obviously concurs. The association in June directed a resolution to E. L. Peterson, director of agriculture, requesting the state diagnostic laboratory to take steps immediately to run capillary tube agglutination tests as developed at the Hamilton, Montana, laboratory on samples as determined by the department of agriculture. It asked the department to supervise right away a program of bleeding to determine the full incidence of lepto in the state.

The department is already taking steps along the lines urged by the Cattlemen's Association.

Next article: Blue tongue.

Hans Norland Auto Insurance, 627 Pine St.

Extension Dairyman Award Made

Gillette E. Gordon, extension dairyman for the University of California has been named winner of the DeLaval achievement award in dairy extension for 1953. The presentation was made at the 49th annual meeting of the American Dairy Science Association now being held at the University of Wisconsin in Madison.

The award is presented each year to the extension dairyman who has contributed the most towards an effective dairy program in his area. Gordon is best known in California for his work with the dairy herd improvement associations. Through cow testing, the use of proven sires, artificial breeding, and better dairy management program under his direction, dairying has become one of the most important California industries. Although California ranks eleventh among the states in the number of cows, it is fourth in total milk production and third in cash farm income from dairy milk for his work in organizing the products.

Gordon is also known in California as a judge of dairy cattle. He is accredited as an official judge by all national dairy breed associations and has judged many major dairy shows, including the Pacific International, Grand National, Waterloo Dairy Congress, and the International Dairy Exposition. He has also judged in Canada, South America and the Pan-American Holstein Exposition.

In the past thirty years, under Gordon's leadership California dairymen have increased by 118 pounds the average production of butterfat per cow. In 1951, California had the highest average production per cow of any state in the Union, which was 7700 pounds of milk and 300 pounds of fat per cow, making it the first state to reach an average production of 300 pounds of fat for all of its cows. California cows under test in the dairy herd improvement associations averaged an even higher figure of 412 pounds of butterfat in 1951.

Gordon is a graduate of the University of California College of Agriculture with the class of 1917. He joined the Agricultural Extension Service in 1918 as a farm advisor in Los Angeles County. His leadership in the dairy industry there earned him in 1924 the assignment of developing and directing the statewide dairy extension program, the position he holds today.

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Ferguson Introduces New-Type Mower With Reduced Vibration; More Speed

New engineering developments which virtually eliminate vibration and increase the farmer's potential mowing capacity by as much as 30 percent are features of the new "High-Speed Mower" produced by Harry Ferguson, Inc. and exhibited here this week by MAC'S FARM EQUIPMENT, 5629 So. 6th St.

Incorporating a new invention regarded as revolutionary in farm equipment, the "High-Speed Mower" departs from the conventional Pitman-type drive which has been a primary cause of excessive vibration in standard mowers for many years. The principle introduced in the new model is known as Ferguson "Dyna-Balance-Drive," an ingenious counterbalancing of forces which produce smooth, quiet operation. Because of the design of the drive unit, embodying the invention, the implement is able to operate at greater speed and thereby increase mowing capacity.

In the "Dyna-Balance-Drive" unit, power is transferred from a double-throw crankshaft to the knife lever and a counterweight. The thrust of the knife lever is balanced by the thrust of the counterweight moving in the opposite direction in a parallel plane. This synchronized movement in the same plane virtually eliminates vibration.

The Ferguson company cites several major advantages in the new mower in addition to the increase in mowing capacity. Vibration reduction cuts the wear on the mower frame and the drive components. Maintenance time and costs on the mower are materially reduced, and the tractor itself absorbs far less punishment even though operating at higher speeds. The noise level is also greatly reduced. At the same time, there is a lessening of driver fatigue, extending the potential number of working hours.

The "High-Speed Mower" has been subjected to more than three years of intensive field testing. It has a break-back safety device which allows the cutter bar to swing back automatically when the mower strikes an obstruction. The swing causes the belt to slip, thus stopping the knife action. To resume operation, the driver merely backs the tractor, resets the release, raises the mower by hydraulic control to clear the obstruction, and starts cutting again.

Operation of the mower is most efficient in third gear at three-quarter throttle, or up to two gears above the maximum running speed for ordinary mowers. Under many conditions, the Ferguson mower can be operated in fourth gear.

With its speed and flexibility, the new "High-Speed Mower" has greater capacity for standard farm mowing and is also well adapted for contour, terrace, highway, and special contract operations.

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