WINNING 4-H SHOWMAN

R. G. Boyne, manager of the Charlottetown branch of the Bank of Montreal, presents a silver tray to Mack Dixon, Clyde River for winning the showmanship trophy for 4-H Club members at the Easter Beef Show and Sale here. Edward Hickey, Malpeque won the 4-H showmanship competition for first year competitors and also had the champion 4-H club steer of the show.

Produce lean pigs on nicotine feeding

No, the pigs at CDA's Nappan, N.S., research branch haven't taken to smoking, but they are geting a little nicotine in their feed. It's to make them leaner and to save on the cost of feed.

Dr. Hugh M. Cunningham of Nappan began seven years ago to study ways of making pigs leaner. Now he has found that nicotine, by stimulating the release of a hormone from the animals' adrenal glands, helps to decrease their fat and increase the growth of lean tissue.

The researcher gives the results of tests to show that 5 p.pm (parts per million) of nicotine sulfate mixed in feed for pigs led to the following increases.

Five to 17 per cent in the ratio of protein to fat in carcass.

Ten to 20 per cent in number of Grade A carcasses.

Five to eight per cent in Record of Performance score.

Two to five per cent in feed efficiency.

A slight increase in dressing percentage.

The net profit per pig was $1.30 to $1.70 more than profit on the "controls"— pigs receiving the same feed but without nicotine.

Dr. Cunningham began his studies with the knowledge that the hormone adrenalin moves body fat into the blood stream to be used for energy.

Energy equals protein which in pigs, is the desirable lean flesh.

CORN OIL HELPED

But adrenalin injected into pigs was only active for a few minutes. By mixing it with corn oil and injecting the mixture under the skin of pigs he found he could prolong the effects of the hormone for several hours. Daily injections over a period of six to nine weeks not only greatly reduced the fat content of the body but, for the first time with any animal, encouraged the formation of protein.

Since farmers could not be expected to inject pigs every day, a search was made for a compound that could be added to the feed to bring about the release of the adrenalin within the body. Nicotine has been found to do this job.

Dr. Cunningham has completed four experiments with chickens and six with swine. Although the differences between the livestock tested and those used as controls in the tests were not always large, the chemical had a beneficial effect in all cases.

Forty pigs were individually fed at different levels of nicotine from weaning up to market weight. The group receiving five p.p.m. netted $7.05 more per ton of feed than the controls. This resulted from a combination of 10 per cent increase in Grade A carcasses and a five per cent increase in feed efficiency. (In addition to the federal $3 premium paid on each grade A carcass, Nova Scotia producers receive an extra dollar from the provincial government.

In another more recent experiment, 20 pigs were individually self-fed a control ration while their litter mates were self-fed the same ration containing five p.p.m. nicotine. Eighteen of the latter graded A compared with only 14 of the controls. When the premiums were added to a two per cent saving in feed efficiency, the net profit and savings of the nicotine-fed group amounted $5.71 per ton of feed. Since it costs only about three cents per ton of feed to add nicotine sulfate (which may be supplied by ½ ounce of "Blackleaf 40" per ton) the cost of the supplement scarcely has to be considered. "So what can you lose?" is Dr. Cunningham's comment.

The researcher hastens to add however, that the use of nicotine as a feed additive must first be cleared with the Food and Drug Division of the Department of Health and Welfare. Nicotine is rapidly eliminated from the body and, since very tiny amounts are used, there should be little difficulty in obtaining permission for its use in feeds.

Dr. Cunningham said he would like to see nicotine tested in other laboratories for a more comprehensive appraisal of its value. The results obtained are not so great as those obtained with adrenalin and further tests are under way at Nappan to improve its effectiveness.

Surplus predicted

OTTAWA (CP)—Finance Minister Gordon predicted Monday night that the old age security fund will have a surplus of $240,000,000 this fiscal year.

He said in his budget speech he expects the surplus to come from revenues of $1,145,000,000 against pension payments of $905,000,000.

Test brome varieties

CRESTON, B. C., Saratoga, a southern variety, produced the biggest yields in tests of brome grass varieties on the silty clay soil found in the Creston area.

The tests, spanning five years, were carried out at Canada Department of Agriculture's research substation at Creston.

Nine varieties, including northern, southern and synthetic types, were tested, reports F. M. Chapman, of the research station. The northern and synthetic varieties were of Canadian origin; the southern varieties were ones introduced in the United States.

All varieties were cut twice during the growing season.

Saratoga led in size of yield, producing 5.6 tons of dry matter per acre. In terms of hay yield, it amounted to about 6.4 tons, the 15 per cent difference being approximately the amount of moisture in cured hay.

Manchar was a close second and the variety actually produced the highest yield of second cut forage. Thirty per cent of the total seasonal Manchar yield came from this cutting.

Seeding of all varieties was carried out at a rate of 12 pounds per acre on well-prepared seedbeds.

A complete fertilizer (6-24-24) was applied prior to seeding and ammonium ntrate (33-0-0) was used every second year. Both were applied at a rate of 100 pounds per acre.

But, says Mr. Chapman, observations during the tests indicate that even better results could be obained by annual applications of ammonium nitrate.

Departmental shifts at farm

R. C. Parent, director of the Experimental Farm here has revealed that the winter works projects being undertaken at the farm are nearing completion and the proposed shifting of certain sections of the research division will soon take place.

A new Laboratory for Soils Research has been built on the second floor of the Science Laboratory on the Malpeque Road. This is in space formerly occupied by the Seed Potato Inspection Service. The Laboratory is now ready to receive Dr. Lloyd MacLeod and his supporting staff from the Experimental Farm at Nappan. Dr. MacLeod expects to be transferred in the early Fall and ready for a full year's work in 1966.

The Seed Potato Inspection Service has been moved to the main office on the Experimental Farm proper, on the Mount Edward Road, and a new Laboratory constructed for the examination of seed potatoes for Ringrot and other diseases. Farmers desirous of visiting the Potato Inspectors should call at the new headquarters.

The offices of the Director and administrative staff of the Experimental Farm have been set up in Ravenwood House as have also the former libraries at the Research Laboratory and Experimental Farm. Ravenwood House, with very slight changes, has been found to be admirably suited for the administrative staff and Library.

During the past winter, two training courses for the improvement of the staff have been held at the Experimental Farm. One has dealth with Mathematics and Statistics with 15 candidates and the second one for Conversational French with ten candidates. Last year a similar group studied Chemistry. It has been found that this is an ideal way to keep the interest of the staff at a high level and up-to-date.

Next week a Seminar on Microscopy and Photomicrography will be conducted at the Experimental Farm by Mr. Stanley Klosevych of the bio-Graphics Section, Ottawa. This Seminar is open to the staff at the Experimental Farm and from other Laboratories in various government departments, both Federal and Provincial.

Program aims at reducing TB in swine and poultry

Tuberculosis today has been relegated to the status of a relatively uncommon disease in humans, thanks to tremendous strides in medical science.

A similar success story applies to Canadian cattle. A testing and eradication program carried out by the Health of Animals Branch, Canada Department of Agriculture, has reduced the incidence of bovine TB to less than 0.1 per cent.

Good results are also being obtained from an educational program aimed at reducing the disease among swine and poultry.

Federal inspectors stationed at meat packing plants notify the Branch's Contagious Diseases Division of all swine and poultry carcasses having tubercular lesions. The reports are followed up with visits to the farms of origin to interview the owners, check their livestock and discuss control measures.

Indicative of the downturn of tuberculosis in swine and poultry are some statistics for 1942 and 1962.

In 1942, swine carcasses condemned because of TB amounted to .07 per cent of the year's total hog slaughter at packing plants. By 1962, this figure had been reduced to .02 per cent.

In the case of poultry, carcasses condemned because of the disease amounted to 0.7 per cent of the year's total kill in 1942. By 1962 the figure had slipped to 0.1 per cent.

An estimated 85 per cent of the TB found in hogs is of the avian type — most of it spread by poultry that are allowed free access to hog pens, observes Dr. J.E. Lancaster, a specialist in poultry diseases with the Health of Animals Branch.

Unlike TB in swine which usually causes localized lesions in the glands of the head and neck, tuberculosis in poultry produces intestinal lesions and the germ is spread in the droppings.

Good management practices and the simple rule of keeping poultry flocks away from swine herds would help considerably in eliminating the disease from hogs.

Control of tuberculosis in poultry also requires good management practices because, once established, the disease organism is difficult to eradicate.

Resistant to atmospheric conditions and to freezing, the germ may survive for several years in the soil of the poultry range, in manure, and in dust and dirt in the poultry houses.

Good management, clean premises and the trend toward the use of battery cages for laying fowls are the big factors in the decline of tuberculosis in poultry, Dr. Lancaster points out.

FEW NEED WORK

The unemployment rate in Australia fell to 1.1 per cent during February to 24,941 men and 25,806 women.

HUGHES DRUG CO.

GIVE YOUR ANIMALS BRAND NAME PROTECTION

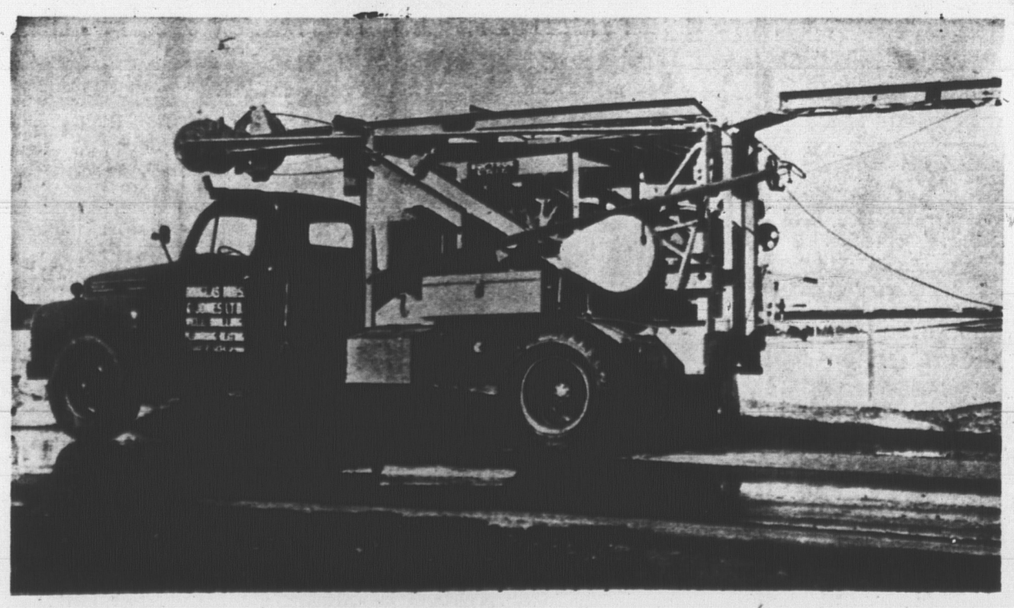
When you buy animal products, the Investment of a few extra pennies to give your herd and flock the protection only the best products afford is a wise one. It pays in immediate results — it pays in future profits — to buy Famous Brand products known to one and all for quality and dependability. These are the products you get at HUGHES DRUGS — at money-saving low prices.

"YOUR DOLLAR BUYS MORE AT THE HUGHES DRUG STORE"

Hughes Drug Co. Ltd.

150 Queen St. Charlottetown Dial 4-5545

GUARANTEED WATER SUPPLY



.....FOR YOUR LIVESTOCK
.....FOR YOUR HOME

e a guaranteed water supply foryour house or herd ... use as mu ch as you wish, because t h e rewill always be lots there! Now is the time to make your appoint-ment with us for the spring or su mmer -- so you can have yourwell drilled when you want it.

PHONE TODAY FOR AN APPOINTMENT

DOUGLAS BROS & JONES INC
155 KENT ST. DIAL 2-1234

HOW ABOUT A PICNIC?

BUT

First to. . .

SAVE-EASY

"The Home of Budget Wise Shoppers"

"Picnic-time" is Just around the corner and people everywhere are looking forward to bright Summer weather and fun-filled Summer activities. "SAVE-EASY" is stocked full of all the delicious foods to complete your picnic, barbecue or friendly get-togethers this Summer. There are tasty cello-wrapped cold meats, hamburg and steak for your barbecues, wieners for your hot-dog parties, pickles of all kinds, soft drinks, fresh lettuce, celery, tomatoes, etc. So when you're food-shopping this Summer visit your friendly SAVE-EASY store and pick up the necessary food requirements that will complete your Summer picnics and all other Summer entertaining activities. "It's so easy to SAVE at 'SAVE-EASY'."

GAUDET'S SAVE-EASY
Granville Street
SUMMERSIDE

ELLIS BROS. SAVE-EASY
St. Peters Road
SHERWOOD