



MODERN FARMER

Agricultural Notes From Britain

The Duke of Windsor is to establish a Hereford herd at his Alperia ranch. When this became known on the second day of the Three Counties Show at Leominster recently, Hereford breeders expressed great satisfaction and there was much speculation on whether the Duke would import a stock bull from Britain. His father, King George V, who bred Herefords, gained many successes at leading shows.

The most impressive event at this show was the magnificent parade of cattle with the Herefords occupying pride of place. They were undoubtedly among the finest ever seen in the Three Counties show ring.

Overseas farmers touring the showground, made inquiries about pedigree cattle for export. Judging, which went on for most of the day, attracted large ring-side crowds. The supreme championship went to Vern Boxer, a magnificent bull owned by Mr. R. S. de Quincey, of Hereford. His Vern herd is world-famous.

Vern Boxer, who was also champion at the Shropshire and West Midlands Show, is one of the best sons of Vern Robert. This 11-year-old bull, though he has never appeared at any show, is known the world over. His sons have been sold for more than £100,000, mainly in South America and Australia.

Artificial Insemination Of Cattle On Increase

One in every three registered dairy farmers in England and Wales now use artificial insemination in their herds instead of keeping a bull. Figures showing the spread of this method—expected to be the biggest factor in increasing milk production in the near future—were issued recently by the Milk Marketing Board.

Five years' operations have just been completed by the Board. During the year ended March 31 last there were 55,000 farmer-members of the 23 insemination centres where 500 bulls are kept, and more than 431,000 cows were inseminated. This compares with a membership of 92 farmers and 6,400 cows inseminated during the year ended March, 1946.

There are also private stations operating. At one of these, controlled by the Cambridge University Farm, a "walkie-talkie" system is used. Inseminators are directed by radio from one farm to another.

Thousands of calves produced by artificial insemination are now mature milking cows and show substantial increases in milk yields as compared with their dams. One expert estimate is that within five years the new system will mean an increase of 50,000,000 gallons of milk annually from the same cow population.

A leading Cheshire dairy farmer, Mr. O.W. Hobson, of Nantwich, says: "Ten years ago at least two-thirds of the smaller herds were using inferior bulls, but now, through artificial insemination, they have access to some of the best bulls. The effect on the future of milk production will be tremendous."

New Insecticide

In London, a weapon completely new to Britain was recently demonstrated for use against flies, gnats, mosquitoes and other winged insects. About 140 files were placed into a glass case. Within two minutes every one had dropped as a result of a one-second spray of an insecticide being manufactured by Messrs. Cooper, McDougall and Robertson, Berkhamsted, Herts.

The weapon is a low pressure insecticidal aerosol, now available for housewives, farmers and in-

Hay And Grass Silage

OTTAWA, July 23 — Many tons of baled hay have been lost by harvesting at too high a moisture content, and storage losses in both chopped hay and grass silage have resulted from poor storage.

Hay harvested by a pick-up baler should have a moisture content of 20-50 per cent depending on the type of hay and the density of the bale. Mature timothy hay baled loosely may be stored satisfactorily at 25 per cent moisture content, or at the same condition as loose hay. Early cut alfalfa clover mixture baled tight should have a moisture content not exceeding 20 per cent.

Baled hay may be handled in the barn by hand, by elevator or by a grapple fork on the hay track. Some breakage will occur with the grapple fork but will not be too serious if handled carefully. As baled hay weighs 4-5 times as much as loose hay per cubic foot care should be taken not to overload the hay mow floor.

Chopped hay cut to a length of 4 inches takes up about the same storage space as loose hay and so can be stored at the same moisture content. However, if the machine is set to cut 2½ inches, the hay should be particularly dry before it is placed in the mow. Chopped hay should be distributed evenly in the barn by frequent adjustment of the blower pipe nozzle and under no condition should be walked on or tramped.

In making grass or legume silage the moisture content should be 60-70 per cent and should be cut at the proper stage of maturity. The crop should be cut into short lengths by setting the machine for a ¾ inch cut or preferably ½ inch. Knives should be kept sharp and set close to the cutter plate. The cutting schedule should be arranged to correspond with the ensiling operations as closely as possible.

If part of the crop becomes a little drier than desired, it can be mixed with freshly cut material as the crop is loaded in order to obtain the desired moisture content. The ensilage should be packed thoroughly as it is put in the silo and tramped every 5 days for about 30 days after filling. To seal the top, the last 4 feet should be filled with green material freshly cut.

Complete details on the storage of silage are available in the Dominion Department of Agriculture Publication No. 525, "Silage Production". Information on equipment and methods of handling hay and silage is contained in the Dominion Department of Agriculture Publication No. 828, "Equipment for Harvesting Hay and Silage."

dustrial concerns. Although nine times more powerful than any standard fly spray, it is harmless to men, beasts and food, but deadly to insects. It is non-inflammable and will not taint milk.

The sprays are self-contained and automatic in operation. The basic principle is the dispersion of a liquid by means of a propellant. On pressing the button, a fine mist-like spray is emitted through a special nozzle and it remains floating invisibly in the air. Because of the high concentration, only very small amounts need be used.

This Aerosol fly-spray for farm use, is claimed to be equivalent in insecticidal effect to nine pints of standard fly-spray.

UNSCHEDULED PERFORMANCE

STETTLE, Alta. — (CP) — Several elephants with a circus outfit here gave an unscheduled performance recently when heavy rains made roads almost impassable between Stettler and Lacombe. The elephants were used to haul bogged-down vehicles out of ditches.

Agriculture Chiefs In Ulster



CANADIAN AGRICULTURE CHIEFS VISIT ULSTER — (left to right): Austine G. Taylor, Minister of Agriculture for the Province of New Brunswick, Canada, and William R. Shaw, Deputy Minister of Agriculture for the Province of Prince Edward Island, Canada, on the farm of Sam Neill, Fonthill, Bangor Co. Down looking at the fine Friesian bull New Orchard Feaman.

Nectar Content Varies In Plants

Nectar concentration in a strain of red clover may be improved by selection, according to recent tests carried out in the Division of Forage Plants, Central Experimental Farm, Ottawa. While this work is still in a preliminary stage, officials find good indications that the amount of nectar secreted may vary not only from plant to plant of the same variety, but from flower to flower on the same plant.

Different fertilizer treatments were found to have little if any effect on the amount of nectar secreted by the plants. Once considered as food for the gods, nectar is the substance that bees extract from flowers and later convert into honey. As bees fly from flower to flower in search of nectar, they act as nature's pollenizers. Their activities in this regard have engaged the attention of agricultural workers for many years. Recently various divisional officials in Canada's Department of Agriculture started a co-operative study in the seed production of alsike clover, red clover and alfalfa.

Advising on the different aspects of the problem will be the Forage Plants and Bee Divisions of the Experimental Farms Service, and the Division of Entomology, Science Service. The work will be done on branch farms and laboratories in British Columbia, Ontario and Saskatchewan.

Farm Briefs From Abroad

Beetles Cause Ban

The appearance of the Colorado potato beetle late in May in the Netherlands resulted in the suspension of cauliflower exports to the United Kingdom. Weather conditions were reported favourable for the insects and large numbers appeared. Inspection and control measures were put into effect in accordance with the European Colorado Beetle Control Regulations affecting the United Kingdom, the Netherlands, Belgium and France.

Corn for France

Hybrid corn will be used to increase the domestic production of this crop in France, where at the present time less than 50 per cent of the consumption is home grown. It is planned to use American hybrids for a start and experiments are under way to determine the varieties most suitable for the various zones under consideration.

Study Grassland Improvement

International experts met last month in Paris to study methods of improving grasslands in Europe. Numerous experiments have been conducted during the past few years and the conference was designed to enable the results to be discussed and compared and the best possible techniques applied to the different conditions.

Wine Production Up

Wine production has steadily increased during the last 50 years in North and South America and in Africa, and world production has been stepped up about 23 per cent. It was revealed at a wine conference held recently in Algiers. While North America is reorganizing her wine production, it is not considered as a dangerous threat to French exports there.

MACHINERY FOR POTATO PRODUCTION

OTTAWA, July 23, 1950 — For the commercial production of potatoes a grower requires specialized equipment to care for and market his crop. This equipment usually consists of a potato seed sower, planter, hiller and cultivator, sprayer or dusting digger, harvester, and a potato grader.

Power seed cutters, requiring a crew of two men, are now available that will automatically cut seed potatoes. Other hand operated machines are suitable for the small grower.

Planters may be either the assisted feed or picker type of machine. The picker type is fully automatic and plants sets with little error. The assisted feed machine requires one man per row to attend the seeding mechanism but a very high degree of accuracy is possible. Both types of planters may be equipped with fertilizer attachments that distribute the fertilizer in hands on each side of the row.

Standard row crop cultivators may be used for weed control be-

Cherry Olives a Canadian Product

Is there such a product as a distinctly Canadian food? This is a question that tourists and visitors often ask on arrival in Canada. Cherry olives, a form of pickled cherry, are a unique product that can claim Canadian origin, says F. E. Atkinson, Experimental Station, Summerland, B. C. This delicacy, he said, had been packed by housewives in British Columbia for many years and is now available as a commercial product.

Large, luscious, fully ripened Bing, Lambert or Royal Ann cherries are used in the manufacture of this product. They are preserved with vinegar, salt, sugar and spices to make a very attractive hors d'oeuvre or pickle. Recipes for processing cherry olives in the home may be obtained by writing to the Fruit and Vegetable Products Laboratory, Experimental Station, Summerland, B. C.

tween the rows. To control the weeds within the row and to mould the earth around the plants, disc or mouldboard hillers are used.

Sprayers or dusters are necessary to control disease and insects in the crop. Power driven or tractor mounted units are more easily adjusted to apply a uniform amount of dust. Sprayers capable of applying 60 to 150 gallons per acre are necessary. To reduce crop injury these machines should have an adjustable width of wheel tread.

With heavy crops, it may be necessary to attach vine lifters to the tractors and wheel equipment to reduce injury to the potato vines during the growing season.

Potato diggers of the apron type when properly adjusted handle the tubers carefully and result in a minimum of injury. Two row diggers may be designed with two separate elevator chains or they may have one wide chain that will lift two rows at one time. For best performance the large diggers should be power or tractor driven. Picker attachments that allow the vines and refuse to be removed and permit the potatoes to be bagged, are becoming popular in areas free of stone. Complete harvesters are available to lift and bag the crop.

Graders are used to size and sort the potatoes. Machines that employ rubber spools or wire mesh belts are two popular types of units. Either style of grader will size the potatoes but the rubber spool machine is claimed to clean and grade the tubers with a more gentle action.

Plant Protection With Antibiotics

Penicillin is a household word in the world today. Not only has it revolutionized medical practice and saved many thousands of lives, it represents a new approach to disease control in man and animals and now plant scientists are seeking the counterpart of penicillin as an ally in the fight to control plant diseases.

This so-called "miracle drug" is but one of several antibiotics, or chemical substances produced by micro-organisms which check the growth or interfere with the life processes of other minute forms of life that may produce diseases in man, animals or plants. Other less well known antibiotics besides penicillin, include streptomycin, aureomycin and some others that are still on the secret list.

For some time, plant pathologists and bacteriologists in the Department of Agriculture, Ottawa, have been engaged in fundamental research work dealing with substances similar to penicillin as a means of controlling certain seed-borne diseases of crop plants and progress is being made.

Before a disease can be adequately controlled, first the organism causing it must be isolated and its life history studied, so it can be hit at the weakest point with the most effective weapon available. Canadian scientists are hopeful that a counterpart of penicillin can be found to combat plant diseases, which might eliminate some of the costly and rather elaborate spraying and dusting methods used at present. Several antibiotics tested show promise for instance, in the control of a fungus disease that is proving a limiting factor in pea production, as so far it has defied all ordinary control practices used against it.

Off Types Found In Oats

OTTAWA, July 23 — Several varieties of oats have been treated with 2,4-D during the past few years at the Dominion Experimental Farm, Indian Head, Sask. Esters of amine and sodium salt formulations have been used at rates varying from two ounces to 32 ounces of acid equivalent per acre. The crop was sprayed at three stages, 3-leaf (six inches high), shot blade and heading.

Numerous off-types have appeared, says E. Buglass, the amount varying with the variety of oats, formulation and rate of 2,4-D. The kind of off-types are the same regardless of treatment or variety. Split leaves, onion-like leaves, and irregular blister-like lesions are frequently found, but it is in the development of the head that the effect of 2,4-D is most noticeable in the production of off-type growth. Twisted and distorted panicles are frequently found.

Twin panicles (heads) are frequently found, that is, two or more panicles can be found arising from the top joint instead of the usual one. Panicles have been found with one main panicle, and four or five additional panicles growing from the last node, usually enclosed by the leaf sheath.

When treated at the shot blade and heading stages very few off-types were found. Off-types were frequent when the oats were treated at the 3-leaf stage.

The varieties reacted differently in the development of off-types, Ajax producing the least, and Exeter the greatest amount. Victory and Vanguard fell in between, but were more like the Exeter.

Sodium salt induced the fewest off-types and ester the most, with amine in between but more like the ester. Generally the rates of application caused an increase in the amount of off-types from the low to the high rates. The two ounce rate of ester produced more off-types in all varieties treated

Good Soil Management

OTTAWA, July 23 — Owing to the conditions under which they have been developed, many soils of the Maritime Provinces do not possess a high natural fertility but they will respond very readily to good management. Practical experience on many farms in Prince Edward Island and results of soil fertility experiments at the Charlottetown Experimental Station have shown the value of good management in maintaining good crop yields.

Much has been written about proper land-use in its broad aspect. Once the areas to be maintained for agricultural purposes are determined, probably the most important factor in good management of agricultural land is the type of crop rotation followed.

The rotation should provide for a reasonably long period under grass crops. Most farmers have observed that when land has been more or less idle for several years the following crops are better. This is attributed to the accumulation of plant nutrients in the soil during the period of rest from cultivation. The rotation should include the use of deep rooted crops, such as alfalfa. Deep rooted crops are able to make use of plant food minerals in the deeper sub-soils. Some of these minerals will be added to the surface soil in plant residues returned to the land. A good rotation copies nature's soil-building processes for replenishing the soil with minerals and organic matter.

Continued cultivation and cropping favour the rapid depletion of soil humus and plant food minerals. The system of regular rotation should provide for the regular return of organic materials to the soil and for the supplying of lime, phosphorus, potash and nitrogen sufficient to maintain vigorous growth of all crops in the rotation, including the grass crops which are often neglected.

Maintaining the humus or organic matter content of the soil at a high level will aid in maintaining a good physical condition. A plentiful supply of humus in the soil and good physical condition make the soil more porous yet more absorptive. Consequently, air can enter and circulate more freely through the soil, which is essential for good crop growth, and the soil will take up and retain more of the rainfall for the use of the growing crops.

Owing to the naturally strongly acid conditions of most soils in the Maritime provinces the use of lime is essential. It is needed to correct the acidity of the soil and provide more favourable conditions for the working population, the micro-organisms, of the soil.

When the soil is well supplied with organic matter and lime the plant nutrients natural to the soil and those applied in commercial fertilizers are maintained in a more available form for plant use. While the inherent characteristics of the soil will, to a large extent, regulate the type of agriculture followed and the productive possibilities of the soil, the soil management practices followed will determine the ultimate productive capacity of the soil and the success of the individual farm enterprise.

than did the eight ounce rate of the amine or sodium salt.

In 1949 second growth was profuse, particularly when treated at the 3-leaf stage. Off-type development in the second growth followed the same trend as in the mature plants.

Seed from off-type plants has been grown to the third generation, and so far there is no indication that the off-type characters are inherited. Plants grown from seed of off-type plants have been normal.

Canadian and United States Stockyards Compared

OTTAWA, July 23 — Commission agents and leaders on public markets in the United States have a wide knowledge of the livestock industry; play a prominent role in their respective communities and all show a strong faith in the industry as a whole, said R. K. Bennett, Marketing Service, Department of Agriculture, Ottawa, who accompanied a group of Canadian commission agents and stockyard managers on a recent tour of markets in Chicago, Kansas City, St. Joseph and Omaha.

Great stress is placed on the value of a public relations program in the United States by the different proprietors and livestock exchanges and their opposite numbers in Canada could learn many lessons in public service from them, declared Mr. Bennett. He cited Sioux City where approximately \$40,000 is used for a varied program of public relations activities, this sum being charged about equally to the stockyard company and to the livestock exchange.

Classes are put on for everyone working around the stockyards radio programs and a market paper are provided, and well organized promotional work of a varied nature is undertaken. This consists of judging at fairs, promoting junior farm club work organizing livestock field days bringing groups of university students to the market, and having representatives at every livestock meeting.

Comparing the operation of the public stockyards in the two countries, Mr. Bennett said that the livestock salesman in the United States are not any more efficient in actual selling than they are in Canada, but that they have more services to work with and possibly are more adaptable to changing conditions than here.

He emphasized the point that in the United States prices generally are set to a great extent in the public stockyards and that the livestock are sold by highly qualified sales agencies. The spirit of co-operation was found to be much in evidence throughout the industry and while all connected with it believed strongly in advertising, they fully realized the importance of having what they advertised.

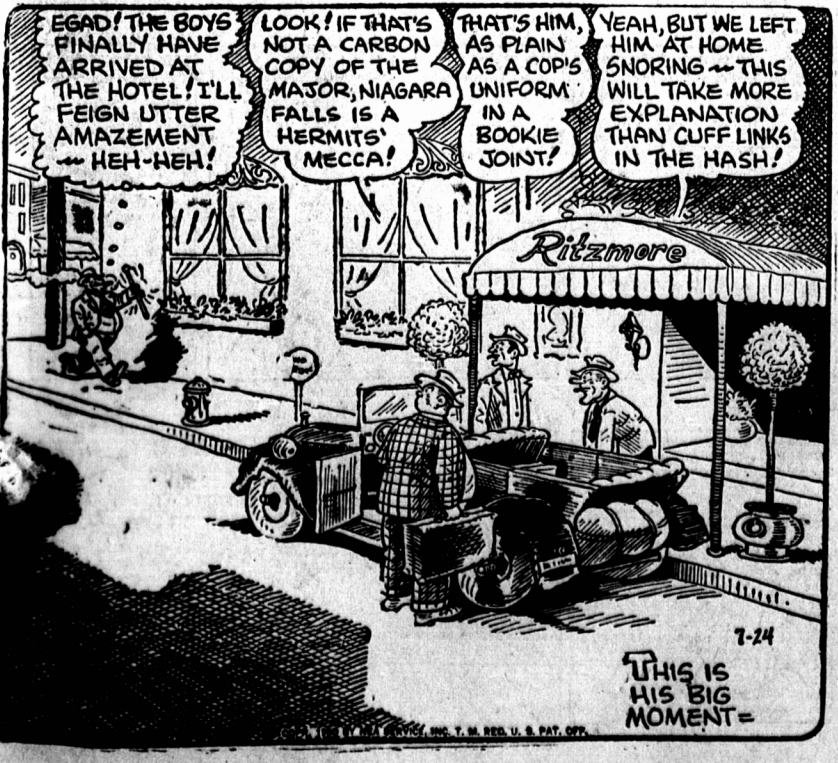
TOURIST BOARD

The British Tourist and Holidays Board, a non-governmental body, was set up in January 1947.



A pitchfork wielding grandmother, of Schomberg, Ont., Mrs. J. Rainie, shown left, 54, drove two vicious 300-pound sows from their repeated attacks on her daughter-in-law and three-year-old grandson, and there-by saved the lives of Mrs. Regina Rainie and Jimmie. Daughter-in-law and grandson are in York Memorial hospital, Newmarket, suffering multiple bites to their arms and legs. The mother had thrown herself over the prostrate form of her son after a pitchfork was knocked from her hands by the force of the sows' attack. Attacking sows, shown, were vicious because there were piglets in the vicinity.

OUR BOARDING HOUSE



EGAD! THE BOYS FINALLY HAVE ARRIVED AT THE HOTEL! I'LL FEIGN UTTER AMAZEMENT — HEH-HEH!

LOOK! IF THAT'S NOT A CARBON COPY OF THE MAJOR, NIAGARA FALLS IS A HERMIT'S MECCA!

THAT'S HIM, AS PLAIN AS A COP'S UNIFORM IN A BOOKIE JOINT!

YEAH, BUT WE LEFT HIM AT HOME SNORING — THIS WILL TAKE MORE EXPLANATION THAN CUFF LINKS IN THE HASH!

Ritzmore

7-24

THIS IS HIS BIG MOMENT

OUT OUR WAY



OFF THEY COME! THOSE WHISKERS HOLD AS MUCH WATER AS A SMALL TOWN STREET SPRINKLER—WHERE ARE THE SCISSORS?

OH, PLEASE, MA, DON'T! THAT SQUARE CHIN IS WHAT MAKES HIM LOOK LIKE A BATTLER—DON'T MAKE HIM LOOK LIKE AN ANT-EATER!

COME ON, WILLIE WINKIE, SHE'LL BE OVER IT IN A MINUTE OR TWO!

7-24

J.R. WILLIAMS

WHY MOTHERS GET GRAY

DRINK Coca-Cola PLAY REFRESHED