

have exerted a great influence in the improvement of their respective breeds have been born in quarantine."

Dairy cows require food for two purposes mainly, viz., maintenance and production. The demands of maintenance—which means self-preservation—must be and are met first. When these needs are met the surplus of feed goes to production. Consequently the more food which a cow eats beyond maintenance the greater should be her production until her capacity to make milk is reached. This point is readily arrived at by increasing the amount of feed in the ration every other day until one does not find a corresponding increase in milk yield; by varying the amount of food about this maximum one soon learns just the right amount of food for each cow, and this balance should be maintained. The food which goes for maintenance does not bring in any cash returns, the amount of food above maintenance which each cow consumes goes for production, and the returns therefrom must pay for the entire feed bill. Consequently it is the cow with a large capacity for milk production and a large capacity for feed that can show a profit. Seldom is the dainty, delicate feeder profitable.—Live Stock Journal, England.

Canada's Rank in Live Stock.

Recent figures published by the Canada Food Board and the Live Stock Branch of the Dominion Department of Agriculture throw an interesting light upon Canada's status as a live stock producing country. We give a number of these figures here for careful consideration by our readers, who, we hope will study them carefully with a view to determining how best and most profitably they can assist in building up the live stock in this country, and make our animal products in great demand in European markets. The figures concerning the United States are taken from the United States Census of 1910, and Canadian figures used in comparison of live stock with area and human population are taken from Canadian Census of 1911. Figures for Canadian exports are based on the returns of 1917, while European comparisons in the larger table are for 1916, and 1917, and the live-stock shortages given are the latest official estimates of the British Food Administration.

The Canada Food Board says: "By a careful study of the figures and comparisons the enormous possibility for development of the Canadian live-stock industry on a broader basis is apparent. With the reestablishment of normal commercial communications with Europe on the restoration of peace, a tremendous demand upon the live-stock industry of this country will have to be anticipated and prepared for. Increased production of live stock is of vital importance to Canada and her future, and is the most valuable reconstruction work that can be done." The accompanying tables show Canada's rank as a live-stock producing country, and the surprising extent to which cattle and hogs have decreased in seven of the European countries. Figures from the Department of Agriculture at Ottawa show that, altogether, France is short nearly 8,000,000 head of live stock; that Italy has had to sell her breeding stock; that Germany has suffered a decrease of 22,000,000 head of cattle and hogs, in addition to sweeping Belgium

European Decrease of Cattle and Hogs Since 1914.

Country	Head of cattle	Head of hogs
France.....	2,366,000	2,815,000
Italy.....	996,000	354,000
Denmark.....	345,000	1,837,000
Sweden.....	599,000	353,000
Germany.....	2,200,000	19,360,000
Austria-Hungary.....	Considerable	Considerable
Holland.....		162,000

Canada's Rank as a Live-Stock Producer.

Country	Rank in Animals per Hundred Acres in Farms.			Number Animals per Hundred Acres in Farms.		
	Cattle	Sheep	Hogs	Cattle	Sheep	Hogs
Holland.....	1	6	2	29	12	19
Denmark.....	2	9	1	25	3	22
Germany.....	3	8	3	16	4	14
Great Britain.....	4	2	7	16	52	5
France.....	5	5	6	12	13	6
Italy.....	6	3	8	10	21	4
Australia.....	7	1	—	8	58	—
United States.....	8	7	4	8	6	8
Argentina.....	—	4	—	—	15	—
Ireland.....	—	—	5	—	—	7
Canada.....	9	10	9	6	2	3

bare; that Ireland now supplies about 4,000 hogs a week only, instead of 18,000 as formerly; and that Britain's domestic supply of hogs is only seventy-five per cent. of normal. What the Canada Food Board describes as Canada's live-stock opportunity is shown by British imports of 1,077,154,000 lbs. of beef; 1,261,082,032 lbs. of hog products, as compared with an export from Canada to Britain of 29,580,000 lbs. of beef and 130,304,900 lbs. of hog products. With regard to sheep, "It has been estimated that before the world's supply of wool can become normal it will take six years." The prices of raw fleece wool in Canada are given as follows: 1912, 14 cents per pound; 1913, 17 cents; 1914, 20 cents;

Province	Sq. miles	Popu- lation per sq. mile	Cattle		Sheep		Hogs	
			No. head	Per square mile	No. head	Per square mile	No. head	Per square mile
British Columbia.....	355,855	1.1	139,184	.4	39,272	.1	33,604	.1
Albera.....	255,285	1.5	739,725	2.9	133,592	.5	237,511	1.0
Saskatchewan.....	251,700	1.9	633,638	2.5	114,216	.4	286,295	1.1
Manitoba.....	251,822	1.8	435,568	1.7	37,322	.2	188,416	.7
Ontario.....	407,262	6.1	2,501,536	6.1	742,188	1.8	1,887,451	4.6
Quebec.....	706,834	2.8	1,453,269	2.1	637,088	.9	794,351	1.1
New Brunswick.....	27,985	12.5	222,228	8.0	158,316	5.7	87,393	3.1
Nova Scotia.....	21,428	22.9	287,492	13.4	221,074	10.3	63,380	3.0
Prince Edward Island.....	2,184	44.9	113,443	52.	91,232	41.8	56,377	26.
	2,280,365		6,526,113	2.9	2,174,300	.9	3,634,778	1.6
Fifteen most important States in U. S.			39,900,000	33.55	39,200,000	26.02	42,900,000	39.84

1915, 27 cents; 1916, 32 cents; 1917, 60 cents; 1918, 68 cents.

The above information, together with the accompanying tables, is, we think, worth careful study and analysis.

Common Parasites of Swine.

Swine are subject to several parasites external and internal. Of the first class the most troublesome is the ordinary hog-louse. These insects are responsible for much unthriftiness and poor gains; are an advertisement of the unobservant eye or carelessness of the feeder, and are intolerable in that unless the infestation is of long standing, they are fairly easy of eradication.

METHODS OF ERADICATION: 1.—Pigs may be dipped or sprayed with any good creolin or coal-tar disinfectant, made up as per directions accompanying the preparation.

2.—Coal oil or kerosene is used by some. Though effective it has a blistering action and should be avoided.

3.—Fuel oil is highly recommended. Experiments with it at Ottawa proved it efficient, but slightly irritant and leaving the hair of the pigs in a dirty, discolored condition.



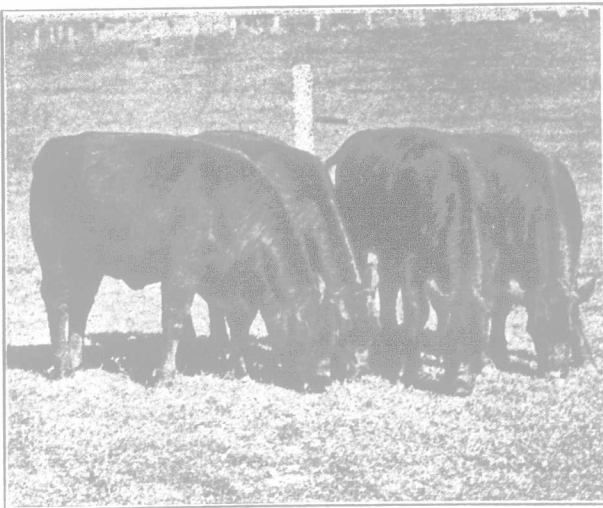
Graceful Lady.

First prize yearling Hereford heifer at the Guelph Winter Fair for O'Neil Bros., Denfield.

4. Crude castor oil is non-irritant, soothing, and quite destructive to lice. Where procurable it forms possibly the best application for this purpose. At present, the price of castor oil is too high to permit of its use for such purposes.

5.—Paraffin oil (low grade) as now used in the herd of swine at the Central Experimental Farm, has proven non-irritant to the skin and quite effective as an insecticide. It is cheap, easily procurable and colorless.

6.—Apply disinfectant washes (creolin, etc.) with a brush, broom, spray-pump, or in the case of the large herd, by the dipping method. Apply oils with a cloth or more conveniently still by using a large oil can with a handle and long spout. File a short section from off the end of the spout to increase the amount delivered. Apply a stream of oil over the neck, shoulders and along the back. The heat of the body will cause the



A Group of Baby Aberdeen-Angus.

application to spread over the body. A large number of hogs can be treated conveniently and quickly by such means.

7.—Repeat the application after ten days to destroy the lice or nits.

8.—If pigs are seen to be badly infested, a thorough clean-up of the premises would be indicated, using a strong creolin spray over all.

INTESTINAL PARASITES.—Of intestinal parasites the round worm is much the more common. In most cases examination of the smaller intestine of slaughtered pigs will reveal the presence of a few large white worms. In small numbers they appear to cause little inconvenience to the animal; a considerable infestation will cause a marked falling off in general condition. Young pigs so affected, are thin, stunted and lacking in vigor and thrift. Severe infestation will frequently cause intestinal inflammation or stoppage, resulting in death.

Where pigs are kept reasonably clean, and supplied with fresh water, the danger of infestation is small. Filthy surroundings together with stagnant or foul water usually predispose to such parasitic infestation. Prevent by cleanly methods and the use of any good mineral corrective mixture. There are a number of these on the market. A good home-made substitute is a mixture of charcoal, woodashes and salt; or of sulphur, salt and iron sulphate mixed in equal parts,—take one part with 8 parts charcoal and 8 parts ashes, mix well and allow the animals free access to it. Where pigs are infested, turpentine is the best remedy. Give 1 teaspoonful to every 100 pounds weight, after fasting the animal for twelve hours. This may be mixed in the feed and given for three successive days. Follow this with a good purging of Epsom salts.—Experimental Farms Note.

Care of Sows and Pigs.

EDITOR "THE FARMER'S ADVOCATE":—

I find it pays to keep pigs clean with plenty of straw for bedding, and to keep them warm in cold weather if I want them to do their best. The pen I use is frame, west side double-boarded with tar paper between, to keep the wind out. It has a pine plank floor. The sow farrows in the basement of barn in a box stall or shed. We do not bother much with her as she is very careful. Between litters she is allowed to run around the straw stack and out on a grass-lot where she gets plenty of exercise. She is fed some oat and barley chop to keep her in fair condition but not too fat. After farrowing for thirty or thirty-six hours she gets no feed, then I feed light for a few days increasing gradually. The feed is oat and barley chop with skim-milk. When the pigs are three weeks old I use a small trough just outside the mother's pen; they soon learn to drink warm separator milk and eat fine-ground oat chop. They are weaned at six or seven weeks of age. At this time they are examined for black teeth and if such be found they are nipped off with a small pair of pinchers, as they cut the tongue and sides of the mouth, then gradually the feed is increased to oat, barley and emmer chop, then at about four months the oats are reduced and more barley added. Sometimes I add corn or oil-cake meal the last month or six weeks.

Wentworth Co., Ont.

E. R. SMITH.

THE FARM.

Fair Play.

EDITOR "THE FARMER'S ADVOCATE":—

Fowl-less dinner tables were in evidence in Sarnia on Christmas day, the outcome of strained relations between producer and consumer, following an act of the city council in appointing a price committee, re farm produce.

Farmers, feeling the injustice of it, have practically boycotted the market, turning elsewhere with their Christmas fowl where their trade has not been tampered with. "Why not the various merchants of other lines whose prices are exorbitant?" is one of the pertinent questions asked. Remarks heard on the market or street corners prove all too clearly that the breach—always but lightly bridged—between rural and city dwellers has been woefully widened.

Too often the consumers complaining know little or nothing of the cost of labor attendant upon farm production and view the farmer as a plutocrat. Seeing only the part that goes into the producer's pocket-