

quired to pass through should be at least five feet wide to prevent crowding. Have a small inclosure made warm for ewes at lambing time. In wet or stormy weather sheep should be shut in. Sheep should not have so warm a house that their wool will feel wet to the touch. If sheep are kept in too warm a place they are very apt to catch cold and contract disease.

**Feed for Breeding Ewes.**—Well-cured pea straw and clover hay with one pound oats per day is the best ration, with two-thirds salt and one-third sulphur where they can have access to it at all times. All sheep should have this in winter under cover. The best way to salt in summer is to bore a number of holes in a piece of timber with a three-inch auger, four inches deep, fill two inches with wood tar and the remaining two inches with salt and sulphur. The tar will prevent the fly from laying the egg in the sheep's nostril which causes grub in the head. The sulphur will prevent ticks.

Lambs should be separated from their dams the first week of September. Ewes should be turned on a bare pasture and examined carefully every day for fear of an overflow of milk. As soon as they are dried off take all the ewes three years-old or older and any inferior ewes and all the lambs you do not wish to keep (but do not allow any price to tempt you to part with your best ewe lambs), turn into a field of good grass, feed one pound of beans or peas per day to each sheep as long as the grass is good; when the grass becomes frozen have an inclosure as already described, feed all the early cut, well-saved clover they will eat up clean; still continue one pound of peas or beans with five pounds of roots per day. By feeding in this way they will be in good shape for the Easter market. Always avoid marketing when the market is glutted, which generally occurs in the fall of the year. Have a piece of rape for autumn feed, and have it in connection with a grass field; do not allow the lambs to go on to it hungry for fear they eat too much at once and cause bloating.

### The Feeding and Management of Swine.

(Continued from page 73.)

1.—At what age do you choose to have sows farrow their first litters, and do you prefer one or two litters the first year, and also after that time?

2.—(a) Which do you find most success with—fall or spring litters? and (b) how do you manage your spring-farrowing sows during the winter season with regard to quarters and food with a view to economy in feeding and welfare of the offspring?

3.—How do you summer your brood sows, and what value do you place upon pasture and by-products of the dairy as summer foods for them?

4.—How do you manage the sow and pigs from the birth of the litter to weaning time, and at what age do you prefer to wean them?

5.—What would you recommend in the housing, general care, feeding, and exercise of pigs from weaning till marketing, looking to growth and good health?

6.—At what age and weight would you market live hogs or dressed pork in order to obtain the greatest profit?

7.—What is your estimate of the advantage or disadvantage of keeping the young pigs gaining rapidly without a halt from the time of weaning until they go to market?

8.—What do you consider the most profitable ration to feed during the last two months of fattening?

9.—Have you made any calculations as to the cost of a pound of pork, live or dressed, according to your method of producing it, and with what result?

If any important points are omitted our readers will oblige by dealing briefly with them.

### A Pound of Pork for Three Cents.

1.—We prefer our sows to farrow the first litter at from 10 to 12 months old, and one year from first to second litter; after that, generally speaking, two litters per year.

2.—We cannot say that we find any noticeable difference between the spring and fall litters when proper attention is given to the sows. For spring or winter litters we keep sows in a warm, dry place at least one week before they are due to farrow. Have fenders all around pen to protect the young pigs from being squeezed against the wall, and change bedding say twice each day for awhile, in order that the young pigs would not lie in a damp bed. We do not feed sow much at first. A little skim milk and shorts, with full access to charcoal, etc., is sufficient.

3.—Brood sows we always summer on pasture, and seldom anything else except plenty of water.

4.—By feeding sow sufficient wholesome food to keep her and her young thriving, but not allow either to get too fat. Give young pigs a trough to themselves after one month old, with a little new milk in it. Wean from six to ten weeks old.

5.—Good comfortable quarters to feed and sleep in, with outside exercise as much as possible.

6.—From five to seven months. All depends on how they have been cared for; if properly handled at five months they would go 150 lbs. to 175 lbs, which is more profitable to the breeder than heavier weights.

7.—If a hog is not kept growing, all the feed that it takes to keep him alive during that time is entirely lost to the feeder.

8.—Shorts and some heavier feeds mixed in conjunction with dairy slops, as a rule, is the most profitable feed to fatten on.

9.—The cost of a pound of pork would be determined by the value of the food consumed, but can be produced with the present price of food, and make a fair allowance for manure, from 3c. to 3½c. per pound live weight.

WM. JONES.  
Norfolk Co., Ont.

### Early Fall Litters Most Profitable.

1.—At twelve months old or sooner if sow is well developed, as the sooner they are put to breeding the better mothers they make, although they may not have large litters for one or two litters, and in all cases two litters a year if possible.

2.—Early fall litters are the most profitable, as they are fit to sell when pork is dearest, and they grow faster and have a good start before the hard winter sets in. Where pigs are sold for breeding purposes the spring litters are the most profitable. The sow should be allowed to run about in winter or summer and have a dry, warm place to lie in.

3.—A run to any kind of pasture in summer is good. A drink of skim milk is all a sow will require, when it is to be had. Whey is not good for a sow in farrow unless grain is fed with it. Whey and pasture alone will not do.

4.—Feed the sow slop in which bran is soaked, cooked potatoes, etc., for the first three days, then add grain. We feed skim milk, soaked peas and bran and find them the best feed a sow and pigs can have. At two to three weeks old the pigs will eat the soaked peas (by throwing them in a shallow trough) and will grow and gain rapidly from the day they begin to eat.

5.—At six weeks old take the sow away and they will not miss her, and will thrive right along. Keep them in a dry, warm pen, with a good yard to run in, and do not let them out until they are fit for market.

6.—Market them at the weight of 125 to 175 pounds.

7.—There is no profit in raising pork if they are not kept growing from the start.

8.—Peas and milk, with corn added as they grow older.

9.—I have made no calculations as to the cost of a pound of pork, as that depends on the price of grain.

These suggestions are for the eastern end of the Province, where we raise grain and keep dairy stock and peas are always a good crop, and we use whey for growing hogs with good results when fed on grain. We do not keep store hogs, as they will not sell for near as much per pound as young, well-fatted pigs. In the west end of the Province they keep hogs longer, as they feed more roots, bran, shorts, etc., and in many cases boil or steam the food, which I do not think pays for the extra trouble.

Hastings Co., Ont. J. M. HURLEY, M. P.

### Keep the Pigs Growing from the Start.

1.—We do not choose, under any consideration, to have our sows farrow their first litter before one year old, and would prefer at sixteen months. Would have two litters per year from the start, providing the first litter was not before sixteen months.

2.—(a) We have most success with litters coming about first of April. (b) After breeding our sows in early winter for spring litters we turn them in yard with good comfortable sleeping quarters provided, and feed them enough corn to keep them in good strong condition until about three weeks before farrowing, when we take them in and feed them liberally with some good nourishing, milk-producing food until farrowing.

3.—After weaning our spring litters, if there is good pasture, we turn our sows out and pay very little attention until a few weeks before farrowing, when we commence to feed them again, as described above. We would place quite a high value on dairy by-products, especially for young pigs.

4.—When the sow is about to farrow, we place her in a comfortable pen with dry, fresh straw bed; and if weather is cold when the little pigs are coming, we stay with them until we see that the little fellows have a start in life, which is half the battle. We give the sow nothing the first day after farrowing but cold water, then we feed sparingly for a few days, of thin slop made of shorts, after which time we commence to increase the ration as the little pigs increase in size, until they are two or three weeks old, when the sow is able to take about all she will eat of not too heavy food, and the little pigs will commence to take a little of the best we can provide, put in a small trough where they can go to it at will, until they are about eight or ten weeks; when they are feeding well the sow is separated from them, and she is scarcely missed. We give the sow and pigs exercise from the start, letting them run out for a while each day as soon as the little pigs feel like going.

5.—Would recommend a good comfortable, dry pen, not crowded, kept well cleaned; would feed all they could eat twice a day of shorts, chopped barley, or a mixture of grains, made so thick they can scarcely drink and so thin they can scarcely eat it, and have all the dry meal they will eat between times placed before them. Always supply plenty of water.

6.—Think it advisable to market hogs just when they are in shape to bring the highest market price; about six or seven months, when they should weigh about 200 lbs. each.

7.—The advantage of keeping young pigs growing rapidly from the start is, that it takes quite a lot of food to keep a pig living without making any gain, and it takes just so much above that amount to make a pound of gain; so the more rapid the gain, the shorter the period life is required to be sustained to produce the desired weight of hog, therefore a saving of feed, saving of labor, and several other small advantages I will not enumerate here.

8.—See latter part of question five.

9.—We have not made any particular calculations.

In addition to above treatment, in winter months we supply them with a mixture of ashes, lime, charcoal, copperas, sulphur, resin, etc., to aid digestion and destroy parasites.

I do not presume to say that the above is the most economical method of producing pork, but I am convinced that there is a fair profit to be derived by a judicious administration of such treatment.

W. N. TAPE (of Tape Bros.).

Kent Co., Ont.

## FARM.

### Cultivation and Seeding.

The occasional spring-like days that are already upon us forcibly remind one that seed time is coming and that preparation must be made at once in order to seize the first opportunity of getting the seed into the ground in proper condition. Not only is the proper time of seeding, the proper condition of the land, and quality of the seed important, but we are all aware that some varieties of grain and fodder crops give much better results under the same conditions than do others. Because of this we each year at this season serve up to our readers much valuable information upon these matters, gathered from the experience of the various Canadian Experimental Farms, Ontario Experimental Union, and from a number of successful farmers in various parts of the Dominion.

#### THE EXPERIMENTAL UNION.

The good work of the Ontario Agricultural and Experimental Union was referred to in our Jan. 1st issue in connection with the report of the annual "Union" meeting. We may say in brief that its function is the testing of the best known varieties of farm crops over the entire Province in all varieties of soils. The following tables show the different varieties and average returns of straw and grain and comparative value as determined from hundreds of experimenters over Ontario last year.

Variety.	PEAS.		Straw.	Grain.
	Value.	Tons.		
Early Britain.....	98	1.09	23.5	
Chancellor.....	90	1.06	27.6	
Egyptian.....	80	1.14	27.4	
Prussian Blue.....	100	1.21	28.7	

Variety.	SPRING WHEAT.		Straw.	Grain.
	Value.	Tons.		
Harrison's Bearded.....	100	1.10	13.7	
Bart Tremaine.....	92	1.09	13.2	
Wild Goose.....	76	1.10	13.1	
Wellman's Fyfe.....	81	1.06	12.8	
Pringle's Champion.....	65	1.00	21	

Variety.	BARLEY.		Straw.	Grain.
	Value.	Tons.		
Mandscheuri.....	100	1.35	30.7	
Oderbrucker.....	84	1.35	34.7	
Cal. Brewing.....	61	1.26	29.7	
Pringle's (hull-less).....	66	1.40	28.3	
Kinna Kulla.....	48	1.36	25	

Variety.	OATS.		Straw.	Grain.
	Rusted Comparison.	Value.	Tons.	
Siberian.....	78	100	1.4	56.1
Oderbrucker.....	89	88	1.5	56.6
Bavarian.....	97	90	1.6	54.4
Joanette.....	83	78	1.5	54.3
Pol. White.....	100*	75	1.4	52.2

Bushels.	MIXED GRAINS FOR GREEN FODDER.		Tons Green per Acre.
	Value.	Tons.	
Oats, 1½; peas, 1.....	100	7.4	
Oats, 1½; peas, 1; tares, 1.....	91	7.5	
Oats, 1½; tares, 1.....	77	6.9	

Variety.	MILLET.		Tons—5 Yrs. Average.
	Value.	Tons.	
Salzer's N. Dakota.....	.....	.....	7.7
Golden Wonder.....	.....	.....	6.5
Common.....	.....	.....	5.2

Average tons, green, per acre for 5 years..... 4.66

Variety.	CORN.		Ears.	Whole Crop.
	Condition.	Tons.		
Cloud's Early Yellow.....	late milk	4.3	18	
Mammoth Cuban.....	firm dough	4.5	16.6	
Wls. Early W. Dent.....	dough	3.7	16	
Rural Thoroughbred.....	late milk	3.7	15.5	
Salzer's N. Dakota.....	firm dough	3.8	13.2	
Compton's Early.....	ripe	3.6	13.2	

Variety.	POTATOES.		Marketable per cent.	Yield. Bush.
	Table Quality.	Value.		
Empire State.....	100	94	94	367.8
Pearl of Savoy.....	96	91	91	339.7
American Wonder.....	88	92	92	316.4
Tonhocks.....	76	80	80	268
Irish Daisy.....	57	84	84	266.6
Burpee's Extra Early.....	89	84	84	266.2

Variety.	TURNIPS.		Average Weight.	Bush. per Acre.
	Value.	Tons.		
Jersey Navet (fall).....	2.5	1,098		
Purple-top Munich (fall).....	2.13	939		
Buckby's Giant (swede).....	2.09	892		
Harley's Bronze-top (swede).....	2.03	874		
Carter's Elephant (swede).....	2.02	863		

Variety.	MANGELS.		Bush. per Acre.
	Value.	Tons.	
Evans' Improved Mammoth Long Red.....	.....	.....	1,477
Simmers' Mammoth Prize Long Red.....	.....	.....	1,352
Carter's Warden Prize Orange Globe.....	.....	.....	1,069
White Silesian Sug. Beet.....	.....	.....	1,004

Variety.	CARROTS.		Bush. per Acre.
	Value.	Tons.	
Pearce's Half-long White.....	.....	.....	987
Large White Belgian.....	.....	.....	907
Large White Vosges.....	.....	.....	808
Mitchell's Perfected.....	.....	.....	763
Gueranda.....	.....	.....	697