

mentioned field, we would not recommend depending upon its producing pasture next spring. Very much will depend upon the severity of the winter and exposure of the field.

2nd. It is very important that fattening sheep, like all other stock, have comfortable quarters. A roomy frame building set on the ground, having a tight roof and dry floor, is all that is necessary, provided it is not draughty. It should be cleaned out once weekly, and be comfortably bedded. It should be so ventilated as to keep the sheep without sweating. Sheep unequal in size and vigor should not occupy the same pen. A good ration consists in as much well-cured clover fed morning and evening as will be eaten up cleanly. A forkful of bright pea straw makes a nice noon-picking, as it gives variety, an important feature in a sheep's bill-of-fare. Either turnips, mangles or ensilage are important adjuncts, fed twice daily at the rate of one bushel for fifteen sheep. Turnips preferred, cut in strips. The grain part of the ration may consist in one-half oats, one-quarter oil cake, one-quarter wheat or peas, fed twice daily, half a pint each at first, increased to one pint as the finishing period approaches. Fresh water and salt should always be within easy reach of the sheep.

3rd. When ensilage or mangles cannot be obtained, the above ration answers well with an increase of oil cake to keep the bowels laxative.

4th. A well-ventilated, roomy house is all that is necessary for rapid fattening.]

SCALE OF POINTS FOR AYRSHIRE BULL.

T. C.:—"Please publish a scale of points required in a perfect Ayrshire bull, and oblige."

[The points desirable in the female are generally so in the male, but must, of course, be attended with that masculine character which is inseparable from a strong and vigorous constitution; even a certain degree of coarseness is admissible; but then it must be so exclusively of masculine description as never to be discovered in a female of his get. The following is a scale of points adopted by the American Ayrshire Breeders' Association:—

- (1) The head of the bull may be shorter than that of the cow, but the frontal bone should be broad, and muzzle good size, throat nearly free from hanging folds, eyes full. The horns should have an upward turn, with sufficient size at the base to indicate strength of constitution. 10
- (2) Neck of medium length, somewhat arched, and large in those muscles which indicate power and strength. 10
- (3) Fore-quarters—Shoulders close to the body, without any hollow space behind; chest broad, brisket deep and well developed, but not too large. 7
- (4) Back short and straight; spine sufficiently defined, but not in the same degree as in the cow; ribs well sprung, and body deep in the flanks. 10
- (5) Hind-quarters—Long, broad and straight; hip bones well apart, pelvis long, broad and straight; tail set on a level with the back; thighs deep and broad. 10
- (6) Scrotum large, with well-developed teats in front. 10
- (7) Legs short in proportion to size, joints firm. Hind legs well apart, and not too close in walking. 5
- (8) Skin yellow, soft, elastic, and of medium thickness. 10
- (9) Color, red of any shade, brown or white, or a mixture of these, each color being distinctly defined. 3
- (10) Average live weight at maturity, about 1,500. 10
- (11) General appearance indicating style and movement. 15
- (12) Escutcheon, large and fine development. 3
- Perfection. 100

POULTRY.

Gleanings from Poultry Essays.

Some time ago a large number of contributions were received in connection with one of our prize essay competitions. Lack of space prevented the publication of any except the three placed first, but we give our readers the benefit of selections from some of the others.

Mr. W. E. Harding, of Amherst, Nova Scotia, mentions several things which will interfere with successful poultry raising on the farm:—

1st. A dog, if he is anything of a thief, and most dogs are. He will manage to get all the meat scraps and bones to pick, which are very essential to the well-being of the hens. He will often frighten them and thus keep them wild.

2nd. On a small farm pigs and poultry may pull against one another, and the dinner scraps are apt to find their way into the pig swill. The pigs also will get what skim milk the calves don't want. The chickens get little or no milk. Maybe a few chickens will get drowned in the swill barrel.

3rd. See that your cat is trained not to kill chickens.

4th. Never let a hen with young chickens go where she pleases to find a sleeping place, but let her go where you please to have her.

5th. There is no profit in a surplus of roosters.

For farmers where poultry is not a specialty, my experience has been that in our climate the best time to have chickens come out is about the first of June.

It leaves more hens to lay in March and

April, and gives you more eggs to market while they are a better price than they will be in May and June.

2nd. A larger per cent. of the eggs will hatch, and a hen will cover more to better advantage.

3rd. The weather is warmer and the chickens can run out-doors almost immediately and will not need so much care as if confined.

4th. If the hen is cooped, the chickens, being small, can have their freedom and will not damage the newly made gardens where early chickens, if running at large, would be quite destructive.

5th. The chickens, if well cared for until after the grain is cut, will be easily fattened while running through the fields.

6th. If you have Leghorns they can be made to lay in December, when eggs are scarce and high, almost as soon as early hatched chickens.

[NOTE.—In the ADVOCATE for Sept. 15th, under the heading, "Early Chick—Winter Egg," by Mrs. Tilson, to which our readers would do well again to refer in considering the points advanced by Mr. Harding.—Editor.]

Supply the hens with some dry earth under the window, for they like to have the sun shine on them while they take their dust bath. If you have more than twenty hens they will be better divided into two lots. During the short days they should be fed as soon as they are off the roosts.

In speaking of ducks, he says neither is it necessary for every farmer to winter ducks. He can buy a setting from his neighbor and put them under a hen and have a nice lot of ducks to market in the fall without much trouble, as they are easily raised after the first week or two. One thing you should not neglect to do, though, is to sprinkle the eggs with water once or twice a week.

B. H. Garner, Maxville, Ont., in writing of the advantages of poultry raising on the farm, has the following:—The poultry raising department on the farm should be tended in a more business-like way, for we must all admit that there is plenty of room for improvement. Poultry and their produce can be turned into cash quicker than any other farm stock, but to realize profitable sums we must raise large flocks and get them on the market at the right time.

In regard to marketing, he says:—Late in the fall most of the farmers crowd their summer flocks on the market, thus bring the price so low as not to cover the expense of production. This is where many farmers get "roped in."

Mrs. L. H. Hogarth, of Exeter, speaks of the luxury and convenience to the farmer's household of having on hand an abundant supply of both eggs and poultry of undoubted freshness at all seasons of the year as a consideration of great importance, and also an item of more than a little interest from the standpoint of economy, by reducing in a large degree the butcher's account. In regard to the house, there should be a covered annex into which the hens may run and be fed in fine weather during winter, as the more exercise the better. She believes the consensus of opinion to be in favor of Plymouth Rocks. Use pure-bred cocks upon your present flock and you will soon have your flock well bred enough for all practical purposes. Do not attempt to keep too many. Experience has proved that small flocks are more profitable accordingly than over-large ones. When hatching early chicks do not give the hen too many eggs to cover, else you may lose the whole setting, especially if each egg gets its turn at getting chilled. Sell off all the young cockerels from the early broods that are not wanted at home. About the first and on through July, before the markets are glutted, will be a good time for this, as a much higher price will be realized than if they were kept till everybody else is ready. During the winter I would say briefly: comply as nearly as possible with summer conditions. Mrs. Hogarth is the only essayist who emphasizes the keeping of an accurate account of all receipts and expenditures; and advises that a cheap poultry book should be kept in a convenient place with a pencil attached with a string, and a daily record of eggs gathered, sales made and other matters of interest made daily.

Henry Reeves, Highland Creek, gives as his opinion that among the various enterprises which come under the head of farming there is none that will give more profit for the money invested and the time spent than poultry raising, if properly managed. He considers that the chief essential to make poultry raising profitable is cleanliness, for with cleanliness the greatest enemy of poultry, viz., vermin, is successfully dealt with. In marketing every care should be taken in dressing the poultry, as a well-dressed pair of chickens will often bring ten or fifteen cents a pair more than those poorly dressed, and the same can be said of turkeys and geese. The attractive appearance of the fowls count for a great deal in selling poultry. He says: I would not advise any farmer to go into the breeding of the "fancy" for profit. I have tried it and found that "all is not gold that glitters." Neither is it well to have a lot of fowls commonly known as "dunghills." What is required is a good every-day kind of fowl, one that has no occasion to be ashamed of its looks, and can boast of some pure blood in its veins. Poultry requires new blood, the same as any other farm stock, and too close breeding is sure to cause degeneration. He is an admirer of the Wyandottes, for the reason that they lay good-sized eggs and a large number. They make early broilers of good size, besides looking attractive when dressed. The Plymouth Rock, he considers, run them very close as a general purpose fowl.

Mr. R. E. White, Perth, Ont., says it has now become quite evident that the farmers of Ontario have not fully availed themselves of the profits to be obtained from poultry raising. It seems that the great majority of farmers have just kept fowls because they furnish excellent food supplies for home consumption, and have not studied the subject from a business standpoint, and therefore are not accustomed to look upon it as a profitable branch of agriculture. He advises the use of tar paper as a lining for the poultry house, for the reason that it is very obnoxious to vermin. As spring advances, the best bred and the strongest should be picked out and placed by themselves in as roomy a place as possible, for the breeding stock requires plenty of exercise. A young cock should be mated with old hens, and a two-year-old cock with pullets. About a week after being mated, the eggs may be saved for setting, and if possible set two or three hens together. Feed, water and the dust bath should be within easy reach of the setting hen at all times. Chickens should be pushed from the start, in order to have the pullets laying when the old hens are moulting, and the cockerels ready for the early market. The poultry raiser who has his chickens hatched early and pushes them from the start has another advantage, for he can then watch the market and thus get them off his hands when choice poultry is scarce and high priced. Never allow your fowls to in-breed from year to year, or they will decrease in size and vigor, but purchase a pure-bred cock from time to time, and by breeding from him, the size, usefulness and appearance of your flock will be greatly improved. Keep only one breed unless you are prepared to give the necessary attention and have sufficient room for other breeds. Save all the droppings, as they are very valuable and will go a long way towards paying for the feed.

GARDEN AND ORCHARD.

Experimental Fruit Stations.

Owing to the variation of soil and climate in the different parts of the Province of Ontario, it has been thought well to establish experimental fruit stations at different points in order to ascertain so far as possible the varieties of fruit most suitable for all parts of the Province.

The magnificent display of Ontario fruits at the World's Fair gave to the world a truer idea of our capabilities along the lines of fruit production than was ever known before. It also gave to us a knowledge that we have a possible important revenue from a source which has hitherto been neglected, and which, if cultivated and fostered, will prove a salvation to our standing among the prosperous fruit countries of the world.

The Fruit Growers' Association of the Province have had the importance and need of such stations in view for several years. Three years ago a standing committee was appointed, whose duty it was to push the experiment station scheme to a successful completion. By their enterprising management, together with the Columbian results, the Provincial Government has been so impressed with the importance of instituting such stations that at the present time four stations have been located and put in operation—one at Leamington, devoted to peaches and strawberries, under the control of W. W. Hillborn; one at Winona, devoted to grapes, under the control of Mr. M. Pettit; one at Craighurst, devoted to apples, under the control of Mr. G. C. Caston, and one at Trenton, devoted to apples and pears, under the control of Mr. W. H. Dempsey. These stations are under the control of the Fruit Growers' Association of Ontario, and of the Ontario Agricultural College. The Board of Control is made up of Jas. Mills, M. A., Guelph, President; Prof. H. T. Hutt, B. S. A., Guelph, Official Visitor for the Dept. of Agriculture; T. Wolverton, M. A., Grimsby, Secretary; A. M. Smith, St. Catharines, and A. H. Pettit, Grimsby.

Mr. Wolverton, together with Prof. Hutt, who have the executive part of this matter in hand, have not only made a careful visit to each of these stations to see that the work is going on properly, but they have also visited several points where it has been thought that stations ought to be established. One of these localities is the Beaver Valley, situated in Grey County, leading from Georgian Bay southward, where fruit of nearly every kind grows to perfection almost as well as in the famous Niagara peninsula. It has proved itself peculiarly adapted to plum culture. The farm of Mr. John Mitchell, of Clarksburg, seems to be very favorably adapted to the growth of plums, and Mr. Mitchell seems well fitted to carry on experimental work with that fruit. It is decided by these gentlemen to recommend to the Board of Control that the fifth station be established in this valley, and be devoted to experiments in the cultivation of plums.

It is the intention to establish five other stations in other parts of Ontario as soon as proper places for their location and suitable men for their conduct can be found.

Prepared forms are used by the experimenters, from which, when properly filled out, as a result of careful work and observation throughout the season, a pretty thorough knowledge is given of the comparative values and modes of treatment of the different fruits tested. These reports are to be sent in to the Board of Control by each experimenter before the 15th November, the results of which will be made public.