

as a winter food as wheat. An acre or two of wild-goose wheat sown at the proper time will carry a large number of fowls over the winter and in fine laying trim, with a few other food adjuncts added. We mention the wild goose variety of wheat owing to its extreme hardness and the large yield it usually gives.

For the CANADIAN LIVE STOCK AND FARM JOURNAL.

Various Topics Discussed.

By W. C. G. PETER, St. George Poultry Yards, Angus, Ont.

NOTES ON THE SEASON.

The past season, which opened so early and apparently so auspiciously, has not fulfilled the promise of its advent. So far as we have received reports, they are decidedly on the side of a poor season generally in all sections, and breeders who are too well-posted to err in caring for stock or looking to hatches have been equally unsuccessful with their novitiate brethren. The extremely cold weather in late April and early May depopulated the broods that were then hatching, and great loss occurred in those that were already forward enough to be shedding their down. However, most poultry-men have extended their hatching season later than was intended, and the weather has been all that could be desired for the welfare of the young stock.

GAPES, ROUP, AND OTHER DISORDERS.

In the July number there is an article on gapes. Happily this is a very rare disease here in Canada. I would like to ask Mr. Cockburn if he ever had a decided case of that disease? In all my long experience I have never had one case, and in conversation with others, some of whom have grown gray in the business of poultry-raising, I cannot find one to tell me of an unmistakable case of gapes occurring with him. It seems so easy to read the directions about putting the horse-hair down the wind-pipe with the one hand while you hold the chick and open its mouth with the other, but it takes a very smart man to do it; in fact, he must have that quality in the superlative degree. My own opinion with regard to this complaint is that it is peculiar to the soil, and it may be occasioned by a particular form of larva generating in such soil, because of its adaptability for the life of the germs. One reason for thinking this is that it is generally confined to certain neighborhoods, and if it exists at all but few yards in the locality seem to escape. I have been told by old men in the business that clay soil will always produce this complaint if the birds are kept long on one place. But I cannot speak of this from experience. A frequent source of alarm with those who have not had much work to do among poultry stock is the slight watery discharge from the eyes and nostrils, and frequent sneezing that attacks young birds when about maturing. This is often thought to be the much-dreaded roup, but it is not at all to be classed with that complaint. It is merely a form of chicken disorder, and is very common and contagious. It seems something like the whooping-cough or chicken-pox among children, for very seldom indeed does a flock escape it altogether. It is generally present in a mild form, but I have seen it at times so virulent that the hard sneezing would remind me of a person suffering from influenza. One of the best remedies that can be used, and a preventive as well, is to put into the drinking-water bromide of potassium, allowing as nearly as possible about three grains per day to each. Put the amount in the water that will be used by the flock through the day and give them no other drink, so they must drink that. If you see your chicks about four months old moping and with no appetite, and not ambitious enough to chase a grasshopper

and run him down, with watery look about the eyes and nostrils, and an occasional sneeze, then put this restorative and alterative into the water for them. If an odd one should not even care to drink, give him three grains in a pill made of moistened meal or bread. This form of chicken complaint is soon over; two or three days is all it generally runs. Many people seeing it might think to themselves, "Why, all my chicks have a cold." Roup, proper, is a scourge, and we could not advise treating a bad case. The best plan, if very bad, is to kill the bird. The first loss is the least, for the victim would never be of any material use. The best plan to follow is to keep the birds clean, and thus ensure health in the flock. Under natural conditions poultry is peculiarly exempt from disease. It is only when carelessness or ignorance pave the way for it that these scourges begin the work of devastation in our flocks.

EXHIBITIONS.

A word now on exhibiting. We hope to see our farmers uniting themselves to one of the many poultry associations. So many of them are going into thoroughbred stock, and by going among breeders more often in meetings, etc., they will become better judges of what they are buying and breeding. And don't forget to show your birds, friends; take them along. They are not so much trouble to take along as pigs, but I venture to say if you have a good Suffolk or Berkshire you would not go to the show without taking it. Then why not take your turkeys, ducks, and fowls? As I have frequently remarked, you are ahead of the fancier in chances for raising prime show stock. If you get good birds to start with you can beat us every time; but you must make yourself acquainted with the breed, as you would have to do with any other stock. It will not pay you to breed a Jersey cow, or a Berkshire pig, unless you make yourself conversant with the points of excellence they must possess to be first-class specimens of their breed. You cannot breed fine poultry with haphazard mating any more than you can get fine horses by letting your mares breed from any mate that happens along. It is only common sense applied to one of the most interesting branches of farm management, viz.: the breeding of fine poultry.

The Apiary.

For the CANADIAN LIVE STOCK AND FARM JOURNAL.

Temperament of the Bee.

By R. F. HOLTERMANN, Romney, Ont.

The question of disposition of the honey bee does not receive sufficient consideration. The agriculturist has found out that the temperament of his barnyard stock varies, and that the profits to be derived from the animals vary. But the application has not been made to the honey bee as much as it might be. Still some of our most observing bee-keepers, or more properly, bee-martys, have already made some discoveries of merit, and now that a beginning has been made it requires only that the attention of the public should be drawn to the matter to make a closer application and receive beneficial results. We have found that the high-strung, irritable races of bees, those which upon the slightest provocation will attack anything in their way, consume more stores, breed more bees when not required, and are more restless in winter than the quiet and even tempered. So far the application is correct, and it only requires that we should apply this to the individuals in the race of bees. We find individuals differing as much in disposition as

racers, and I have come to the conclusion that the queen should be removed from colonies which are of a high-strung, nervous temperament; they wear themselves out more quickly and are unpleasant to deal with, consume more stores and are less liable to winter with success, as they will not settle down to that quiescent state which is so desirable for successful wintering. Either they will not settle down to that condition at all, or upon the slightest unfavorable condition being present they will awaken from it.

Then in handling the bee, how irritating to find the whole colony rush out upon the slightest mismanagement being made, and darting back and forth in front of that extremely sensitive organ, the organ of smell, and at every dart the unfortunate operator undergoes in imagination the agony of a sting. Whilst rough and rude handling is to be condemned, and will be resented by any colony, there is a great difference, and the difference should be noted and acted upon. If you make a colony queenless because her progeny is bad, do not allow the colony to raise a queen from the eggs deposited by her, as the daughter may inherit the disposition of her mother and transmit it to her progeny.

Now I am perfectly well aware there are many who will claim that the colonies I condemn give the best results; this is, however, written in the face of such knowledge, and in opposition, to a large extent, of such knowledge. There may be exceptional cases where such a colony may have an excellent honey-gathering record, but that proves nothing. No more than that many a high-strung individual of the human race makes his mark and does good vastly beyond the man of a more quiet and equable disposition. There are many of the same class, however, who do not confer these benefits, and their warmest friends admit that their average life is not so long as the more phlegmatic.

HANDLING BEES.

It is astonishing to see the difference in handling and working with bees. I can bring to mind now apiaries which I do not care to visit, and only because the bees have been handled so roughly that they resent even the sight of any one, because they recollect they have received maltreatment and nothing else from the hands of some one. Imagine a horse or a dog beaten or kicked by man whenever within reach, and again the same kindly spoken to and gently treated at all times, and you have to a large extent the difference between a colony of bees properly and improperly treated. Never attempt to handle a colony without a smoker in first-class order. If the bellows has become damaged, or any part of it is liable to fail at a critical moment, secure another, and do not grudge the paltry sum. Buy a good smoker, not the lowest priced one. I avoid saying cheapest, for the word so often proves a misnomer. Use good dry wood, or you will have a filthy deposit on your smoker barrel, and even drops of liquid from the nozzle into the hive. Be very careful not to jar the hive before smoking the bees; this angers them, so that no amount of smoking will subdue them afterwards; remove the lid gently, raise one corner of the quill and throw your smoke upon bees and combs, not in dense clouds and for over a minute, but gently and for a few seconds only; then if the combs are stuck to the hive loosen them without jarring and draw them out without crushing bees between combs, at sides, or between end boxes of frames and hive end. If you crush a bee, that bee throws off a scent which a skilled apiarist can detect frequently and which the other bees can detect every time, and it is the signal for an attack. Try to get through all manipulations before