

## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

PUBLISHED WEEKLY BY  
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"  
Winnipeg, Man.

THE FARMER'S ADVOCATE AND HOME MAGAZINE  
is published every Thursday.

- It is impartial and independent of all cliques and parties, and is handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
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very well on some of the other necessities which may be purchased at smaller cost. We would have it generally understood that even though prices did advance at the beginning of the war, and even though they remain fairly stiff, it is not likely that the farmer will reap any decided benefit from the conflict, and in the end he, with all the people, will be the loser therefrom.

### The War and Farm Drainage.

In this issue a correspondent draws attention to the effect of the war on draining Ontario land. Few of our readers ever dreamed that a war in Europe would seriously affect underdrainage in this country and by so doing lessen the chances of increasing production, and yet our correspondent shows that it is so. Readers interested in drainage know that assistance is given by the Government through the township council to encourage draining the land. Our correspondent points out that he and his neighbors, who have put in considerable tile drains this year, hoped to avail themselves of some of this assistance, but now they find, owing to the war, the Government cannot help. And yet farmers are urged to increase production. If it is so that money is not forthcoming to aid in this work many acres, wet and soggy, badly in need of drainage and in such a condition that they can not produce a profitable yield will have to go on non-productive beyond the cost of growing the crop, and many more acres will produce only a small proportion of what they are capable of drained. If there is money to carry on extensive public works in war time surely there should be a little to aid underdrainage. It is almost a crime to cut off this help, and at the same time cry out for bigger crops and a greater grain acreage. But then we like the spirit in our correspondent's letter. He is right when he says that the farmer will have to fight for himself, and he shows good fighting spirit when he closes, "We are capable of fighting for ourselves." The Government might at least help them entrench.

### Nature's Diary.

A. B. Klugh, M.A.

Among all our birds there is no group which stands in need of protection as much as the Hawks and Owls. The reason for this is because as a group they are sadly misunderstood. All Hawks and Owls are condemned by the farmer and the sportsman because of the harm which is done by a very few species. As Dr. A. K. Fisher of the United States Biological Survey says, "It would be just as rational to take the standard for the human race from highwaymen and pirates as to judge all Hawks by the deeds of a few."

Taken as a group the birds of prey perform a most necessary service for the farmer, a service which is carried on quietly and continuously, and which is never realized or appreciated until it is rendered less efficient by a diminution in the numbers of these birds. This service is the destruction of small rodents. These small animals are destructive in many ways, and no year passes but we hear of the injury which they do in girdling fruit trees and in damaging pastures and meadows. Where the birds of prey have been very much reduced in numbers the field mice have increased to such an extent as to constitute a veritable plague. It may seem an anachronism to many to class any Hawk as an insectivorous bird, yet many species feed very largely upon insects.

If we look for a moment into the food of our common Canadian Hawks and Owls we shall see that most of them are among the most valuable allies which the farmer possesses.

The Red-tailed Hawk, a large species, common in the East, in which the tail is red above, is commonly termed "Hen-hawk," but as a matter of fact it very rarely takes poultry, and by far the greater portion of its food consists of injurious animals. It also feeds extensively upon large insects such as grasshoppers, crickets and beetles.

The Red-shouldered Hawk is the commonest large Hawk in many parts of the East. It may be known, when at rest, by the reddish coloration of the bend of the wing ("shoulder"), and when in the air by the under-side of the tail having narrow bands of black and white. Its cry of "Whee-yoo-whee-yoo" coming down to us from high overhead is a common sound of spring and summer. This species shares with the Red-tail the name of Hen-hawk, a name even less merited than in the case of the Red-tail, since less than one and one-half per cent. of its food consists of poultry or game birds. Its tastes are decidedly omnivorous, and it feeds on mice, snakes, frogs, fish, grasshoppers, centipedes, spiders, cray-fish, earthworms, snails, and an occasional ground-haunting bird. This latter item appears so rarely in its bill of fare as to lead to the supposition that they are swooped upon in mistake for a mouse. A pair of these Hawks bred for several successive years within a few hundred yards of a large poultry farm, and the owner never saw them attempt to take a fowl.

The Rough-legged Hawk, which breeds in the West and is seen as a migrant in the East, feeds almost exclusively upon field mice. It takes also ground squirrels and sometimes a rabbit, but never touches a bird either wild or domesticated. This is one of our largest Hawks, being two feet in length, and may be recognized by its having the legs feathered down to the toes.

Swainson's Hawk, which is the common large Hawk of the prairies, may be known by the broad band of chestnut across the breast, which contrasts strongly with the pure white of the throat. This species is about twenty inches in length. It feeds almost entirely upon field mice, gophers, and large insects. Speaking of this Hawk Dr. Fisher says, "Soon after the breeding season the hawks collect in the foothills and on the plains of the West, forming flocks, some of which contain hundreds of individuals, and feed almost exclusively on grasshoppers and crickets. If we assume that a hundred grasshoppers, which is only three-quarters of the number actually found in a stomach after a single meal, is the daily allowance for one hawk, we have a grand total of 900,000 for the work of a flock of 300 birds in one month. The weight of this vast number of insects, allowing 15.4 grains for the weight of each, amounts to 1,984 pounds. An average of a number of estimates given by entomologists places the quantity of food daily devoured by a grasshopper as equal to his own weight; consequently if these grasshoppers had been spared by the hawks the farmer would have lost in one month nearly thirty tons of produce. The above estimate is probably much too low for each hawk doubtless eats at least 200 grasshoppers daily, which would double the amount, making the loss sixty tons instead of thirty. This is the work of a month for only 300 hawks. What estimate can be placed on the services of the hundreds of thousands which are engaged in the same work for months at a time?"

## THE HORSE.

Do not over-work the brood mare.

Too many horses are "broken," not trained.

Save the best box stall for the colts in winter.

Drawing a three-horse plow is not fair to a two-horse team.

The automobile is a help in war time, but the horse is indispensable.

It is time all colts with working dams were weaned, that is, provided these colts are four months old.

It might be a good time to buy a stallion right now. They are almost sure to be scarcer and dearer in the spring.

At some of our shows geldings still appear in the breeding classes. This is a standing joke which seems to be permanent.

A few more oats and a little less hay may mean the difference between thin and fat horses between now and freezing-up time.

A report comes from St. Louis, U. S. A., that 10,000 horses have been selected in the stock yards there by representatives of the British army for use in the war.

Autumn days mean sweating working horses. To avoid sore shoulders raise the collars frequently, and rub off the sticky sweat and gummy dirt with the hand. At night wash off carefully with salt and water. Keep the collars clean.

If you want to have a good laugh ask a horseman to explain the difference between an agricultural and a general-purpose horse, or how the agricultural horse differs from the Clydesdale and so on. There are plenty of indefinable lines of demarcation, but few satisfactory solutions can be given.

### The Yeld-Mare Class.

At some of our leading exhibitions this year considerable trouble arose in some breeds regarding the appearance of yeld mares in the championship class, especially where no class had been listed for yeld mares, and consequently their appearance for championship was their first showing before the judges. Some of the prize lists were made to read that to compete for championship an animal must be the winner of a class. Where there was no class for yeld mares it seemed clear that any which might be at the show were not eligible to compete for sweepstakes, and yet it did not seem altogether right to keep a first-class individual out of the competition.

The fault is in the prize list. There should be a class for yeld mares, and the winner of this class has just as good a right to compete for championship as has the winner of any other class at the show. Some hold that yeld mares should have no place in the prize list, but why? Horsemen know that some mares, and good breeders too, only breed every second year. They also know that owing to accidents or other mishaps a winning mare may not have a foal at foot and so is not eligible for the brood-mare class. The mare may be bred and safe in foal, and yet cannot show. It is not fair to keep such an individual out of the competition. She is a breeder and should have her class, and her chance at the sweepstakes ribbons and silverware. She is just as worthy as any of the different ages of colts which have won their classes. She is not worthy of and should not be permitted a place in a brood-mare class, but it is no more difficult to compare and contrast and reach finally a fair conclusion between a brood mare and a yeld mare than it is between a brood mare and a sucking foal, a yearling, a two-year-old or a three-year-old colt. In revising prize lists this difficulty should be overcome.

It did not take long to so thoroughly inculcate the spirit of militarism into the German people through schools, business and everything that goes to make up the life of the country that they demanded war. Is it not possible through the same channels to press the peace propaganda to such an extent that people would maintain peace for all time? It is just as easy. All that is needed is men to lead the movement.

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Editor "T

Austral nation, an army removed all stock is for English blood are peculiar size demands the surplus requires an horses to c properties. of these ra a far-spread plaint is of made by th African w horses is r frequently supposed country.

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