

locality, and as far as my experience has gone it is the gray phase which is most abundant in most localities. J. H. Fleming says that at Toronto the red phase is rare, usually occurring for several years in succession and then disappearing.

Though this little bird is called the Screech Owl it, as a matter of fact, very seldom screeches. Its usual note is a rather sweet, plaintive, tremulo whistle, a whistle with a ventriloquist quality which makes it often a matter of some difficulty to determine the exact direction from whence it comes. Upon rare occasions it justifies its name by screeching in a loud, and if near at hand, a decidedly ear-splitting manner. I had been well acquainted with this species for ten years before I ever heard one screech, and had just about decided that its name was given to it on the same principle that a place is called "Green Mountain" because there is no mountain within many miles and things are a little less green than usual at this point, or a house is named "Park View" because no park is visible from it. Then one evening a Screech Owl alighted within four feet of my head and emitted a screech which fully made up for all the other screeches which I had not heard.

The Screech Owl is a species worthy of the farmer's protection and should be welcomed about the barns instead of being shot at every opportunity, as is unfortunately often the case. It is the greatest insect-eater among our owls the insects most often taken being grasshoppers, crickets, beetles, and cutworms. In the investigations into the food of this species by the United States Biological Survey the number of insects destroyed was shown by the fact that as many as fifty grasshoppers were found in one stomach, eighteen June beetles in another, and thirteen cutworms in a third. The destruction of cut worms is particularly worthy of appreciation, as among all the pests of the farm and garden there is no more aggravating pest than this greasy, gray larva which destroys a whole young plant, full of promise of good things for the future, a young plant which has probably been the object of much care and solicitude since it was a seedling and has just been set out, for the sake of the little ring of tissue which it secures in the felling of it. Meadow mice, White-footed Mice, and House Mice are the mammals most frequently eaten by the Screech Owl, and while the White-footed Mice are not often destructive to crops, the other two do an immense amount of damage to crops in the field and barn. An occasional Chipmunk, Flying Squirrel or Mole is also taken. This species is fond of fish, and captures most of them in winter by watching beside the breathing holes in the ice and seizing such fish as come to the surface. The Screech Owl takes some birds, but its bird diet consists almost exclusively of House Sparrows, and in killing these destructive and dirty pests it is rendering a real service to the farmer.

The nest of the Screech Owl is a hole in a tree, which it lines with feathers, and in which it deposits from four to six round, white eggs. The range of this species in Canada is from the Atlantic Ocean to Manitoba, and it is replaced in the West by closely allied races.

Now that the leaves are off the trees the nests of many birds are brought to view in situations in which their existence was unsuspected, and we have a good opportunity to study bird architecture. A rather interesting case came under my observation this summer. A Warbling Vireo, which had nested within a yard of one of my windows the year previously made frequent visits to the old nest. At first I thought it might be repairing the nest—a decidedly unusual occurrence among most of our birds—but I soon found that it was tearing the old nest to pieces and carrying off the string, of which the nest was very largely composed, to use in the construction of a new nest some hundred yards away.

horse, as I have worked some 1,300-lb. horses that would do as much work as horses weighing 1,700 lbs., but one was a little, big horse and the other was a big coarse-bred brute that had no type or make up. Get the big horse with good blood in his veins and you have something that is always wanted and will bring the price. I have handled horses for 35 years in different parts of Ontario and I have always found the heavy horse in best demand.

AN INTERESTED READER.

Rainy River District, Ont.

Unsoundness in Various Horse Breeds.

The reports of 10 States in the United States publishing accounts of the unsoundness of their stallions offer an opportunity of a study of the various breed in this respect. In this list no unsoundness is reported in 31 Suffolks, so they are therefore omitted.

Percentage of Each Unsoundness on Basis of Total Specified Unsoundness in Each Breed.

Breed.	Percheron.	Belgian.	French Draft.	Shire.	Clydesdale.
Sidebone.....	33.1	45.1	30.4	27.6	40.0
Bone Spavin.....	9.7	6.1	10.9	6.7	0.0
Ringbone.....	2.7	4.9	6.5	0.0	0.0
Curb.....	1.3	1.2	0.0	0.0	0.0
Thick wind.....	18.7	18.3	13.0	27.6	10.0
Heaves.....	0.0	1.2	0.0	3.5	20.0
Blindness.....	9.0	8.6	19.6	13.8	10.0
Bog spavin.....	8.4	4.9	10.9	6.9	0.0
Thoroughpin.....	0.3	1.2	0.0	0.0	0.0
Springhalt.....	2.0	0.0	2.2	3.5	0.0
Chorea.....	2.0	1.2	0.0	0.0	0.0
Navicular disease	0.3	0.0	0.0	0.0	0.0
Other specified unsoundness.....	12.5	7.3	6.5	10.4	0.0
Actual number of specified unsoundnesses.....	299	82	46	29	102
Number of each breed.....	1,193	2,789	1,540	1,263	782
Per cent. of breed with specified unsoundnesses.....	2.67	2.93	2.92	2.29	1.27

In examining the preceding table one must not regard the percentages between the different breeds on a particular unsoundness as absolutely indicative of which breed is the most liable to that unsoundness, nevertheless, it is some indication of comparative merits in this respect.

The Clydesdale and the Suffolk have been subjected by their breeders to selection towards a common ideal. Apparently this kind of breed building is most effective for the production of animals to withstand service, as there are fewer weaklings in the line of draft power in these two breeds than in all others. According to the table the Clydesdale exhibits weakness at four points, the Shire at seven, the French

Draft at seven, the Belgian at 10, and the Percheron at 11. The main weak points in the Percheron are the feet, the hocks, the wind and the eyes, with a significant deficiency in quality as evidenced by bog spavins and thoroughpins combined.

The Belgian evinces trouble of the same nature, the Shire shows less tendency to puffy joints, while the Clydesdale has a clean bill of health in strength of hocks and quality.

E. M. Wentworth, in the Breeder's Gazette, pertaining to the board report of the 10 different States, says: "If one point stands out clearly here, it is that the fussiness of the Clydesdale breeder in regard to feet, legs and action has its reward. While of the specified unsoundness in the Clydesdale, sidebone is the most common, yet it is really even less frequent in this breed than in any other major breed, only one animal out of every 195 showing it, while its nearest rival, the Shire, shows one out of every 158. This is merely another means of emphasizing the thoroughness with which a general breeder's ideal can improve a breed.

"Perhaps the most significant fact of all is that the real weak spot in all of the draft breeds is the foot. If a draft breed is to become unsound the chances are from one out of 2.5 to one out of 4 that the foot will go first, and sidebones be produced. The next most vulnerable point is the wind, when all breeds are considered, but the chances range from one out of three to one out of eight. After that the eyes seem weakest, the probability being from one out of five to one out of 12.

"It seems difficult to understand why the heavy horse, whose foot never receives more than two-thirds the jar which the racer's foot gets, fails so signally at this point. That it is not related to breed peculiarity in shape is evidenced by its frequency in each breed, nor does texture of the horny wall seem to be related to it. One can appreciate the difficulties in the wind, the thick wind of the continental breeds and the Shire doubtless being related to overfatness, while the heaves of the Clydesdale may be related to its less capacious paunch, and its greater activity which might produce pressure on the lung nerves with the resultant paralysis. The blindness apparently is more or less sporadic. No blindness due to recurrent ophthalmia (moon-blindness) is included, hence one may consider the blindness to be the result of hereditary causes more or less independent of the other conditions of the breed or body.

"It is easy enough for any one who is a breed partisan to find food for his partisanship in the figures that have appeared in this article, but two things stand out pre-eminently, even to the impartial observer, immense popularity of the Percheron in the leading horse producing state of America and the remarkable efficiency of the Scotch method of horse breeding, which has produced the Clydesdale, a breed so free of unsoundness and so durable in quality. Furthermore, every evidence should demand further inquiry into the Suffolks."

This breed comparison in unsoundness does not indicate as to which may or may not be the best draft horse, but in it is more or less comparison in the efficiency of underpinning of the relative breeds in which the Clydesdale shows superiority, conforming to Clydesdale claims. If a similar analysis could have been made concerning conformation of tops, perhaps quite a reversal of merits would have been observed.

THE HORSE.

Favors the Heavy Horse.

EDITOR "THE FARMER'S ADVOCATE":

Some land being more easily worked than others leaves an opening for discussion on the light and heavy horse. The light horse may be all right in some places, but when you want to buy a heavy team you must dip down for cash; also, when you have one for sale it demands the high price. These are facts we can't get away from. Right in this settlement, a large company desires to buy horses for lumbering purposes. Of course, they want the heavy horse. Now there are plenty of horses for sale, good chunks but too light, so the company must go elsewhere for their horses. A 1,350-lb. horse will do a lot of work but a 1,700-lb. horse will do more and last longer. The trouble with most breeders is they do not consider quality. My advice is breed the big horse, but breed the right kind of big horse and not the long-legged, long-backed, big-looking horse, but the big, thick, short-coupled, flat and clean-boned horse, thick through the heart with a good bread basket. A horse that hasn't room for feed, hasn't the staying power. I breed for as large a horse as possible without crossing breeds. Crossing is where the heavy horse falls down. I have known breeders to breed a Clydesdale mare to a Percheron horse, then back to a Clydesdale, then to a light horse. What breed and what kind of horse will such breeder have ten years hence? If they are not scrubs then we may breed to the cheapest horse we find. I am not going to say a word against the 1,300 or 1,400-lb.



A Well-reared Foal and Its Dam.