Nature about the Farm

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BIRD NOTES

The other day I visited a friend's farm in this county and there found that a small colony of Barn Swallows had established themselves under his driving shed. The birds, he said, had resorted to this shed to nest for several years and as he had always protected them they had become very familiar, some of the nests were so low that I could easily reach them with my hand; the birds, however, were so confident of their safety that they remained upon the nests while we went round and inspected them. During the early part of the afternoon the birds were working for insects over the orchard and around the barnyard, but towards evening the cows were brought up and put in a field just opposite the shed, for a time As soon as the cows arrived, all the swallows in the shed left their nests and went over to where the cows were, the birds which had been working outside also went over, and the whole colony circled and hovered about the animals, eagerly feeding upon the flies which infested them. That Barn Swallows are particularly fond of hawking for flies around domestic animals is well known and may be observed in any pasture field where stock are grazing. In this instance, however, the birds evidently knew the rule of the farm, and those engaged on the nests waited until the cows were brought up, so that they could get their evening meal, without being very long absent from their eggs.

There is no more useful or interesting family of birds known than the Swallows. In this province we have six species, viz.: the Purple Martin, Barn Swallow, White-breasted Swallow, Cliff Swallow, Bank Swallow and Rough-winged Swallow, the last a rare species, and as it closely resembles the Bank Swallow, it may often be confused with it. A peculiarity of the family is that all of them, with the exception of the Bank Swallows, have abandoned their original nesting sites and have attached themselves to buildings erected by men. The Barn Swallow and Cliff Swallow construct the outer shell of their nests of mud; formerly they built them in caves or under overhanging ledges of cliffs, the Barn Swallow now builds inside farm buildings, while the Cliff Swallows nest in colonies on the outside, usually under the eaves. In Manitoba when the land was first taken up, the Cliff Swallows seemed to follow the settlers, colonies taking possession of the barns soon after they were built and the influence they exerted in lessening the super-abundant insect life of the prairie was very great. The Purple Martin, which is the largest of the Swallows, and the White-breasted Swallow, both originally built their loose nests in hollow trees, and it is probable that they still do so in unsettled districts, but with us they invariably resort to holes in buildings, or boxes put up expressly for their accommodation, from which, however they are frequently ousted by trespassing House Sparrows. The Bank and Rough-winged Swallows still adhere to their original habit of digging holes in the face of a sand bank and making a loose nest at the end of the tunnel. In this province they always associate in large colonies and generally select a sand bank in the vicinity of water for their nesting site, but along the banks of the Assiniboine, in Manitoba, I often found single pairs quite isolated from others of their kind.

During the summer, and while with us in Canada, all the swallow tribe are purely insectivorous, usually capturing their food while on the wing, but on the cold, windy days that frequently occur in early spring the insects upon which they depend are too chilled to fly and then the swallows seek them in open places on the ground.

In the latter part of July and the beginning of August the large female ants swarm from their nests, each one prepared to found a colony for herself were she permitted; the swallows, fortunately for us, however, interfere, and gorge themselves upon these creatures, the Purple Martins particularly destroying vast numbers of them, even after the ants have divested themselves of their wings. When this has taken place the Swallows alight on the ground, pursuing them there with the greatest activity.

The Chimney Swift, which somewhat resembles the swallows in its aerial habits, belongs to another family of birds altogether, but like them it has forsaken its old manner of nesting and now resorts to our buildings for that purpose.

INSECT LIFE

I find that we are not to be exempt from the attacks of the cutworm this season, for they have now appeared in force and are making up for lost time; the cold weather and backward condition of vegetation undoubtedly delayed their appearance near the surface of the soil, but having arrived, they will feed later than usual before changing to the pupa state. If they are doing serious damage, the poisoned bran bait, composed of 1 lb. Paris green, 6 lbs. bran, made into a moist (not wet) mash with sweetened water, should be used. Distribute the bait in small lumps over the infested land and the insects will be destroyed.

So far, insects have been remarkably scarce, butterflies are rare, and but few dragon flies have appeared, even the pestilent mosquitoes have failed to torment. The green Rose aphis, however, is troublesome, but can be kept in check by frequent waterings with soap solution or by using Pyrethrum powder. I prefer the latter if only a few plants have to be protected.

FARM FORESTRY.

It is often said that the farmers of Ontario compose the one perfectly independent class of the community; no matter what may happen to the other industries in which our people are engaged, the farmer's lands will always supply him with all the necessaries and many of the luxuries of life. This was perfectly true so long as the land bore its fair proportion of trees, but of late years, owing to the excessive and wasteful clearing which has been done, the farmer has become dependent upon the miners and the railways for their fuel, and will (if prompt steps are not taken to prevent it) shortly have to resort to some system of irrigation for water. Substitutes for wood and coal as fuel may perhaps be found, but none for water; this essential element has, however, always been supplied by nature in sufficient quantities to render successful agriculture possible, but of late years, although the supply has been ample, the loss by evaporation and surface drainage has been so rapid that even in seasons having a normal rainfall water is apt to be scarce.

Water management is the great problem of the future, upon the solution of which our continued success in agriculture depends, and with the solution of this problem, the problem of re-stocking our waste lands with trees is most intimately connected, for without having a proper proportion of our land under trees, no rational water management is possible, and without a water supply there can be no productive agriculture.

The close investigations of modern naturalists have proven that all forms of life and all conditions in nature are dependent one upon another and that no change can take place in one condition without corresponding changes in others; in no case is this more clearly exemplified than in the relationships which exist between the forest cover and the water supply. To support plant life, the soil must contain a constant supply of water. This supply can only be kept up by the maintenance of reservoirs, from which the water will gradually and evenly circulate through the soil by natural underground drainage. A true cover, properly located, operates as such a reservoir, by conserving the moisture it receives from dissipation, by the evaporative influence of sun and wind, and secures proper circulation by changing surface drainage into gradual sub-drainage, it keeps the soil porous, and by its deep-reaching root system insures the percolation of waters to the sub-soil. Whereas, on bare land or cultivated fields, the rain as it falls compacts the soil, thus preventing percolation and causing rapid drainage over the surface, while the water which falls on tree-covered land finds its way immediately underground and thus furnishes the desired constant supply by its circulation. This explains the constant, even flow of springs and streams in a wooded country, while after deforestation we find the springs dry up, and the streams are either raging muddy torrents or dry gullies. Floods and droughts alternate according to the season and the fields are eroded and crops washed out by every rainfall.

While the conservation of the water supply is, perhaps, the most urgent reason for immediate action in tree planting, yet there are so many other advantages to be derived from it, that the attention of the public can not be too quickly turned to it.