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The Field.

Bushwhacking.

Weeds have been defined to be "plants out of place," and in like manner we may define bushes to be shrubs out of place, or thickets of little trees growing where trees ought not to grow. They are not, like weeds, annuals and biennials, with delicate roots easily eradicated, but long-rooted and tough-rooted perennials, "least willing still to quit the ground." Cut them down, and, like the hydra, a dozen heads will often sprout out where one grew before.

Bushes, like everything else that God has made, have, I think, appropriate place and use; but their place is not by the side of the division fence nor in the meadow or pasture. Here they are occupying land which may be devoted to better purposes. Bushes cannot live on air alone. Their roots go more deeply and widely in search of food than is commonly supposed, and every thorn-bush by the fence, and every hardhack in the pasture is a thief stealthily robbing the farmer of what is not its due. It is an alarming feature of this, as of all other kinds of thieving, that it increases rapidly unless visited with righteous retribution. One successful pickpocket no more certainly gives encouragement to a dozen other evil spirits than does one well-rooted hardhack to a community of hardhacks. Bushes are social in their nature. They do not love solitude. Their tendency always is to live in clusters, and they fully understand the command to multiply and replenish and fill the earth.

What is very singular about these thieving bushes is that they are so sly and insinuating that farmers are very apt not to notice their depredations till they have pretty full possession of a field or fence.

We have seen hardhacks and alder-bushes slowly but surely extending their dominion over a farm, while the owner looked on, and saw the trespass year after year, with apparently no indignation against the marauders. We have even heard the wonder expressed why these hardhacked pastures did not carry so much stock as formerly, and the cause assigned as old age, degeneracy, or drought, rather than to the obvious one that grass and bushes cannot occupy the same space at the same time.

We have no doubt about the degeneracy of some of these old bush-ridden pastures. The land has become exhausted of some of the elements necessary for the growth of grass. They have been carried off in the milk, beef, and wool that have been sold from the farm. As the pasture could no longer produce a good crop of grass for the want of potash, lime, phosphorus, &c., from which it is compounded, and as the land dislikes to be idle, it turned its attention to the growth of bushes, as the roots of these can run deeper in search for food than can the roots of grasses. This is simply nature's plan for the rotation of crops. A little bone dust, or plaster, or some wood ashes, might have kept the pasture in good heart for the production of grass, and thus barricaded the land against the encroachments of the bushes. If our observation is not greatly at fault, there are few weeds or bushes that can find an abiding place in well-manured, well-swarded land. Give grass a good chance and it will choke out almost everything else. Grass in the vegetable world is like truth in the moral; it is mighty and will prevail.

But in multitudes of meadows and pastures it is too late to consider about the prevention of bushes. The grass is not and the bushes are; and the only question is how shall we get rid of them? We must declare war against them, must turn bushwhackers, and give them such a whacking that they will retire discomfited. We once asked an aged man, half physician and half farmer, and keen in his observations in both professions, "How can we get rid of the willows and other bushes that are creeping in upon our cultivated fields?" "Cut them down in the old of the moon in August," was his curt reply. We are not such lunatics as to put much faith in the influences of the moon upon vegetation, but we are satisfied that the best time to kill bushes, by cutting, is when they have attained maturity of growth for the season. At this time the vitality of the tree is mostly in the branches and trunk, and if separated from its roots at this time, they are in such an exhausted state that they are the least able to send up [illegible]. This maturity of growth is very likely to occur in August, but whether the moon is young, middle-aged, or old, we should not stop to inquire.

We have cut willows and hardhacks after they had attained their full growth for the season, and they succumbed to our rough surgery. One man cut them in the winter and in the spring, and his bush-whacking was so much labor lost. We have found cutting bushes to be very analagous to cutting weeds. If, then, we cut while in vigorous growth, and before they have blossomed, they start up again with renewed resolution to accomplish their mission in life—the production of seed; but, cut after the blossoms have well developed, their vitality is rarely sufficient to produce much show of second growth.

It greatly conduces to the extirpation of bushes, after they are cut, to pile them over the roots, and, when they are dry, to burn them. This cauterizing is pretty certain to perfect the work of bushwhacking, and there is generally no better mode of disposing of the vile trash. The ashes will be some small compensation for the damage done by the bushes.

In the case of hardhacks, which in some parts of the country have usurped such dominion over the land, they can best be eradicated by ploughing, if not of too rank a growth, and after cultivating a hoed crop for a year or two, of buckwheat; if the soil is not sufficiently mellow for the hoe, re-stock with grass-seed. So long as the land is kept under the plough or scythe, this pesky bush will not put in an appearance. It is only in pastures that hardhacks find their home. There they luxuriate—sometimes to such an extent that cattle cannot penetrate them, and, of course, the plough must give way to the log-hoe or grappling-iron. If a horse is attached to the latter, he will rip out a great quantity of these bushes in a day, and after lying for a few days to dry, they may be thrown, roots, dirt, and all, into piles, and be burned. The ashes and burned earth furnish a most excellent fertilizer.

August and September are good months for bush-whacking, and whoever desires a tidy and productive farm will not let these months pass away without exterminating all the bushes which infest the fences and fields. Like Time in the primer, he will cut down all, both great and small.—*Alexander Hyde, in N. Y. Times.*

Experiments with Oats.

The following extract is from the London (England), *Agricultural Gazette*:

The first year we got the best sample we could of black oats of 40 lbs. weight, and sowed them to the extent of a sack an acre; and, the result of this first trial was about 30 bushels to the acre, weighing 38 lbs. to the bushel. Of course the grain was thin, and there was also an increase of that limited hairiness at the base of many of the cones which point to a retrogression from the characters of the plumper seed. Our next trials were with the white oats of the weight of 47 lbs. per bushel; seeded a sack to the acre. The results in this case were 40 bushels to the acre of a good even seed, but weighing only 45 lbs. per bushel, that is, 2 lbs. less than the sample sown. The next year our oat experiments were considerably modified, for we had determined to sow but two bushels of seed instead of four bushels to the acre; and casting about to get the heaviest seed in the market, we procured a sample weighing somewhere about 47 lbs. per bushel. These were sown at the rate of two bushels to the acre, and resulted in a crop of nearly 40 bushels to the acre, weighing as much as the sample sown. Now, it is worthy of remark that a neighbor's oat crop of the same year was not only of the nature of an experiment, but it was also a lesson on the subject of thick seeding which we shall not soon forget. This crop, like our own, was the white Canadian oat, sown in a field of the same kind of soil, but, if anything, the land was of better quality. On seeing the field while the crop was being cut, the first remark was, "You have seeded too thick;" and sure enough, upon the mistaken principle that "if you don't put it in, you can't expect to get it out," more than a sack an acre had been sown, and thus, while in our own case the straws were remarkably regular both in height and size, the average of the latter being that of a good-sized goose quill, surmounted by a panicle of from 100 to 300 grains of corn, the majority of the culms of the thick-sown crop, growing beneath a few of the taller and larger growth, might be compared to crow quills, their seeds numbering from five to twenty. These facts, then, tend to show that if a poor starved seed is used, it may only make matters worse to sow too thickly, as many are apt to do; and the result of last year's oat growth is a convincing proof that it is not a large number of small stems which make up a good crop, but a comparatively small number of fully developed ones.

Shade Trees.

Usually, at the spring of the year, it is the custom to inquire what trees to plant. Few know much about these things. They have a sort of an idea that something is required to protect them from the heats of summer, but what is the best or even good for that purpose, they do not know at all.

It is all very well just at the planting time to get the information what to plant, but now, when the trees are in leaf, is the opportunity to make personal acquaintance with the facts, so that when the season comes we can act understandingly. This is also the best season to study the subject, as we can fully appreciate the luxury of a tree's grateful shade.

The worst thing about taking up the subject at this season is that it will give so much encouragement to those trees which grow fast. For it must be confessed