

say a word or two about its value. Think of the many industries indirectly dependent upon the pine lumber trade. Think of yourself, when one of the most important sources of revenue is lost,—what that would mean to you, to your children, to the coming generations.

Our forest resources are not inexhaustible. When that was said, nobody gave a thought to such a destructive enemy! The enemy is now within our borders—it has spread during a few years from Ontario, where it was first found in Canada, to Quebec. Its spread is alarming, but not beyond control, it is hoped. It has spread also in the United States widely, far more widely than in Canada, so far as is known.

We know the enemy, we know what it has done in other countries. We must do all we can to prevent the destruction of our white pine resources. Most of all, those who are holding white pine sections, should co-operate with the government in its battle against this dangerous foe. Combined effort alone may yet save the situation. Let there be slackness, slowness even, and the disease will defeat our efforts. Twenty years, perhaps fifty, perhaps ten,—who can tell how long it will take this plague to repeat what it accomplished before. Now is our day to do what must be done, and, if we succeed, coming generations, our own children and children's children will thank us for the deed.

DESCRIPTION OF WHITE PINE BLISTER RUST

The first and most essential point is to know the disease. If everybody made it his business, when in the woods, every camper, every hunter, every Boy Scout, every lover of our beautiful forests, and, most of all, every forester and wood man, from lumber-jack to owner—to know, recognize, and immediately report, where the disease was observed, and, if in doubt he send a specimen to those who know it, then we may hope to cope with it before it is too late.

The disease is most of all dangerous to the young pine. When it attacks the main stem,—and as many as one hundred separate infections and more have been observed on one tree—and girdles it, which it is sure to do eventually, the tree dies. *During May and June each year*, this disease can be recognized by any one looking for the following symptoms even if he have no training; later on, only experts can determine it. All know the appearance of the fine smooth dark green bark of stem and branches of this white pine. But does everybody know the white pines from other pines? Of course he knows that the white pines have five needles or leaves in a cluster, while others have but two or three. To make sure of this, he need only cut or pull off a cluster

of leaves where they are attached to the branch, and count that little cluster held together at the base by a small sheath—if there are five needles it is almost sure to be a white pine—and even if not, (this disease only attacks five-leaved pines) it should be reported nevertheless.

During May and June, rarely after the middle of June, the disease is most conspicuous on the pine. The formerly smooth dark green bark will be found swollen, puffed up, "blistered," and breaking through the bark will be seen small whitish-orange scale-like bodies of a dusty floury appearance, composed of the spores or seeds of the disease. There may be a few or many at each point of infection. Often times one can see these from a short distance. They may be on any young branch or on the older wood, but they disappear after June, and only the blister remains, though far less pronounced to the casual observer.

Where the scales had been are often small drops of resin, or gum in the popular phrase, though these are not always present,—(or may be present from other causes,)—since even mechanical injuries to the bark, such as squirrel bites, etc., will cause gumming. In time, this bark be-