

THE DUTCH ELM DISEASE¹

THE ENTRY AND MOVEMENT OF ELM BURL LOGS

R. KENT BEATTIE

PRINCIPAL PATHOLOGIST, FOREST PATHOLOGY

AND

A. E. VERRALL

SUPERVISING TECHNICIAN, FOREST PATHOLOGY AND EMERGENCY

CONSERVATION WORK

The Dutch elm disease was discovered in the United States in 1930. The first clue as to how it entered the country came in August, 1933, when port inspectors of the Bureau of Entomology and Plant Quarantine found that European elm burl logs for use in cutting fancy veneer were entering the United States. Upon investigation *Ceratostomella ulmi* was definitely determined to be present in such logs intercepted at New York, Baltimore, Norfolk, and New Orleans. A quarantine on the entry of elm burl logs from Europe was established October 21, 1933, and all previous entries of such logs have been traced.

The United States Treasury and United States Commerce Departments maintain jointly a system or import records setting forth the materials which come to the United States from abroad. Reports are made by collectors of customs. These are assembled and tabulated by the Section of Customs Statistics of the Department of Commerce. This section is located in New York City. The data are analyzed and organized on the basis of the current tariff act and not necessarily by individual commodities. Elm logs are not segregated as such, but are included in the classification item "*Cabinet Woods in the Log form not specifically provided for.*" The port of entry, the country from which shipped, the customs entry number, and the classification item are all entered in the Customs Statistics records in the form of key numbers. These records are available in complete form back through the calendar year 1925 and in partial form through 1923. With the co-operation of the Section of Customs Statistics, all these records have been examined and the entry numbers extracted. To determine which of these entries include elm burl logs and which apply to other logs under the same tariff heading required an examination of the appropriate customs entry papers on file at the customs port of entry.

The Customs port of entry recorded for a log shipment is not necessarily the port at which the logs make their first arrival in the

¹In view of the present interest of the members of the Tennessee Academy in elm diseases, this paper has been reprinted in part from *The Plant Disease Reporter*, Vol. XIX, No. 2 (Feb. 15, 1935), pp. 11-14.

United States, but is the port where the duty is paid and there are cleared from customs. More than half of the elm burl logs arrived at one of the four maritime ports above mentioned and were transferred under customs bond to some port of entry in the interior of the United States before being released from Customs. For such logs an entry for Immediate Transportation in Bond was made at the port of first arrival and this entry is unaccompanied by the detailed customs papers, which show the nature of the contents of the shipment. Such papers are to be found at the final customs port of entry. The period during which these final entry papers are preserved differs at the different ports, but is never less than five years and is frequently much longer.

In addition, information has been obtained by interviewing a large number of veneer manufacturers and log dealers interested in, or thought likely to be interested in, the importation of elm burl logs.

The Customs records show that elm burl logs have been brought to the United States from France, England, and Germany. An importer's statement makes it probable that one shipment had its real origin in Czechoslovakia.

The earliest importation discovered was in 1925 and shipments have been recorded in each succeeding year.

New York, Baltimore, Norfolk, and New Orleans are the only ports of arrival found. Special attention was given to Boston because of the importance of New England in the Dutch elm disease control problem. There is no evidence that any elm burl logs have entered Boston or any other New England port nor is there any evidence of any shipment of logs from other ports to New England. A Boston veneer manufacturer states that the cutting of fancy elm burl veneer occurs chiefly in the Middle West and that New England manufacturers have not yet become interested in it.

The Customs records or manufacturer's statements show that elm burl logs have gone to veneer factories or to log yards in New York City, N. Y., Carteret, N. J., Baltimore, Md., Portsmouth, Va., Cincinnati, Dayton, and Piqua, Ohio, Laurenceburg, Indianapolis, and Evansville, Ind., Chicago, Ill., Louisville, Ky., Knoxville, Tenn., Kansas City, Mo., and Harahan and Slidell just outside of New Orleans, La.

With these log movements the present known distribution of the Dutch elm disease may be compared. Over 7,600 infected trees are known in the vicinity of New York City. One tree has been found at Baltimore; one at Norfolk; ten at Cleveland; one at Cincinnati; and four at Indianapolis. All these are closely related to the log movements. One infected tree has been found at Old Lyme, Connecticut, many miles east of the New York City infected area. Apparently, its presence is not related to imported logs.

FIGHT AGAINST DUTCH ELM DISEASE IN FULL SWING IN
THREE STATES

The enlarged Federal campaign to save the American elm from the fate of the American chestnut is now in full swing against the Dutch elm disease. The war is being waged over 5,000 square miles in New York, New Jersey, and Connecticut; all within a radius of 50 miles of the port of New York City where the disease entered this country. Nearly 7,700 Dutch elm disease trees and 30,000 dead and dying or unsanitary elms have been chopped down and promptly burned. The sanitation program was made possible by an allocation of funds from the Public Works Administration and of men from the Civilian Conservation Corps. A total of 142 crews, 68 in New York, 44 in New Jersey, and 30 in Connecticut, are now attacking the 175,000 dead and dying elms which may be possible sources of the disease as well as breeding places for insect carriers of the disease.

REVISED QUARANTINE EXCLUDES ALL
ELM LOGS FROM EUROPE

A revision of the Dutch Elm Disease Quarantine No. 70, announced by the Secretary of Agriculture today, and effective January 1, 1935, closes the door still more tightly against further introduction of this enemy of the American elm trees by entirely prohibiting the importation from Europe of all logs of elm and its relatives.

As originally drawn, this quarantine permitted the entry from Europe of elm burl logs, used for making a type of furniture veneer, provided the logs were free from all bark and wood-infesting insects at the time of arrival and that they were given a prescribed hot-water treatment before they were released. While comparatively few importations of these burl logs have been made since the quarantine became effective on October 21, 1933, most of these shipments have come with the bark incompletely removed and in some cases the adhering remnants of bark have been found to be infested by living adults and larvae of scolytid beetles, known to have a part in spreading the fungus causing the Dutch elm disease.

In view of the efforts now under way to check local outbreaks of the Dutch elm disease in this country, quarantine officials believe no chance should be taken which would result either in further introduction of the causal fungus or in the equally undesirable establishment here of its bark-beetle carriers. And since the elm burl logs concerned contain so many deep fissures and crevices in their gnarled and knotty surfaces, it is considered hopeless to expect a type of bark removal before shipment so complete and thorough as to eliminate the possibility of the logs harboring these dangerous insects. Because of this situation quarantine authorities are convinced that complete exclusion of these elm veneer logs from Europe is the only safe course to adopt.