

THE EUROPEAN CORN BORER QUARANTINE AND CLEAN-UP REGULATIONS

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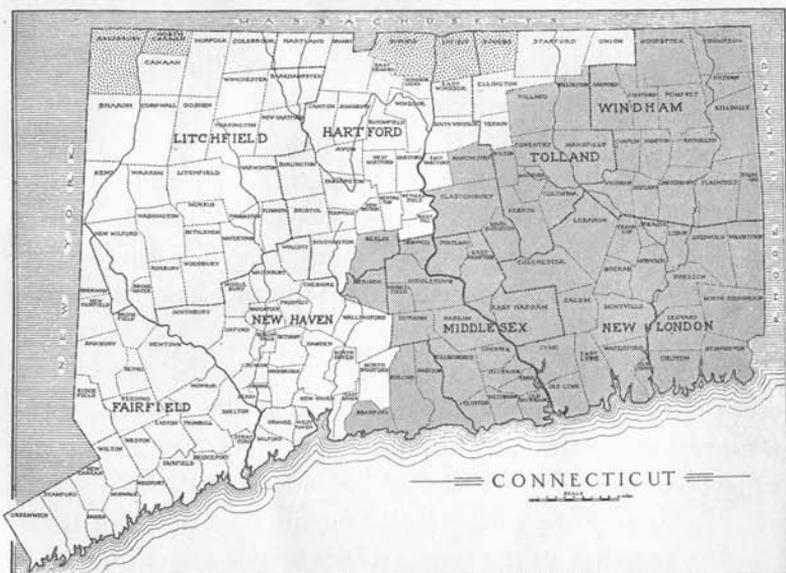


FIGURE 1. Map of Connecticut showing area under State and Federal quarantine on account of European corn borer. Shaded portion at right represents the two-generation area, and is part of the larger infestation extending over Rhode Island, eastern Massachusetts, New Hampshire and southeastern Maine. Lighter shaded portions in north-western and north central part of the State represent the one-generation area, and are part of the large infestation of western Massachusetts, New York and westward.

Connecticut Agricultural Experiment Station
New Haven

¹ This publication is a continuation of the series known as BULLETINS OF IMMEDIATE INFORMATION, which hereafter will be called CIRCULARS.

WHAT THE GROWER SHOULD KNOW

1. *Infestation.*—The European corn borer has spread over nearly half of Connecticut. Strict control methods must be practiced by the grower, or profit from corn growing will soon be impossible.

2. *Quarantine.*—The revised State and Federal orders include all of Middlesex, New London and Windham Counties and the following towns outside: Berlin, Glastonbury, Manchester, Marlborough, Branford, Guilford, Madison, Meriden, Andover, Bolton, Columbia, Coventry, Hebron, Mansfield, Tolland and Willington, all of which are in a generally infested region. The towns of Suffield, Enfield, Somers, North Canaan and Salisbury, which are not in the large area, are also under the restrictions. See the map on the cover.

3. *Control law.*—Destruction of stalks in the quarantined areas is required before April 10, under the provision of a Connecticut statute. The order by the director of the experiment station is that "all cornstalks shall be disposed of . . . by feeding to livestock, burning or plowing under cleanly, and that all the larger weeds in and around the cornfields be likewise destroyed." *Violators are subject to fine.*

4. *Shipment.*—No corn on the ear may be shipped out of the restricted area and in the summer months all celery, green beans in the pod, beets with tops and rhubarb must be certified by inspectors.

5. *Inspection service.*—Those who have produce to be certified should apply to H. N. Bartley, Federal agent, 22 Elizabeth Street, South Norwalk, or to local agents soon to be announced.

THE EUROPEAN CORN BORER QUARANTINE AND CLEAN-UP REGULATIONS

The European corn borer, *Pyrausta nubilalis* Hubn., is a serious pest of corn, which also attacks certain vegetable and flowering plants. The insect is now present over nearly half the area of Connecticut and corn growers must soon practice cultural methods of control or they will be unable to grow corn at a profit. As new quarantine and control regulations have recently been established, this circular is published to give the latest regulations, but it also contains a brief account of the European corn borer and its injury.

This insect has a dirty white larva an inch or less in length, marked with scattered black dots. It prefers corn and it tunnels all through the stalks and ears. Breaking over of the tassels is one of the symptoms first noticed by the grower. When heavily infested, the entire stalks break down, and nearby celery, rhubarb, bean, beet, dahlia, chrysanthemum, gladiolus, aster, cosmos, zinnia, and other cultivated herbaceous plants and many of the larger weeds may be attacked.

In Connecticut, the heaviest infestations occur in the southeastern portion near the Rhode Island line.

COMPULSORY CONTROL

Owing to the recent rapid spread of the corn borer in Connecticut, it was foreseen that the cost of clean-up in such a large territory would be too great to be defrayed by public funds. Consequently it will be necessary for each grower to dispose of his own corn stalks and stubble. A certain proportion of growers will do this voluntarily for their own benefit, but others will not do so except under pressure. In order to make it possible to clean up all fields, the General Assembly of 1929 enacted the following law:

PUBLIC ACTS OF 1929

CHAPTER 171

AN ACT CONCERNING THE CONTROL OF THE EUROPEAN
CORN BORER

Be it enacted by the Senate and House of Representatives in General Assembly convened:

SECTION 1. The director of the Connecticut Agricultural Experiment Station shall issue and publish orders, rules and regulations which shall be effective in any town or portion thereof which shall have been quarantined on account of the European corn borer as provided by chapter 31 of the

public acts of 1927, which orders, rules and regulations may require that each owner, tenant or manager of land on which corn of any kind has been grown shall, not later than December first of the year of its growth, plow or cause to be plowed the field in which it was grown, so as to bury the stubble to a depth of at least six inches, or pull up and destroy such stubble or cause it to be pulled up and destroyed by burning, and each person having in his possession corn stalks shall, not later than April tenth of the year following that of their growth, completely dispose of such corn stalks by using them as fodder or by burning them, and shall destroy, or cause to be destroyed, on or before April tenth of each year, all weeds in such areas as may be designated by the director of the Connecticut Agricultural Experiment Station.

SEC. 2. Any person who shall violate any provision of this act or any order, rule or regulation issued by authority of any such provision shall be fined not more than one hundred dollars.

Approved June 3, 1929.

STATE OF CONNECTICUT
AGRICULTURAL EXPERIMENT STATION
NEW HAVEN, CONN.

CLEAN-UP ORDER

Pursuant to the provisions of Chapter 171, Public Acts of 1929, I, William L. Slate, Director of the Connecticut Agricultural Experiment Station, do hereby issue orders, rules and regulations as follows: That in the quarantined area all corn stalks shall be disposed of on or before April 10, by feeding to live stock, burning or plowing under cleanly, and that all of the larger weeds in and around the corn fields be likewise destroyed.

Effective January 15, 1930.

WILLIAM L. SLATE,
Director.

CULTURAL CONTROL METHODS

The following practices must be carried out by all growers if it is desired to hold the European corn borer in check. Otherwise, it may be impossible to grow corn at a profit after the State becomes thoroughly infested:

1. *Corn stalks should be cut* just as early as possible after maturity and put in the silo or fed out to cattle. When fed out, uneaten portions of stalks should be destroyed. If allowed to stand, such stalks furnish a favorable shelter for borers.

2. *If the stalk is cut close to the surface* of the ground, very few borers will be contained in the stubble. If it is cut 6-12 inches high, the stubble may furnish enough borers to ruin the crop the following year, and such stubble should be plowed under cleanly, or pulled and burned.

3. *Corn stalks which are not cut* and used for silage or fodder should be burned in the field or cleanly plowed under. The larger weeds in the fields and around the margins should also be burned.

4. *By clean plowing in the fall*, a large percentage of the second-brood borers are killed in the winter. Fall plowing is

somewhat less effective against the single-brooded borers, but against both one-generation and two-generation borers, early spring plowing (in April) is beneficial, especially if all debris is covered deeply. There are now plows and attachments to facilitate the clean plowing under of standing corn stalks, and your county agent can advise you regarding them.

5. *Small patches of sweet corn* in back yard gardens can perhaps be pulled and burned to best advantage. If not cleaned up, such places will produce enough borers to infest the entire countryside.

QUARANTINE

After due notice and a public hearing at the station January 7, 1930, the following quarantine order was issued, effective January 15, 1930. This is in accord with Federal Quarantine No. 43, as revised and effective December 16, 1929.

STATE OF CONNECTICUT
AGRICULTURAL EXPERIMENT STATION
NEW HAVEN, CONN.

Quarantine Order No. 24

CONCERNING THE EUROPEAN CORN BORER

The fact has been determined that the European corn borer, *Pyrausta nubilalis* Hubn., has spread to such an extent as to make it necessary to extend the area restricted by State Quarantine Order No. 21, effective March 15, 1929, and likewise to bring it into conformity with Federal Quarantine No. 43, as revised, effective December 16, 1929. A public hearing was held at the Connecticut Agricultural Experiment Station, New Haven, on Tuesday, January 7, 1930, at 2 o'clock P. M., as provided in Chapter 31, Public Acts of 1927.

Now, therefore, I, William L. Slate, Director of the Connecticut Agricultural Experiment Station, under authority granted by Chapter 31, Public Acts of 1927, do hereby proclaim the following areas (including towns affected by Quarantine Order No. 21) to be under quarantine and subject to the restrictions and regulations made a part of Federal Quarantine No. 43, as revised and effective December 16, 1929.

Regulated Areas

Two-Generation area:—All towns, boroughs and cities in Middlesex, New London and Windham Counties; Berlin, Glastonbury, Manchester and Marlborough in Hartford County; Branford, Guilford, Madison and Meriden in New Haven County; Andover, Bolton, Columbia, Coventry, Hebron, Mansfield, Tolland and Willington in Tolland County.

One-Generation area:—The towns of Enfield and Suffield in Hartford County; Somers in Tolland County; North Canaan and Salisbury in Litchfield County.

Movement of Restricted Plants

Until further notice unless accompanied by a certificate or permit issued by an authorized inspector of the Connecticut Agricultural Experiment Station or Federal Plant Quarantine and Control Administration, the following plants and plant materials cannot be allowed movement from the restricted areas to points outside or from the two-generation area into the one-generation area or from the one-generation area into the two-generation area: corn, broom corn, sorghum and sudan grass, including all parts of leaves and stalks throughout the year; from the two-generation area, all cut flowers and entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, gladiolus and dahlia (except gladiolus and dahlia bulbs without stems) throughout the year; for the period between June 1 and December 31, all celery, green beans in the pod, beets with tops, rhubarb, oat and rye straw as such or when used as packing.

Shelled corn must bear a certificate or permit that the corn is clean (except that packages of shelled corn weighing 25 pounds or less to the shipment may be sent without certificate or permit).

This order shall take effect January 15, 1930.

WILLIAM L. SLATE,
Director.

Approved:

JOHN H. TRUMBULL,
Governor.

SUMMARY OF REGULATIONS

For the guidance of growers and shippers, the regulations about moving crops from the quarantined area (see Figure 1) to the free area are given below:

Movement Not Allowed

Applies Throughout the Year: Corn on the ear, either green or dry, corn stalks, broom corn, sorghum and sudan grass, including all parts of leaves and stems. Inspections and permits refused.

Movement Allowed with Certificates

Applies Throughout the Year: From the two-generation area all cut flowers and entire plants of aster, chrysanthemum, cosmos, dahlia, gladiolus, hollyhock, and zinnia must be inspected and certified for shipment. (No restrictions on gladiolus and dahlia bulbs without stems.)

Applies from June 1 to December 31: All celery, green beans in the pod, beets with tops, rhubarb, oat and rye straw as such or when used as packing must be inspected and certified. (No restrictions from January 1-May 31).

Shelled Dry Corn: Quantities of 25 pounds or less without restrictions. Larger quantities must bear permit or certificate showing that corn is clean and free from pieces of cobs and stalks throughout the year.

For further information about the European corn borer apply to:

W. E. BRITTON, Connecticut Agricultural Experiment Station, New Haven, Conn. In charge of State regulatory work.

H. N. BARTLEY, 22 Elizabeth St., South Norwalk, Conn. In charge of Federal control work.

Requests for inspection and certification should be made to Mr. Bartley or to local inspectors soon to be announced.