

Connecticut Agricultural Experiment Station
New Haven, Connecticut

The Japanese Beetle Quarantine

W. E. BRITTON

The Japanese beetle, *Popillia japonica* Newman, a serious pest of native and cultivated trees and shrubs, is now present at several widely separated

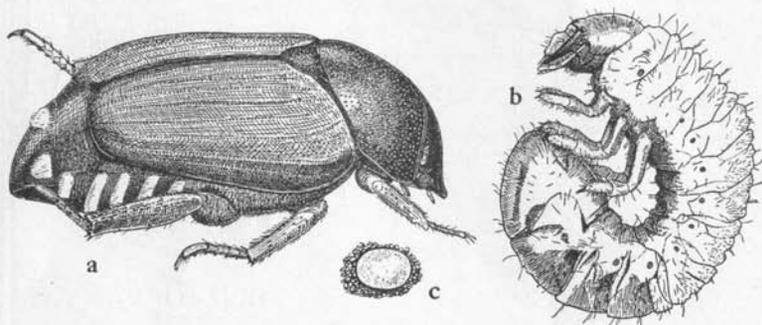


FIG. 8. The Japanese beetle. a, adult beetle; b, grub or larva; c, egg; all enlarged about five times.

points in Connecticut. The egg, grub and beetle are shown in Fig. 8. The eggs are white and are laid in the soil. The grubs are white and feed upon grass roots in the soil. The beetles are bright, shining green, with copper-colored wing-covers. There are two white patches on the tip of the abdomen beyond the wing covers, and five on each side of the abdomen, all composed of white hairs. The beetle is about half an inch in length and flies about actively in the warm sunshine. It feeds upon the tender foliage of fruit, shade and woodland trees, grape vines, roses and many shrubs and plants. It is present from late June until late September, but is most abundant about the middle of July.

DISCOVERY AND SPREAD IN THE UNITED STATES

Originally from Japan, this insect was discovered to be present at River-ton, N. J. in 1916. Since then it has spread in all directions and at present infests the state of New Jersey, the eastern third of Pennsylvania, Delaware, a small portion of Maryland, Alexandria, Virginia, District of Columbia, Long Island, and Westchester County, N. Y., and a portion of Connecticut as shown in Fig. 9.

OCCURRENCE AND SPREAD IN CONNECTICUT

The Japanese beetle was first found in Connecticut at Stamford by Federal scouts, late in the summer of 1926. Only eighteen adults were taken, mostly in two rear yards on the south side of Broad Street nearly opposite the end of Franklin Street. In July, 1927, beetles were found in Bridgeport at eight different centers, well-distributed over the city. They were much the most abundant, however, just south of Washington Avenue, where about 186 were taken. One was found in Darien and one in New Canaan. In 1928, Federal scouts found small infestations in New Haven, Hartford and New London, and a larger one at Springfield, Mass.

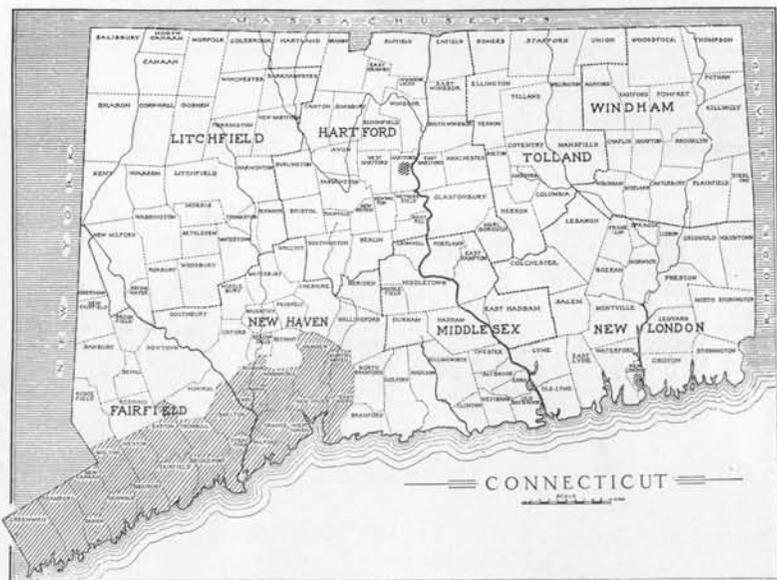


FIG. 9. Map of Connecticut. Shaded areas indicate territory quarantined on account of Japanese beetle.

METHODS OF CONTROL

The Japanese beetle is a difficult pest to control, though foliage and fruit may be protected by spraying heavily with coated lead arsenate. Small trees and shrubs may be protected by covering them with netting. The beetles may be attracted by certain chemical odors and then killed by a contact spray which has been devised containing oleoresin or pyrethrum and a sodium oleate soap. The grubs in lawns may be killed by applying an emulsion of carbon disulphide, or by treating the surface layer with lead arsenate, at the rate of three pounds per 100 square feet.

QUARANTINES

On account of the distribution of the beetle, Federal quarantine No. 48 (Fifth revision) extends the Bridgeport area to include New Haven and surrounding towns. The State quarantine coincides with the Federal quarantine (Fig. 9), but places additional restrictions on certain areas in Hartford and New London as shown in Figs. 10 and 11. The Quarantine Order follows:

STATE OF CONNECTICUT
AGRICULTURAL EXPERIMENT STATION

NEW HAVEN, CONN.

Quarantine Order No. 20

CONCERNING THE JAPANESE BEETLE

The fact has been determined that the Japanese beetle, *Popillia japonica* Newman, has been found in the cities of New Haven, New London and Hartford, and to prevent the further spread of this pest it is necessary

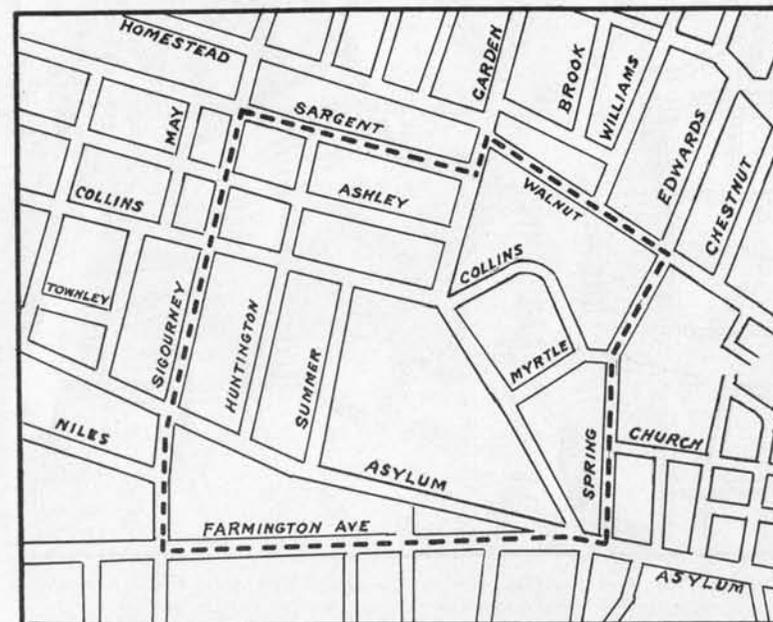


FIG. 10. Map of Section of Hartford. The dotted line surrounds area under State quarantine on account of Japanese beetle.

to extend the quarantine restrictions over certain additional areas, regarding which a public hearing was held in New Haven, February 25, 1929. Federal quarantine No. 48 has also been revised, effective February 15, 1929, to include eleven additional towns in New Haven County.

Now, therefore, I, William L. Slate, Director of the Connecticut Agricultural Experiment Station, under authority conferred by Chapter 31, Public Acts of 1927, do hereby proclaim the regulated area fixed by State Quarantine Order No. 16, and by the rules and regulations supplemental to Federal Quarantine No. 48 (Fifth Revision), effective on and after April 1, 1927, as amended effective on and after November 1, 1927, namely, the towns of Bridgeport, Darien, Easton, Fairfield, Greenwich, New Canaan, Norwalk, Shelton, Stamford, Stratford, Trumbull, Weston, Westport, and Wilton, in *Fairfield County*, to be extended to include the eleven towns of Ansonia, Derby, East Haven, Hamden, Milford, New Haven, North Haven, Orange, Seymour, West Haven and Woodbridge, in *New Haven County*.

Also, that that portion of the City of Hartford bounded by Farmington Avenue, Spring Street, Walnut Street, Sargent Street, and Sigourney Street, is hereby quarantined.

Also, that that portion of the City of New London bounded by Huntington Street, Bristol Street, Williams Street, Manwaring Street, Hempstead Street, Franklin Street, Cottage Street, and Broad Street, is hereby quarantined.

The rules and regulations supplemental to Federal Quarantine No. 48 (Sixth Revision), effective on and after February 15, 1929, or any subsequent amendments thereto, restricting the interstate movement of quarantined articles from the regulated areas, are hereby declared to be in full force and effect with respect to the intrastate movement of quarantined

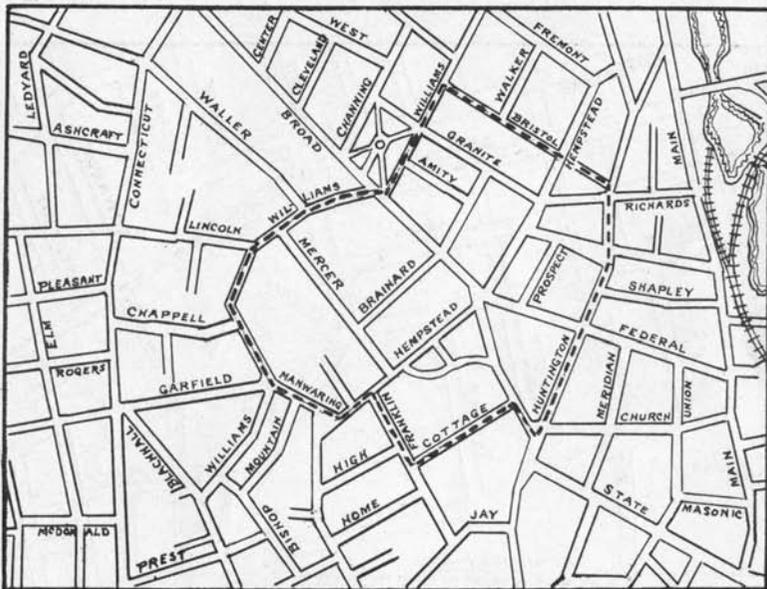


FIG. 11. Map of Section of New London. The dotted line surrounds area under State quarantine on account of Japanese beetle.

articles from the herein designated regulated areas of Connecticut to unregulated portions thereof.

This order shall be effective on and after April 1, 1929.

W. L. SLATE,
*Director, Connecticut Agricultural
Experiment Station*

Approved:

JOHN H. TRUMBELL, *Governor.*

For further information regarding the Japanese beetle, apply to:

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or J. P. JOHNSON, Hurley Building, Shelton, Conn.

For inspections and certificates, shippers should apply to:

J. P. JOHNSON, Hurley Building, Shelton, Conn. (Telephone, Derby 2974).