

History of the Spongy Moth in Massachusetts



Early control efforts were labor intensive. It was believed that the best way to control the moth was by destroying the eggs; men would be hired to climb trees and scrape egg masses or paint them with creosote. 1896.



A biological control project, run from 1909-1914, imported tens of thousands of spongy moth caterpillars and pupae infected by parasites from Europe, Japan, and Russia. Collected specimens were reared in laboratories and outdoor insectaries in Massachusetts. 1906.



Between 1954 and 1955, over 2 million acres were aerially sprayed with DDT in Plymouth, Norfolk, Middlesex, and Worcester Counties. 1955



The population boom in 2016 caused significant damage statewide. Severe defoliation was visible during an aerial survey along coastal regions of Plymouth County. 2016.



1869 Spongy moth accidentally introduced by Professor Leopold Trouvelot in Medford, MA.

1905 Control efforts resumed with the USDA bureau of Entomology joining the state.

Spongy moths are found in every city and town in Massachusetts.

1946 DDT is used on spongy moth for the first time.

1981 Largest defoliation event in Massachusetts' history.

2016 Outbreak caused by prolonged dry conditions lead to over 345,000 acres of defoliation.



Early outbreaks in Medford and surrounding towns caused total defoliation to stands. 1905

1889 First major outbreak event. State Board of Agriculture headed with eradication program that continued until 1900.



Protective belts were cut around badly infested areas in an attempt to contain the movement of the moth. Control in these areas included the spraying of pesticides and burning. 1909

1911 The first power truck sprayer is invented by the state, dramatically reducing insecticide spraying costs.



1936 The first aerial spraying for pesticide treatment of the spongy moth, significantly changes the way the spongy moth will be managed in the upcoming decades.



Four Civilian Conservation Corps (CCC) camps were established for the sole purpose of combating the spongy moth. 1935

1961 Bacillus thuringiensis (Bt), a naturally occurring bacterium is first used experimentally, marking the first attempt to move from chemical insecticides to biological insecticides.

1989 Entomophaga maimaiga (Em) fungus identified as established. Causes significant mortality in spongy moth population.



Despite initial introduction in 1980 and subsequent introduction in the early 1980s, it was not until 1989 that E. maimaiga is recovered in the wild causing mortality.