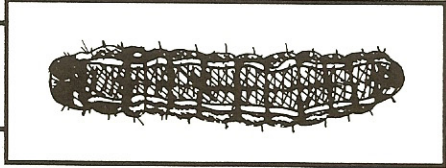


BRUCE SPANWORM



Operophtera bruceata (Hulst)

Hosts: Sugar maple, beech, aspen, and poplar.
Obsolete nomenclature: *Rachela bruceata* Hulst.
Natural enemies of importance: polyhedrosis virus.
First recorded outbreak in Vermont: 1933. A native pest.

DISCUSSION

Bruce spanworm outbreaks have been observed to last approximately 2 years, after which the population crashes. The first recorded Bruce spanworm outbreak in Vermont began in 1933, primarily in sugar maple orchards in the north and northeast regions of the state (Fig. 2). This original outbreak lasted until 1935.

Populations again increased in 1950 in Vermont, and also in Alberta and Wisconsin. They remained at high levels through the 1954 growing season, although damage was considered to be low because a forest tent caterpillar outbreak, causing considerable damage, was occurring also. This forest defoliator was not a problem again until 1981, when populations began to increase

and damage was observed in Vermont sugar bushes. Damage at that time was limited to the understory vegetation.

Of interest is that spanworm damage was frequently observed to occur in areas previously damaged by other insects. The outbreak of 1981 continued until 1983. Concurrent damage occurred in Maine. In 1983, 12,140 ha (30,000 acres) received light to moderate defoliation, the heaviest being in the Northeast Kingdom. In 1986 and 1987, no appreciable defoliation was mapped. However, in 1988 in Moretown and Cabot, larvae were found and very light defoliation was observed.

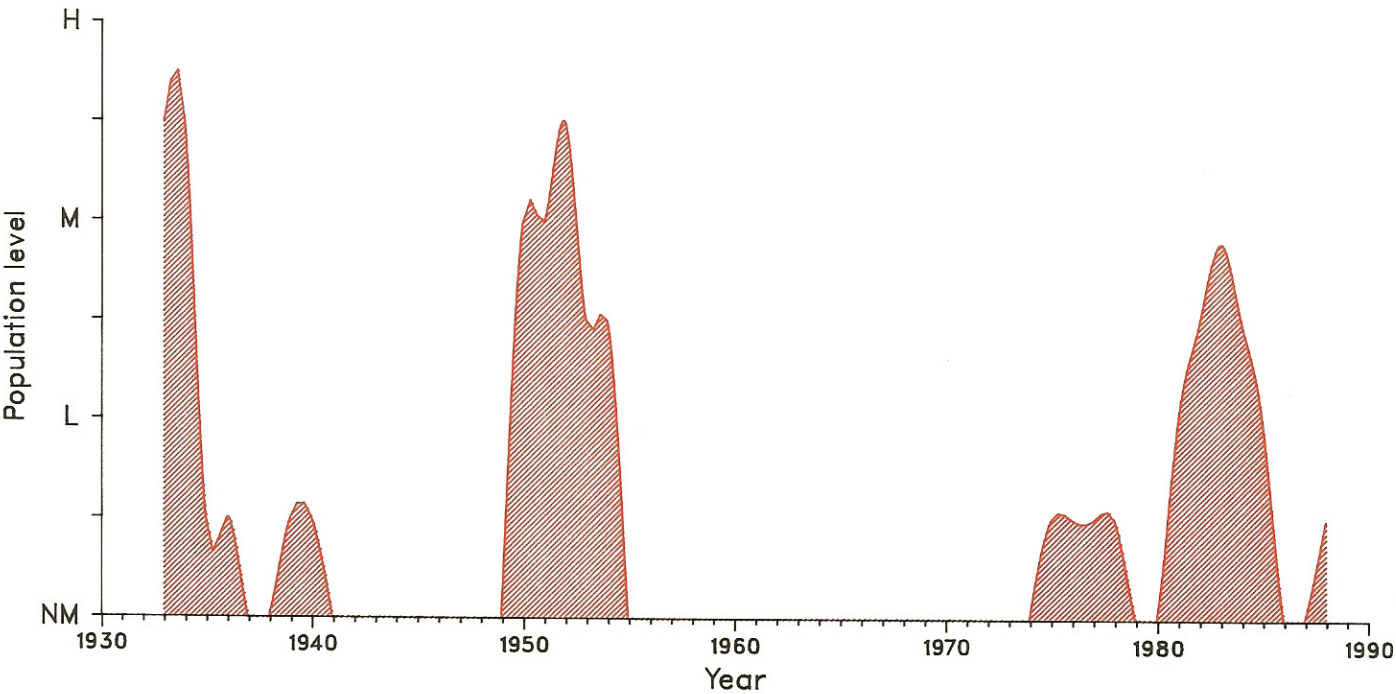


Fig. 2. Bruce spanworm, *Operophtera bruceata* (Hulst), populations in Vermont through 1988.

H = high, M = moderate, L = low, NM = not mentioned.